#### OFFICE OF THE FACULTY COUNCIL



#### THE UNIVERSITY OF TEXAS AT AUSTIN

P. O. BOX 7816 • Austin, TX 78713-7816 (512) 471-5934 • Fax: (512) 471-5984 • http://www.utexas.edu/faculty/council

December 7, 2015

Judith H. Langlois Interim Executive Vice President and Provost The University of Texas at Austin MAI 201

Campus Mail Code: G1000

Dear Dr. Langlois:

Enclosed for your consideration and action are proposed changes to the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. The proposals were classified as being of *exclusive* interest to only one college or school and were approved by the Faculty Council on a no-protest basis on December 4, 2015. The authority to grant final approval on these changes resides with UT System.

- Proposed Changes to the BS in Astronomy Degree Program (D 13639-13641)
- Proposed Changes to the BS in Biochemistry Degree Program (D 13642-13645)
- Proposed Changes to the BS in Chemistry Degree Program (D 13646-13650)
- Proposed Changes to the BS in Human Development and Family Sciences Degree Program (D 13651-13655)
- Proposed Changes to Admissions and Degree Plan in Neurosciences (D 13656-13661)
- Proposed Changes to the BS in Nutrition Degree Program (D 13662-13669)
- Proposed Changes to the Front Chapter (D 13670-13678)

Please let me know if you have questions or if I can provide other information concerning these items.

Sincerely,

Hillary Hart, Secretary

General Faculty and Faculty Council

HH:dlr

Enclosure

xc:

Gregory L. Fenves, president

Janet Dukerich, senior vice provost

ec (letter only):

Carol Longoria, deputy to the president

David Vanden Bout, associate dean for curriculum and programs, College of Natural Sciences

Judith Quinney, manager, records office, College of Natural Sciences

Allen Walser, manager of reporting and analysis, IRRIS

Brenda Schumann, associate registrar

Lydia Cornell, program coordinator, provost's office

Michelle George, administrative manager for faculty affairs, provost's office

# DOCUMENTS OF THE GENERAL FACULTY

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN ASTRONOMY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to BS in Astronomy in the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On September 8, 2015, the faculty representatives from department approved the changes and on September 9, the college curriculum committee approved them. On September 28, 2015, Associate Dean David Vanden Bout approved it on behalf of the dean. The secretary has classified this proposal as legislation of *exclusive* interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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 December 4, 2015.

Hillary Hart, Secretary

General Faculty and Faculty Council

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN ASTRONOMY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG~2016-2018

Ту	pe of (	Change	<ul><li>✓ Academ</li><li>✓ Degree</li></ul>	_		3 form required)			
Pr	oposed	l classificati	on 🛭 Exc	lusive	☐ General	☐ Major			
1.	CON	SULT LIN	DA DICKE	NS, DIR		CCREDITATION		THE COLLEGE MU SSESSMENT, TO	JST
	• I	s this a new Does the pro	degree prog gram offer c	ram? ourses th	at will be taught	off campus?	Yes [ Yes [ Yes [		
2.	EAC	H INDIVIE	UAL CHA	NGE:				RATIONALE FOR	
	2. A	Rationale: [ Add M 427J Rationale: [	Γhe departm as an alterna Γhe Departn	ent create ative to M nent of M	ed a stand-alone I 427K.	d SCI 365, Physics course for this nur	mbered to		nd
3.	THIS		AL INVOL' other colleg			oposer's college ty taken by student		] Flags	
		Course in a curriculum Change in requirement internal)		I	☐ Change in co an existing po ☐ Requirement catalog langu	urse sequencing for rogram s not explicit in the lage (e.g., lists of burses maintained	e 🗵	Courses that have to added to the inventor Other: add an alternative math cout to a degree requirement	ory
4.	a. I I b. I c. I t d. I	f yes, then he Do you antice f yes, how no Do you antice aking classe f yes, please Do you antice courses in other thanks.	oposal impactow? ipate a net chany more (ipate a net in sin your colindicate the ipate a net indicate a net indicate colleges'	hange in or fewer) harge (clege? anumber harease (cleges)	students do you or decrease) in th of students and/or or decrease) in th	or class seats invo e number of stude	ents from lved.	Yes ☐ No ☐  Yes ☐ No ☐  Outside of your colleg  Yes ☐ No ☐  your college taking  Yes ☐ No ☐	e
	I	t yes, please	indicate the	number	or students and/o	or class seats invo	ived.		

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

How many students do you expect to be impacted?

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

Person communicated with:

Date of communication:

Response:

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? If yes, explain: No

### COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: September 8, 2015

College approval date:

September 9, 2015

Dean approval date:

September 28, 2015, David Vanden Bout, Associate Dean

#### PROPOSED NEW CATALOG TEXT:

# **BACHELOR OF SCIENCE IN ASTRONOMY**

[no changes]

#### **Prescribed Work Common to all Options**

[no changes]

# **Additional Prescribed Work for Each Option**

[no changes]

### Option I: Astronomy

- Six semester hours in biology, chemistry, computer science, and/or geological sciences. Chemistry 301 or 301H and the courses in the Elements of Computing Certificate Program may be counted toward this requirement; any other course to be counted must meet major requirements in the department that offers it.
- 7. Mathematics 408C and 408D, or the equivalent; and 427J or 427K, 427L, and 340L.
- 8. Physics 301, 101L, 315, 115L, 316, 116L, 336K, 352K, 353L, 355, 362K, 369, and 373.
- Twelve semester hours of upper-division coursework in astronomy, including Astronomy 352K, 353, and 358. Astronomy 351 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**

[no changes]

## **Special Requirements**

[no changes]

#### 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 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to BS in Biochemistry in the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On March 26, 2015, the faculty representatives from department approved the changes, and on April 8, the college curriculum committee approved them. On September 28, 2015, Associate Dean David Vanden Bout approved it on behalf of the dean. The secretary has classified this proposal as legislation of *exclusive* interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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 December 4, 2015.

Hillary Hart, Secretary

General Faculty and Faculty Council

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN BIOCHEMISTRY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Гур	e of Change	<ul><li>✓ Academic Chan</li><li>✓ Degree Program</li></ul>	nge n Change (THECE	form required)		
	posed classificat		☐ General	☐ Major		
1.	IF THE ANSW	ER TO ANY OF T	HE FOLLOWING TRECTOR OF AC	G QUESTIONS IS YE CCREDITATION AN	CS, THE COLLEGE N D ASSESSMENT, TO	<b>1UST</b>
	DETERMINE !	IF SACS-COC API	PROVAL IS REQ	UIRED.		
		v degree program?		Y	es 🗌 No 🖂	
	Does the pr	ogram offer courses	that will be taught	off campus? Y	es 🗌 No 🖂	
	<ul><li>Does the pre</li><li>Will course</li></ul>	s in this program be	delivered electroni	cally? Y	es 🗌 No 🖂	
2.	EXPLAIN CHA	ANGE TO DEGRE	E PROGRAM A	ND GIVE A DETAIL	ED RATIONALE FO	R
	EACH INDIVI	DUAL CHANGE:				
	1. All cha	nges are to Option I	: Biochemistry. A	ddition of M 408M to c	omplete the three-part	
	calculu <b>Ration</b>	a coguance			good preparation for a c	areer
	2 Remov	al of BIO 328M.				
	D - 4'	-las Diagtotistics is	only offered under	r SDS 328M.	17V 117M 217I and	117N
	<ol><li>Reorde</li></ol>	ering of physics sequ	iences emphasizes	the selection of PHY 3.	17K, 117M, 317L, and	11/14,
	the pre	ferred sequence for	students seeking th	e BS in Biochemistry.	ng the first one in the li	st.
	Ration	ale: Many students	that students with	less thorough understar	nding of calculus do not	end
	4-1-1	ma a physics seguen	ce requiring more	complex calculus-based	problems.	
	4. Remov	e the choice to com	plete eighteen hou	rs in a field of study app	proved by the undergrad	luate
	1					
	Ration of stud	ale. This choice ca	ulty decided either	a transcript-recognized	ns to what an appropriat certificate, or eighteen	hours
3.	THIS PROPO	SAL INVOLVES (	Please check all tl	nat apply)		
	☐ Courses	in other colleges	Courses in pare frequent other college	roposer's college that ly taken by students in	☐ Flags	
	Course i	n the core		ourse sequencing for	Courses that have	e to be
	curricul		an existing j		added to the inve	entory
		in admission	Requiremen	ts not explicit in the		
		nents (external or	catalog lang	uage (e.g., lists of		
×	internal)		acceptable of department	courses maintained by office)		
4.		ROPOSED CHAN				
		proposal impact other		?	Yes 🗌 No 🛛	
	If ves, the	n how?				
	b. Do you an	ticipate a net change	e in the number of	students in your college	? Yes 🗌 No 🔯	
	If yes, how	v many more (or fe	wer) students do yo	ou expect?		

c.	Do you anticipate a net increase (or decrease) in the number of <u>students from outside</u> of your college taking <u>classes in your college</u> ? Yes \( \subseteq \text{No } \subseteq \)					
	If we please indicate the number of students and/or class seats involved.					
d.	Do you anticipate a net increase (or decrease) in the number of students from your college taking					
	courses in other colleges?  Yes □ No ☒					
	If yes, please indicate the number of students and/or class seats involved.					
	o H t Land 164h a managal hag					
If 4	a, b, c, or d was answered with yes, please answer the following questions. If the proposal has					
noi	tential budgetary impacts for another college/school, such as requiring new sections or a non-					
nes	gligible increase in the number of seats offered, at least one contact must be at the college-level.					
	How many students do you expect to be impacted?					
	Impacted schools must be contacted and their response(s) included:					
	Person communicated with:					
	Date of communication:					
	Response:					
e.	Does this proposal involve changes to the core curriculum or other basic education requirements (42					
	hour core, signature courses, flags)? If yes, explain: No					
	If yes, undergraduate studies must be informed of the proposed changes and their response					
	included:					
	Person communicated with:					
	Date of communication					

Date of communication:

Response:

Will this proposal change the number of hours required for degree completion? If yes, explain: No

# 5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: March 26, 2015 April 8, 2015 College approval date:

Dean approval date:

September 28, 2015, David Vanden Bout, Associate Dean

# PROPOSED NEW CATALOG TEXT:

# BACHELOR OF SCIENCE IN BIOCHEMISTRY

[no changes]

# **Prescribed Work Common to all Options**

[no changes]

# **Additional Prescribed Work for Each Option**

# Option I: Biochemistry

- 5. Mathematics 408C and 408D, or 408N, [and] 408S, and 408M.
- 6. Biostatistics: [Biology 328M or] Statistics and Data Sciences 328M.
- One of the following sequences:
  - [Physics 301, 101L, 316, and 116L;] Physics 317K, 117M, 317L, and 117N (recommended);
  - b. Physics 303K, 103M, 303L, and 103N; or
  - c. [317K, 117M, 317L, and 117N.] Physics 301, 101L, 316, and 116L.
- 8. The following chemistry courses:
  - a. General chemistry: Chemistry 301 or 301H, 302 or 302H, and 204 or 317.
  - b. Organic chemistry: Chemistry 320M.

- c. Biochemistry: Biochemistry 339F and 369L, and three additional courses chosen from Biochemistry 339J, 339M, 339N, and 370.
- d. Physical chemistry: Chemistry 353 or 353M.
- e. Analytical chemistry: Chemistry 455.
- 9. One of the following sequences:
  - a. Biology 311C, 311D, and 325; or
  - b. Biology 315H and 325H.
- 10. Completion of one of the following:
  - a. Eighteen additional semester hours of upper-division biochemistry, biology, chemistry, and neuroscience; or
  - b. [Eighteen additional semester hours in a field of study approved by the undergraduate adviser; or a transcript-recognized certificate.
  - [c. A transcript recognized certificate.]
- 11. Enough additional coursework to make a total of 120 semester hours.

# Option III: Biochemistry Honors [no changes]

# Special Requirements [no changes]

# Order and Choice of Work

[no changes]

# 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 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to BS in Chemistry in the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On September 30, 2015, the faculty representatives from department, the college curriculum committee, and the dean's designate approved the changes.

The secretary has classified this proposal as legislation of exclusive interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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Hillary Hart, Secretary

General Faculty and Faculty Council

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN CHEMISTRY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

The course of the core	
CONSULT LINDA DICKENS, DIRECTOR OF ACCREDITATION AND ASSESSMENT, DETERMINE IF SACS-COC APPROVAL IS REQUIRED.  Is this a new degree program?  Does the program offer courses that will be taught off campus?  Will courses in this program be delivered electronically?  EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE IS EACH INDIVIDUAL CHANGE:  Delete SCI 360 (Topic 4: Physics by Inquiry); add SCI 365, Physics by Inquiry Rationale: The department created a stand-alone course for this numbered topic.  Add M 427J as an alternative to M 427K.  Rationale: The Department of Mathematics developed M 427J, a blend of differential equation linear algebra. This course is being taught instead  THIS PROPOSAL INVOLVES (Please check all that apply)  Course in the core 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)  Course that added to the internal of acceptable courses maintained by department office)  SCOPE OF PROPOSED CHANGE  Does this proposal impact other colleges/schools?  Yes No If yes, then how?  SCOPE of PROPOSED CHANGE  Do you anticipate a net change in the number of students in your college?  If yes, please indicate the number of students and/or class seats involved.  Do you anticipate a net increase (or decrease) in the number of students from your college to your atking classes in your college?  If yes, please indicate the number of students and/or class seats involved.  Do you anticipate a net increase (or decrease) in the number of students from your college to your atking classes in your college?  If yes, please indicate the number of students and/or class seats involved.	
<ul> <li>Is this a new degree program?</li> <li>Does the program offer courses that will be taught off campus?</li> <li>Will courses in this program be delivered electronically?</li> <li>Yes  No  ✓</li> <li>Will courses in this program be delivered electronically?</li> <li>Yes  No  ✓</li> <li>EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE IN EACH INDIVIDUAL CHANGE:</li> <li>1. Delete SCI 360 (Topic 4: Physics by Inquiry); add SCI 365, Physics by Inquiry Rationale: The department created a stand-alone course for this numbered topic.</li> <li>2. Add M 427J as an alternative to M 427K.  Rationale: The Department of Mathematics developed M 427J, a blend of differential equatilinear algebra. This course is being taught instead</li> <li>3. THIS PROPOSAL INVOLVES (Please check all that apply)  Courses in other colleges  Course in the core curriculum  Change in admission  Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)</li> <li>4. SCOPE OF PROPOSED CHANGE  a. Does this proposal impact other colleges/schools?  If yes, then how?  b. Do you anticipate a net change in the number of students in your college? Yes No If yes, how many more (or fewer) students do you expect?</li> <li>c. Do you anticipate a net increase (or decrease) in the number of students from outside of your taking classes in your college?  If yes, please indicate the number of students and/or class seats involved.</li> <li>d. Do you anticipate a net increase (or decrease) in the number of students from your college ta courses in other colleges?  Yes No No</li> </ul>	LEGE MUST NT, TO
EACH INDIVIDUAL CHANGE:  1. Delete SCI 360 (Topic 4: Physics by Inquiry); add SCI 365, Physics by Inquiry Rationale: The department created a stand-alone course for this numbered topic.  2. Add M 427J as an alternative to M 427K. Rationale: The Department of Mathematics developed M 427J, a blend of differential equation linear algebra. This course is being taught instead  3. THIS PROPOSAL INVOLVES (Please check all that apply)  Courses in other colleges  Courses in proposer's college that are frequently taken by students in other colleges  Course in the core Change in course sequencing for an existing program added to the incomplete course added internal acceptable courses maintained by department office)  4. SCOPE OF PROPOSED CHANGE  a. Does this proposal impact other colleges/schools?  If yes, then how?  b. Do you anticipate a net change in the number of students in your college?  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 taking classes in your college?  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 tacourses in other colleges?  Yes No	A T TOD
Courses in other colleges  Course in the core curriculum  Change in admission requirements (external or internal)  COOPE OF PROPOSED CHANGE  a. Does this proposal impact other colleges/schools?  If yes, then how?  b. Do you anticipate a net change in the number of students in your college?  Courses in proposer's college that are frequently taken by students in other colleges (or decrease) in the number of students from your college tacourses in other colleges?  Course in the core Change in course sequencing for an existing program added to the impact of the catalog language (e.g., lists of acceptable courses maintained by department office)  A. SCOPE OF PROPOSED CHANGE  a. Does this proposal impact other colleges/schools?  If yes, then how?  b. Do you anticipate a net change in the number of students in your college?  Courses that and the course student in the course added to the impact of the impact of the course added to the impact of th	
Course in the core curriculum an existing program added to the importance of the course in admission and existing program added to the importance of the course in admission catalog language (e.g., lists of acceptable courses maintained by department office) acceptable courses maintained by department office of the course added mathematics requirement.  4. SCOPE OF PROPOSED CHANGE  a. Does this proposal impact other colleges/schools? Yes No If yes, then how?  b. Do you anticipate a net change in the number of students in your college? Yes No If yes, how many more (or fewer) students do you expect?  c. Do you anticipate a net increase (or decrease) in the number of students from outside of your taking classes in your college? Yes No If yes, please indicate the number of students and/or class seats involved.  d. Do you anticipate a net increase (or decrease) in the number of students from your college tare courses in other colleges? Yes No Ye	
<ul> <li>a. Does this proposal impact other colleges/schools? Yes □ No If yes, then how?</li> <li>b. Do you anticipate a net change in the number of students in your college? Yes □ No If yes, how many more (or fewer) students do you expect?</li> <li>c. Do you anticipate a net increase (or decrease) in the number of students from outside of your taking classes in your college? Yes □ No If yes, please indicate the number of students and/or class seats involved.</li> <li>d. Do you anticipate a net increase (or decrease) in the number of students from your college take your session other colleges? Yes □ No</li> </ul>	added to atics
<ul> <li>If yes, how many more (or fewer) students do you expect?</li> <li>c. Do you anticipate a net increase (or decrease) in the number of <u>students from outside</u> of your taking <u>classes in your college</u>?  If yes, please indicate the number of students and/or class seats involved.</li> <li>d. Do you anticipate a net increase (or decrease) in the number of <u>students from your college</u> ta courses in other colleges?  Yes □ No</li> </ul>	
d. Do you anticipate a net increase (or decrease) in the number of students from your college ta courses in other colleges?  Yes \sum No	your college ] No ⊠
	ge taking ] No ⊠

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

How many students do you expect to be impacted?

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

Person communicated with:

Date of communication:

Response:

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:

Will this proposal change the number of hours required for degree completion? If yes, explain: No

# 5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: September 30, 2015

College approval date:

September 30, 2015

Dean approval date:

September 30, 2015; David Vanden Bout, Associate Dean

# PROPOSED NEW CATALOG TEXT:

# BACHELOR OF SCIENCE IN CHEMISTRY

[no changes]

# Prescribed Work Common to All Options

[no changes]

# Additional Prescribed Work for Each Option

# **Option I: Chemistry**

[no changes]

## **Option II: Computation**

[no changes]

### **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 UTeach-Natural Sciences academic adviser.

- 7. Mathematics 408C and 408D, or 408N, 408S, and 408M.
- 8. History 329U or Philosophy 329U.
- One of the following sequences: 9.
  - 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 [360 (Topic 4: Physics by Inquiry)] and Physics 108 (Topic: Physics by Inquiry) may substitute for Physics 316 and 116L, 317L and 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 303K, 103M, 303L, 103N, 315, and 115L.
- 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 hours in a second field.
    - iv. Chemistry 368 (Topic 1: Research Methods: UTeach) or, with the consent of the UTeach-Natural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component.
    - v. In place of requirements 4c through 4f of the prescribed work above, the following courses, for a total of at least thirty-four semester hours of chemistry: Biochemistry 339F or 369; Chemistry 353; and 455 or 456.
  - b. For physical sciences certification:
    - i. Mathematics 427J or 427K and 427L.
    - ii. Chemistry 153K, 354L, and 154K.
    - 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 UTeach-Natural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component.
    - v. In place of requirements 4c through 4f of the prescribed work above, the following courses, for a total of at least thirty-four semester hours of chemistry: Biochemistry 339F 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 427K, 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 UTeach-Natural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component.
    - iv. In place of requirements 4c through 4f of the prescribed work above, the following courses, for a total of at least thirty semester hours in chemistry: Chemistry 353 and 153K, 455, and Biochemistry 369.
- 11. Eighteen semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 650S.
  - 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**

[no changes]

# **Special Requirements**

[no changes]

# Order and Choice of Work

Students are strongly recommended to take the chemistry/biochemistry-major sections of the following courses: Chemistry 301 or 301H (if taken), 302 or 302H, 128K, 128L, 328M, and 328N. Students planning a graduate program are strongly recommended to take Physics 301, 101L, 316, 116L, 315, and 115L.

Students in option II should consult the undergraduate adviser each semester regarding order and choice of work; those in option III should consult the UTeach-Natural Sciences academic adviser.

The following order of work is recommended as a typical minimum program for option I. It assumes that the student has high school credit in trigonometry, college algebra, and the first semester of general chemistry; is able to earn credit by examination for Chemistry 301; and is able to score well enough on the ALEKS placement examination to take Mathematics 408C or 408N in the first semester of the freshman year. Many students meet some of the following course requirements by credit by examination.

**First year:** Chemistry 302 or 302H, and 317; Mathematics 408C and 408D, or 408N, 408S, and 408M; Physics 301 and 101L, or 303K and 103M, or 317K and 117M (to be taken after Mathematics 408C or 408N); Rhetoric and Writing 306; six semester hours to fulfill core curriculum requirements.

**Second year:** Chemistry 128K, 128L, 328M, and 328N, or 220C, 320M, and 320N; any coursework needed to meet a core curriculum requirement; three semester hours to be counted toward requirement 4 of the prescribed work; English 316L, 316M, 316N, or 316P; Physics 316 and 116L, or 303L and 103N, or 317L and 117N; an upper-division mathematics course (such as Mathematics <u>427J or</u> 427K) or an upper-division computer science course.

**Third year:** Biochemistry 339F or 369, Chemistry 353, 153K, 354L, 456; six semester hours of American and Texas government; six semester hours of American history; three semester hours of electives; a three-semester-hour course to fulfill a core curriculum requirement; three semester hours to be counted toward requirement 4 of the prescribed work.

**Fourth year:** Chemistry 431, 154K, 376K, and courses to fulfill requirement 3 of the prescribed work. The student must also take enough additional coursework to fulfill requirements 4, 5, 9, and 10 of the prescribed work. It is recommended that the majority of the elective courses taken to fulfill requirements 4 and 9 be chosen from upper-division courses in biology, chemistry, chemical engineering, mathematics, and physics.

# DOCUMENTS OF THE GENERAL FACULTY

# 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 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to BS in Human Development and Family Sciences in the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On September 21, 2015, the faculty representatives from department approved the changes and on September 28, the college curriculum committee and the dean's designate approved the proposal. The secretary has classified this proposal as legislation of *exclusive* interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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 December 4, 2015.

Hillary Hart, Secretary

General Faculty and Faculty Council

# 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 2016-2018

Тур	e of (	Change		cademic Ch Degree Progr	nange ram C	Change (THECI	3 form requir	red)		
Pro		l classificati		⊠ Exclusiv		☐ General	☐ Major			
1.	IF T	HE ANSW	ER T	O ANY OF	THI	E FOLLOWIN	G QUESTIC	ONS IS YES TION AND	S, TE	IE COLLEGE MUST SESSMENT, TO
	DET	RDMINE I	FSA	CS-COC A	PPR	OVAL IS REC	UIRED.			
		Is this a new						Ye	s 🔲	No 🖾
	•	Door the pro	oram	offer cours	es tha	at will be taught	off campus?	Ye	s 🔲	No 🖾
	•	Will courses	in th	is program l	be de	livered electron	ically?	Ye	s 🗌	No 🖾
2.						PROGRAM A	ND GIVE A	DETAILE	DR	ATIONALE FOR
	EAG	CH INDIVI	DUA	L CHANGI	Ľ:	had In animals ad	4 SCI 365 P	hysics by In	auiry	
		Rationale:	The	department of	create	by Inquiry); ad ed a stand-alone I 427K.	course for th	ns numbered	а юр	ic.
		Rationale:	The	Department	of M	athematics devo g taught instead	eloped M 427	7J, a blend o	f diff	erential equations and
3.	TH	IS PROPOS	SAL I	NVOLVES	(Ple	ase check all t	nat apply)			El assa
				er colleges		Courses in p	oroposer's colly taken by st	llege that tudents in	Ц	Flags
		Course ir		core		☐ Change in c	ourse sequen program			Courses that have to be added to the inventory
	Ē	Change i	n adn	nission external or		Requirement catalog lang acceptable department	guage (e.g., li courses maint	sts of		Other: HDF 353 to replace; HDF 378K, Longevity in the 21 <sup>st</sup> Century
4.	SC	OPE OF PI	ROPC	SED CHA	NGE	, 	า			Yes □ No ⊠
	a.				ner c	olleges/schools	•			
	1.	If yes, then	icina	: e a net chan	ge in	the number of	students in yo	our college?		Yes 🗌 No 🖂
	b.									
	c.	Do you and	icipa	te a net incre	ease (	or decrease) in	tne number o			outside of your college Yes ☐ No ⊠
	d.	Do you an	ticipa other	te a net incre colleges?	ease (		the number of	or students 1	rom	your college taking Yes ☐ No 🏻
		If yes, plea	ise in	dicate the nu	ımbe	r of students an	d/or class sea	ts involved.		
										If the proposal has
	If 4	4 a, b, c, or	d was	answered	witn	yes, piease ans	wer the folio	, , ing quest		Carra and a man

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

How many students do you expect to be impacted?

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

Person communicated with:

Date of communication:

Response:

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:

Will this proposal change the number of hours required for degree completion? If yes, explain: No

# 5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: September 21, 2015

College approval date:

September 28, 2015

Dean approval date:

September 28, 2015, David Vanden Bout, Associate Dean

# 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

[no changes]

# **Option II: Human Development**

This option involves the study of development across the life span.

- 6. Statistics and Data Sciences 302; Mathematics 408C, 408N, or Statistics and Data Sciences 332.
- Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; 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 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.
- 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.
- 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 355; and three additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355 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, 371, and 372K.
- 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.

Statistics and Data Sciences 302; Mathematics 408C, 408N, or Statistics and Data Sciences 332.

Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; 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 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.

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.

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 355; and three additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355 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 372K.

11. Six additional semester hours chosen from Human Development and Family Sciences 322, 335, 345, 347, 353, 356, 358, 360, 371, and 372K.

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, or Statistics and Data Sciences 332.

Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; 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 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.

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.

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 355; and three additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355 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, 342, 343, 353, 356, 360, and 378K (Topic 6: Introduction to Early Childhood Intervention).

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 315H and 325H; Chemistry 301H and 302H; 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.

Human Ecology 115H and 225H.

8. Human Development and Family Sciences 304H, 312, 313H, 113L, 315L, and fifteen semester hours chosen from the following: Human Development and Family Sciences 335, 337, 342, 343, 345, 347, 351, 353, 356, 358, 362, 371, 372K, 378L, 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. Twenty-one additional semester hours of coursework approved by the departmental honors adviser.
- 13. Six hours of coursework in the College of Liberal Arts 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 calculus course and a statistics course, one of which must be a designated honors course.

7. Chemistry 301 or 301H; Biology 311C; and Biology 311D or Chemistry 302 or 302H.

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; fifteen semester hours chosen from: Human Development and Family Sciences 335, 337, 342, 343, 345, 347, 351, 353, 356,

358, 362, 371, 372K, 378L, and approved social science courses.

Human Development and Family Sciences 355H and 379H.

- 11. Twenty-one 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**

[no changes]

# DOCUMENTS OF THE GENERAL FACULTY

# PROPOSED CHANGES TO THE DEGREE AND ADMISSION FOR THE BACHELOR OF SCIENCE IN NEUROSCIENCE IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to the degree and admission for the BS in Neuroscience in the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On May 20, 2015, the faculty representatives from department approved the changes and on September 23, the college curriculum committee approved them. On September 28, 2015, Associate Dean David Vanden Bout approved it on behalf of the dean. The secretary has classified this proposal as legislation of *exclusive* interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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 December 4, 2015.

Hillary Hart, Secretary

General Faculty and Faculty Council

# PROPOSED CHANGES TO THE DEGREE AND ADMISSION FOR THE BACHELOR OF SCIENCE IN NEUROSCIENCE IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Туј	pe of (	Change	$\square$	Academic Chan Degree Program	ge ı Change (THEC	B form required)		
Pro		d classificati			☐ General	☐ Major		
1.	COL	NSHLT LIN	DA	DICKENS, DII	RECTOR OF A	CCREDITATIO	IS YES, THE COLLEC N AND ASSESSMENT	GE MUST , TO
	DET	TERMINE I	FS	ACS-COC APP	ROVAL IS RE	QUIRED.		
				ree program?			Yes ☐ No ⊠	
		Does the pro	grai	n offer courses t	that will be taugh	nt off campus?	Yes □ No ⊠	
	•	Will courses	in t	his program be o	delivered electro	nically?	Yes □ No ⊠	
2.	EXI	PLAIN CHA	NG	E TO DEGRE	E PROGRAM	AND GIVE A DE	TAILED RATIONALE	FOR
	EAG	CH INDIVII	DUA	AL CHANGE:				
		in Neuroscie	nce	, Option I				
	1.	Ontion 1. De	anar	ne the ontion as	Neuroscience C	ajal Scholars.	LEFT HILLY HAD	11,111
	-	D /	The	department is re	enaming the lab-	intensive option to	differentiate it from the	newly
		11.1	111	In this option	students are real	ired to complete to	our neuroscience laborate	ny courses
		1		largraduate reces	arch with neuros	cience faculty und	er the NEU 3// and 3//1	1 course
		numbers. Sa	antia	go Ramon y Caj	jal is considered	one of the fathers	of modern neuroscience s	30 nanning
		the option a	fter	him was conside	ered appropriate.			
	2.	Damaria M	100	D and M 408M			t t' f multino	wiahla
		Rationale:	A d	liscussion among	g the NEU facult	ty revealed that an	understanding of multiva	Travic J. which are
		calculus wa	s on	ly really require	d for the quantit	ative methods cour	rse, NEU 466M and 366N	uirements
		now both el	ecti	ves. With this ch	lange, the mathe	matics, physics, ch	emistry, and biology requestions Land III) will be	identical.
		for the BSA	(m	ajor in Neurosci	ence) and the BS	s in Neuroscience	(options I and III) will be	TGOTH TOWN
	3.	Remove M	362	K and SDS 321	in the core math	ematics requireme	of neuroscience than M 3	62K.
		Rationale:	SD	S 328M, Biostat	istics, is more sp	nd Statistics M 36	of neuroscience than M 3 2K and SDS 321 may co	unt toward
		Probability	, and	SDS 321, Intro	to Probability a	discipline	Zit und obe der may	
		the requirer	men	t of three courses	s from a related	o list the PHY 317.	K sequence first.	
	4.	Reorder the	cal	culus-based phy	sics sequences u	courses they see a	s an option, and we woul	ld prefer
		Rationale:	Stu	idents tend to tai	ouses more on h	iomedical applicat	ions.	
	_	that they ta	Ke u	ne option mat 10	native to NEU 3	30		
	5.	Remove IV	EU.	o would like all	students seeking	neuroscience to ta	ke NEU 330, the first of	our two core
		Rationale:	W	Would like all 3	R is our service	course. NEU 365F	will no longer count as	a .
		introductor	y cc	MEH 225 or an	y NEU elective.			
	_				y INDO DICCHYO.			
	6.	D (1	NII	ZII 266M (now/	466M) is a quant	titative methods co	mputer lab course and we	e simply do
		Kationale:	i INI	andwidth to requ	ire majors to tak	e it. NEU 466M w	ill become an alternative	course in a
		1 C		d laboratory cou	rcec			
	-	list of appr	ove	u iautiaitiy cou	e additional cou	rses chosen from o	ne of several fields of sci	ence. Add
	7.	Opdate the	req	un ement of tille	e additional cou			

M 427J as an alternative to M 427K.

**Rationale:** The faculty decided M 362K is the appropriate probability course to support research in the field of neuroscience. The additions were made with approvals from the departments offering the courses in biology, chemistry, and mathematics.

8. Update the twelve hours of upper-division neuroscience laboratory courses.

Rationale: The faculty agree that the additions and deletions are appropriate. Some new neuroscience courses have been or are being developed, and we wish to add them to the list of electives.

Increase additional upper-division NEU from six hours to nine hours.

**Rationale:** Since NEU 366M is no longer required, students may choose an additional upper-division NEU course.

# BS in Neuroscience, Option II

Update requirement thirteen and fourteen with additional neuroscience course choices.

Rationale: The neuroscience faculty and the Dean's Scholars director agree that the additions are appropriate.

# BS in Neuroscience, Option III

Addition of Neuroscience option.

**Rationale:** The BS in biology, neurobiology option, is being dropped by the department. We created a new option in the BS in neuroscience that will serve students who do not want the BSA neuroscience major and do not want to complete the lab-intensive Option I: Cajal Scholars.

3.	THIS PROPOSAL INVOLVES (F	Please check all that apply)	
	Courses in other colleges	Courses in proposer's college that are frequently taken by students in other colleges	☐ Flags
	Course in the core curriculum	Change in course sequencing for an existing program	Courses that have to be added to the inventory:  NEU 367W (replace
	☐ Change in admission requirements (external or internal)	Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)	BIO 367W); NEU 371M (replace BIO 371M)  Other: addition of option III
4.	SCOPE OF PROPOSED CHANG	<b>GE</b>	
	a. Does this proposal impact other	r colleges/schools?	Yes 🗌 No 🖂
	If yes, then how?  b. Do you anticipate a net change	in the number of students in your college?	Yes 🗌 No 🖂
	If yes, how many more (or few c. Do you anticipate a net increase taking classes in your college?	er) students do you expect? e (or decrease) in the number of students fr	om outside of your college Yes ☐ No 🏻
	If yes, please indicate the number d. Do you anticipate a net increas courses in other colleges?	per of students and/or class seats involved. e (or decrease) in the number of students fr	om your college taking Yes □ No ⊠
	If yes, please indicate the number	ber of students and/or class seats involved.	

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

How many students do you expect to be impacted?

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

Person communicated with:

Date of communication:

Response:

e. Does this proposal involve changes to the core curriculum or other basic education requirements (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:

Will this proposal change the number of hours required for degree completion? If yes, explain: No

### 5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: September 8, 2015

College approval date:

September 9, 2015

Dean approval date:

September 28, 2015, David Vanden Bout, Associate Dean

#### PROPOSED NEW CATALOG TEXT:

### BACHELOR OF SCIENCE IN NEUROSCIENCE

The Bachelor of Science degree in Neuroscience provides a strong foundation in the core sciences and related mathematical disciplines, along with the opportunity for training in [a three-course specialization in one of six areas:] biology, chemistry, computer science, mathematics, physics, or psychology. Distinctive features of the program include an emphasis on developing the quantitative, statistical, mathematical, and computational skills required in neuroscience, and meaningful hands-on laboratory experience.

# **Prescribed Work Common to All Options**

[no changes]

# **Option I: Neuroscience Cajal Scholars**

- Mathematics 408C [and 408D<sub>7</sub>] or 408N[<sub>7</sub>] and 408S[<del>, and 408M</del>]; [Mathematics 362K or] Statistics and Data Sciences [321 or] 328M.
- 5. An eight[-semester-]hour physics sequence [of coursework in physics] chosen from the following:
  - a. Physics 317K, 117M, 317L, and 117N; [301, 101L, 316, and 116L;]
  - b. Physics 303K, 103M, 303L, and 103N; [er]
  - c. Physics 301, 101L, 316, and 116L [317K, 117M, 317L, and 117N.]
- Chemistry 301 or 301H, 302 or 302H, and 204.
- Biology 311C and 311D, or [Biology] 315H and 325H, and [Biology] 206L.
- 8. Three additional majors-level courses selected from one of the following lists [supporting disciplines]:
  - Biology: Biology 325 or 325H, 320, 344, [and] 349, and 370.
  - Chemistry: Chemistry 328M and 128K, 328N and 128L, 353 or 353M, and Biochemistry 369.
  - Computer Science: Computer Science 312, 314, Statistics and Data Sciences 335, 374E.

- Mathematics: Mathematics <u>427J or</u> 427K, 427L, 340L or 341, [358K] <u>362K</u>, [9+] 378K, Statistics and Data Sciences 321[5] or 329C[5; students who chose Statistics and Data Sciences 328M for requirement 4, may not also count Mathematics 358K]. Mathematics 362K and Statistics and Data Sciences 321 may not both count.
- e. Physics: Physics 345, 338K, 355.
- Psychology: Psychology 301, 323, 353K, 355.
- Neuroscience 330 [or 365R, and Neuroscience 335.]
- 10. Neuroscience <u>335</u> [<del>366M</del>].
- 11. Twelve-semester-hours of laboratory courses chosen from the following: Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 466G, and 466M. [and 377; the same section of Neuroscience 377, Undergraduate Research, may not count toward requirement 13 if used to fulfill this requirement.]
- 12. [Six] Nine-semester-hours of upper-division neuroscience to be chosen from: Biology 325, 359K, 365N, Neuroscience 337 [(Topic: Sensory Neuroscience), 337 (Topic: Genetic Analysis of Behavior and Disease), Biology 365N, Neuroscience] 365T, 365W, 366C, 366D, 466G, 366N, 367F, 367V, and 371M. [additional approved Neuroscience 337 courses, and Biology 359K, and Neuroscience 365D.] Biology 325 or 325H may count toward either requirement 8a or requirement 12.
- 13. Three [additional] semester hours of either Neuroscience 377 (Undergraduate Research) or Neuroscience 379H (Honors Tutorial Course); the research topic in Neuroscience 377 or 379H must relate to neuroscience 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**

- Breadth requirement: An honors mathematics course; Biology 315H and 325H; Chemistry 301H and 302H; 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.
- 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.
- One of the following: Physics 315 and 115L, Physics 316 and 116L, Physics 338K, 345, 355; courses counted toward requirement 4 may not also be counted toward requirement 6.
- Chemistry 204. 7.
- Chemistry 128K, 128L, 328M, and 328N. 8.
- Biology 320 or 344. 9.
- 10. Biology 349 and 370.
- 11. Neuroscience [365R or] 330.
- 12. Neuroscience 335.
- 13. Nine hours of laboratory courses chosen from: Neuroscience 365L, 366E, [Neuroscience] 366L, 366N, [Neuroscience] 366P, and [Neuroscience] 366S, 367W, 466G, and 466M.
- 14. Six hours of upper-division neuroscience chosen from: Neuroscience 337 [(Topic: Sensory Neuroscience), 377 (Topic: Genetic Analysis of Behavior and Disease), 365D, 365T, 365W, 366C, 366D, [366E, 466G, 366M, 366N,] 367F, 367V, 371M, and 377. [additional approved Neuroscience 337 courses, and Neuroscience 365D.]
- 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 379H.
- 18. Eight additional semester hours of coursework approved by the departmental honors adviser.
- 19. Six semester hours of coursework in the College of Liberal Arts or the College of Fine Arts.
- 20. Enough additional coursework to make a total of 120 semester hours.

# **Option III: Neuroscience**

Mathematics 408C or 408N and 408S; and Statistics and Data Sciences 328M.

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

# **Special Requirements**

[no changes]

### DOCUMENTS OF THE GENERAL FACULTY

# PROPOSED CHANGES TO THE BS IN NUTRITION DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to the BS in Nutrition in the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On January 30, 2015, the faculty representatives from department approved the changes and on April 8, 2015 the college curriculum committee approved them. On September 28, 2015, Associate Dean David Vanden Bout approved it on behalf of the dean. The secretary has classified this proposal as legislation of *exclusive* interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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 December 4, 2015.

Hillary Hart, Secretary

General Faculty and Faculty Council

# PROPOSED CHANGES TO THE BS IN NUTRITION DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Ту	rpe of Change  ☐ Academic Change ☐ Degree Program Change (THECB form required)	
Pro	oposed classification 🖂 Exclusive 🔲 General 🔲 Major	
1.	IF THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS CONSULT LINDA DICKENS, DIRECTOR OF ACCREDITATION DETERMINE IF SACS-COC APPROVAL IS REQUIRED.	
	• Is this a new degree program?	Yes 🗌 No 🖂
	<ul><li>Does the program offer courses that will be taught off campus?</li><li>Will courses in this program be delivered electronically?</li></ul>	Yes □ No ⊠ Yes □ No ⊠

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

## BS in Neuroscience, Option I

- 1. Update the accrediting body information in the preface to the BS in Nutrition degree and the preface to the requirements in option I.
  - Rationale: Previous information is out of date.
- 2. Update preface to option I, Dietetics, indicating when NTR 345M is offered.
  - Rationale: NTR 345M is offered during spring semesters only.
- 3. Change NTR 365 (Topic I) to NTR 343 or NTR 365 (Topic 1) in option I (Dietetics: Didactic Program in Dietetics, or DPD). Add NTR 343 or NTR 365 (Topic 1) in options I (Dietetics: Coordinated Program in Dietetics (CPD), or DPD), II, III, IV, V, and VI. The options to which NTR 343 is being offered have sufficient elective hours, save one. option VI, International Nutrition, is removing three hours of social science requirement to create room for NTR 343 (see update #8 for more information).

  Rationale: Vitamins and minerals, NTR 365.1, is an existing optional topic course that is offered in the regular rotation. The nutrition faculty believes that this course is essential to a complete education in nutrition, and that it should be required for all students pursuing a BS degree. Consequently, we are seeking approval to change vitamins and minerals from an optional course to a required course. In addition, we are changing the course number from NTR 365.1 to NTR 343. The reasons for the course number change are: 1) better indicate that the course is required and not optional; and 2) clarify that the course should be taken after NTR 342. NTR 365 (Topic 1: Vitamins and Minerals) will be listed as an alternative to NTR 343 during this transition catalog to ensure that students who completed the content under NTR 365.5 know that the course they took substitutes for required NTR 343.
- 4. Remove NTR 370 or 371 in requirement 10b.
  - **Rationale:** Previously, CPD students in option I were allowed to substitute, or waive NTR 365 (Topic 1: Vitamins and Minerals). Since NTR 343 is now required for all NTR students, this statement no longer applies. CPD students are already required to take NTR 370 or 371 in requirement 11ai.
- 5. Add NTR 355 has an alternative to NTR 355H in option II.
  - **Rationale:** During the last catalog cycle, this update was made to other nutrition options but was missed in option II. NTR 355 is an individual research project; NTR 355H is an honors individual research project.
- 6. Change number of additional nutrition hours to twelve (from fourteen) in option IV. Change number of hours approved by the honors advisor to nine (from ten) in option IV.
  - **Rationale:** The number of nutrition hours was reduced due to the addition of NTR 343 as a requirement. The hours approved by the honors advisor was reduced to make the total number divisible by three.
- 7. Change number of hours approved by the honors advisor to six (from ten) in option V.

  Rationale: The number of hours was reduced due to the addition of NTR 343 as a requirement and to make the total divisible by three.

	8.	Reduce social science requirer Rationale: The total was reduced as a science requirer reduced by the reduced requirements and reduced reduced requirements.	ment to three hours (from six).  uced due to the addition of NTR 343 as a re	quirement.
3.	יוידי	HIS PROPOSAL INVOLVES	(Dlogge check all that apply)	
3.	11	Courses in other colleges	Courses in proposer's college that are frequently taken by students in other colleges	☐ Flags
		Course in the core curriculum	Change in course sequencing for an existing program	Courses that have to be added to the inventory NTR 343 is being added to inventory to replace the course
				number 365, Topic 1. Since the course will be required for all NTI majors, the department wants a stand-alone course number.
		<ul> <li>Change in admission requirements (external or internal)</li> </ul>	Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)	Other:
4.	SC	OPE OF PROPOSED CHAN	GE	
	a.	Does this proposal impact other	er colleges/schools?	Yes 🖂 No 🗌
		If yes, then how? Option VI, In	nternational Nutrition, will reduce its requir	ement from six hours to three
		hours chosen from: GRG 339k	X, 357; MAS 307, 318; and SOC 335, 354K	
	b.	If yes, how many more (or few		
	c.	Do you anticipate a net increas taking classes in your college?	se (or decrease) in the number of students fr	om outside of your college Yes □ No ☒
			ber of students and/or class seats involved.	I es 🗀 No 🖂
	d.		be (or decrease) in the number of students fr	om your college taking
		courses in other colleges?		es 🛛 No 🔲
			ber of students and/or class seats involved.	
			graduates per academic year. At most, one	
		reduction in enrollment is insig	nic year: GRG 339K, 357; MAS 307, 318; a gnificant.	and SOC 335, 354K. The
	pot	tential budgetary impacts for a	th yes, please answer the following question ther college/school, such as requiring to of seats offered, at least one contact must be to be impacted?	new sections or a non-
		7	acted and their response(s) included:	
		Person communicated with	- · · · · · · · · · · · · · · · · · · ·	
		Date of communication:		
		Response:		
	e.		nges to the core curriculum or other basic e	ducation requirements (42-
		hour core, signature courses, fla		
			must be informed of the proposed chang	ges and their response
		included:	Factoria and	,
		Person communicated with	1:	

Date of communication:

Response:

f. Will this proposal change the number of hours required for degree completion? If yes, explain: No

### 5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: January 30, 2015 College approval date: April 8, 2015

Dean approval date:

September 28, 2015, David Vanden Bout, Associate Dean

### PROPOSED NEW CATALOG TEXT:

## **BACHELOR OF SCIENCE IN NUTRITION**

Nutrition is an integrative science with the overall objective of improving the health and well-being of individuals and groups. Nutritional inquiry encompasses not only the roles of electrons, atoms, molecules, genes, cells, organs, and complex organisms in biological life processes but also the links between life science and health, behavior, education, population, culture, and economics. The Bachelor of Science in Nutrition degree program includes six options, described below.

For students pursuing careers in dietetics, courses in behavioral and clinical nutrition and food systems management provide the academic preparation required for dietetics practice. The Didactic Program in Dietetics (DPD) meets the coursework requirements that qualify graduates to apply to a dietetic internship, which leads to the Registered Dietitian credential. Completion of the Didactic Program in Dietetics requirements qualifies a graduate to apply for the exam to become a Dietetic Technician, Registered. 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. The Coordinated Program in Dietetics (CPD) includes both the coursework and the supervised practice necessary to be eligible to write the examination to become a registered dietitian. The DPD and CPD are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND)[Commission on Accreditation of Dietetics Education] of the Academy of Nutrition and Dietetics (AND) [American Dietetic Association (ADA)], 120 S. Riverside Plaza, Suite 2000, Chicago IL 60606, (800) 877-1600.

The nutritional sciences option requires courses in science and research in order to prepare students for graduate study or professional school. Graduates may seek employment in private or publicly funded research programs or, upon completion of graduate study, may engage in college or university teaching or nutrition research. This option also allows students to fulfill requirements for postgraduate study in medicine, dentistry, and other health professions. Additional coursework is needed to be eligible to apply for a dietetic internship or to practice as a Dietetic Technician, Registered.

The nutrition and public health option III is designed to prepare students for entry-level positions in public health and nutrition at state and other health departments, in research, and in industry. It will equip them for entry into graduate programs in nutrition or other public health disciplines at schools of public health, at graduate schools in the biomedical sciences, and for entry into medical or other health professional schools as well as for those who pursue health and research careers.

Students who plan to follow option IV must be admitted into the Honors in Advanced Nutritional Sciences Program. Students in this option take honors courses in nutrition, research methodology, and writing. In addition, students are encouraged to take honors courses in disciplines outside of nutrition, such as biology, chemistry, and mathematics. Students consult with the departmental honors adviser to develop an individualized and challenging program of study that meets their goals and interests.

Students who plan to follow option V must be admitted to the Dean's Scholars Honors Program. In addition to taking a core of research, writing, and seminar courses in the College of Natural Sciences, students in this option consult with the departmental honors adviser to develop a coherent individual program of rigorous and challenging courses from across the University.

Students in the international nutrition option gain firsthand knowledge of nutrition issues in other countries through a study abroad experience. Students combine the study of nutrition with a broad range of courses to prepare for experience studying and practicing nutrition in another culture.

Prescribed Work Common to All Options {no changes}

## Additional Prescribed Work for Each Option

## **Option I: Dietetics**

Students in dietetics may select either the Didactic Program in Dietetics (DPD) or the Coordinated Program in Dietetics (CPD). Students who complete the DPD with at least four upper-division nutrition courses completed in residence will receive a verification statement that qualifies them to apply for an accredited <u>supervised practice program [dietetic internship]</u>. DPD graduates who complete an accredited <u>supervised practice program [dietetic internship]</u> may become active members of the <u>Academy of Nutrition and Dietetics (AND) [Dietetic Association (ADA)]</u> and are eligible to write the examination to become a registered dietitian.

Students interested in the Coordinated Program in Dietetics must apply for admission after completing sixty semester hours of prerequisite coursework. Upon completing the CPD, which includes approximately twelve hundred hours of supervised practice, graduates immediately qualify for active membership in the <u>AND</u> [ADA] and to write the examination to become a registered dietitian.

Students who are admitted to the CPD should consult the faculty adviser each semester regarding order and choice of work. During the fourth year, the following courses must be taken in the indicated term: *fall semester*: Nutrition 245C; *spring semester*: Nutrition 345M, 372C, 372F, 373S; *summer session*: Nutrition 374C and 374P. Because these courses are taught only once a year, a student who does not take them at the indicated time may be unable to complete the program.

- 4. 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.
- 5. Mathematics 408C, 408N, or Statistics and Data Sciences 332.
- 6. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306,325H, and 328M.
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369.
- 8. Biology 311C or 315H, 325 or 325H, and 365S.
- 9. Accounting 310F or 311.
- 10. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L; students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C* before progressing to other upper-division nutrition courses.
  - b. Nutrition 307, 107L, 338W or 338H, 342, and 343 or [and] 365 (Topic 1: Vitamins and Minerals [; Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health); students in the CPD must complete Nutrition 370 or 371 instead of 365.]
- 11. Coursework in nutrition, consisting of the following:
  - a. Behavioral and clinical nutrition:
    - i. CPD: Nutrition 315, 218, 118L, 330, 332, 370, and 371.
    - ii. DPD: Nutrition 315, 218, 118L, 330, 332, 370, 371, and either Nutrition 337 or 365 ([Topic 1: Vitamins and Minerals;] Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health). [The same topic in Nutrition 365 may not count toward both requirement 10b and requirement 11aii.]
  - b. Food systems management: Nutrition 334, 234L, and 355M.

- c. Research:
  - i. CPD: Nutrition 373S.
  - ii. DPD: One of the following: Nutrition 324 and 124L, 353, 355 or 355H, 366L, 379H, Statistics and Data Sciences 318, 321, 325H, or 352; with the approval of the faculty undergraduate adviser, DPD students may count Nutrition 352 toward this requirement; Statistics and Data Sciences 325H may not be counted toward both requirement 6 and requirement 11cii.
- d. Professional development:
  - i. CPD: Nutrition 245C.
  - ii. DPD: Nutrition 162.
- 12. Students in the CPD must complete an additional fifteen semester hours of supervised practice: Nutrition 345M, 372C, 372F, 374C, and 374P.
- 13. Enough additional coursework to make a total of 126 semester hours.

# **Option II: Nutritional Sciences**

- 4. At least six semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H, and 113L.
- 5. Mathematics 408C, 408N, or Statistics and Data Sciences 332.
- 6. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 220C, 320M, 320N, and Biochemistry 369.
- 8. Either Biology 311C, 311D, and 325 or Biology 315H and 325H; and Neuroscience 365R or Biology 446L, and 365S.
- 9. Complete one of the following:
  - a. Physics 301 and 101L;
  - b. Physics 302K and 102M;
  - c. Physics 303K and 103M; or
  - d. Physics 317K and 117M
- 10. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L; students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C* before progressing to other upper-division nutrition courses.
  - b. One of the following: Nutrition 307 and 107L; Biology 326M and 226L; 326R and 226L; Chemistry 455.
  - c. Nutrition 337, 338W or 338H, 342, 343 or [and] 365 (Topic 1: Vitamins and Minerals), [;] and 365 (Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health).
- 11. Nine additional semester hours of nutrition, including three hours each from the following areas:
  - a. Nutritional sciences: Nutrition 365 or 370 or 371; the same topic of Nutrition 365 may not be counted both toward this requirement and toward requirement 10c.
  - b. Behavioral and clinical nutrition: Nutrition 315, 218 and 118L, 321, 330, 331, 332, or 370 or 371
  - c. Research: Three semester hours of coursework chosen from Nutrition <u>355 or</u> 355H, 366L, Biology 325L, 331L, and Biochemistry 369L.
- 12. Enough additional coursework to make a total of 126 semester hours.

### **Option III: Nutrition and Public Health**

- 4. Six semester hours chosen from Anthropology 322M (Topic 12: *Mexican Immigration Cultural History*), Sociology 307M, 319, 354K, and 368D.
- 5. Three semester hours of Statistics and Data Sciences 302, 304, 306, 325H, and 328M.
- 6. One of the following courses: Mathematics 408C, 408N, or Statistics and Data Sciences 332.
- Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369.
- 8. Biology 311C or 315H, 325 or 325H, and 365S.
- 9. The following core nutrition coursework:

- a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L; students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C* before progressing to other upper-division nutrition courses.
- b. Nutrition 337, 338W or 338H, 342, <u>343 or 365 (Topic 1: Vitamins and Minerals)</u>, and 365 ([Topic 1: Vitamins and Minerals;] Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health).
- 10. Three semester hours of research chosen from Nutrition 324 and 124L, 352, 353, 355, 366L, 379H, and Statistics and Data Sciences 318, 321, 325H, or 352; Statistics and Data Sciences 325H may not count toward both requirement 5 and 10.
- 11. Nine semester hours chosen from Anthropology 432L and 349C, Biology 446L, 361T, and 478L, Classical Civilization 306M, Health Education 352K (Topic 4: *Strategic Health Communication*) and 373, Kinesiology 320 and 324K, and Psychology 332C.
- 12. Enough additional coursework to make a total of 120 semester hours.

# **Option IV: Honors in Advanced Nutritional Sciences**

- 4. 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.
- 5. Mathematics 408C, 408N, Mathematics 408D-AP-H, or Statistics and Data Sciences 332.
- 6. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M.
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 320M, 320N, 220C, and Biochemistry 369.
- 8. Biology 311C, 311D, and 325 or Biology 315H and 325H; and Biology 365S.
- 9. Nutrition 312H, 312R, 338H, 342, 343 or 365 (Topic 1: Vitamins and Minerals), and 365 ([Topic 1: Vitamins and Minerals;] Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health), and twelve [fourteen] additional semester hours of nutrition or related coursework approved by the departmental honors adviser.
- 10. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser.
- 11. Nutrition 355H and 379H
- 12. Nine [Ten] semester hours of additional coursework approved by the departmental honors adviser.
- 13. Enough additional coursework to make a total of 120 semester hours.

### **Option V: Nutrition Honors**

- 4. Breadth requirement: A calculus course and a statistics course, one of which must be a designated honors course; Biology 315H and 325H; Chemistry 301H and 302H; 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.
- 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 312H, 312R, 338H, 342, <u>343 or 365 (Topic 1: Vitamins and Minerals)</u>, and 365 ([Topic 1: Vitamins and Minerals), and 365 ([Topic 1: Vitamins and Minerals), 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 355H and 379H.
- 12. <u>Six</u> [Ten] semester hours of additional coursework in nutrition or related area approved by the departmental honors adviser.
- 13. Six semester hours of coursework in the College of Liberal Arts or the College of Fine Arts.
- 14. Enough additional coursework to make a total of 120 semester hours.

#### **Option VI: International Nutrition**

Students in this option must participate for one semester or summer session in a study abroad program in nutrition offered by the University. Students must submit a study abroad application. During the study abroad experience, students complete Nutrition 353, Field Experience in International Nutrition. Additional coursework in nutrition or in the language, culture, or history of the country may be available during the international study experience. All study abroad programs in nutrition must be approved in advance by the international nutrition faculty adviser. A list of other study abroad opportunities in nutrition is maintained in the main office of the School of Human Ecology.

- 4. Economics 304K or 304L and at least three semester hours chosen from Psychology 301, Sociology 302, and Anthropology 302.
- 5. <u>Three [Six]</u> semester hours chosen from the following: Geography 339K, 357, Mexican American Studies 307, 318, Sociology 335, 354K.
- 6. Second-semester proficiency in a single foreign language.
- 7. Mathematics 408C, 408N, or Statistics and Data Sciences 332.
- 8. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M.
- 9. Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369.
- 10. Biology 311C or 315H, 325 or 325H, and 365S.
- 11. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L. Students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C* before progressing to other upper-division nutrition courses.
  - b. One of the following four-semester-hour sequences: Nutrition 307 and 107L; Biology 326M and 226L; 326R and 226L.
  - c. Nutrition 338W or 338H, [and] 342, and 343 or 365 (Topic 1: Vitamins and Minerals).
- 12. Nutrition 316, 218, 118L, 321, 331, and 353.
- 13. At least nine semester hours, three of which must be upper-division, chosen from one of the following areas:
  - a. Health professions: Chemistry 220C, 320N, Biology 206L, 311D, 326M, 346, Nutrition 337, Nutrition 365 ([Topic 1: Vitamins and Minerals;] Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health); Biology 326M may not be counted toward both requirement 11b and requirement 13a.
  - b. Dietetics: Nutrition 315, 330, 332, 370, 371.
  - c. Behavioral science: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, Psychology 308, 319K, Sociology 308D, 319, 320K, 324K.
- 14. Enough additional coursework to make a total of 126 semester hours.

## **Special Requirements**

{no changes}

#### DOCUMENTS OF THE GENERAL FACULTY

# PROPOSED CHANGES TO THE FRONT SECTION OF THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Dean Linda A. Hicke in the College of Natural Sciences has filed with the secretary of the Faculty Council the following changes to the front section of the College of Natural Sciences chapter in the *Undergraduate Catalog*, 2016-2018. On September 28, 2015, Associate Dean David Vanden Bout approved the proposal on behalf of Dean Hicke. The secretary has classified this proposal as legislation of *exclusive* interest to a single college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the changes on October 18, 2015, and forwarded them 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 UT System.

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 December 4, 2015.

Hillary Hart, Secretary

General Faculty and Faculty Council

# PROPOSED CHANGES TO THE FRONT SECTION OF THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2016-2018

Тур	e of	Change   ☐ Academic Change ☐ Degree Program Change (THECB form required)
Pro	pose	d classification   ⊠ Exclusive   □ General   □ Major
1.	CO	THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS IS YES, THE COLLEGE MUST NSULT LINDA DICKENS, DIRECTOR OF ACCREDITATION AND ASSESSMENT, TO FERMINE IF SACS-COC APPROVAL IS REQUIRED.
	•	Is this a new degree program?  Yes □ No ⊠
		Does the program offer courses that will be taught off campus?  Yes □ No ☒
	•	Will courses in this program be delivered electronically? Yes ☐ No ☒
2.		PLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR CH INDIVIDUAL CHANGE:
	1.	<u>Update of Dean's Office leadership</u> <b>Rationale:</b> Additions, removals, and changes are made to reflect the current leadership in the Dean's Office.
	2.	Freshman Research Initiative
		Indicate that the Freshman Research Initiative is now part of the Texas Institute for Discovery
		Education in Science (TIDES).
		Rationale: This reflects a change in where the program is housed in the college.
	3.	<u>Departmental Honors</u> Under Biochemistry Departmental Honors, delete Chemistry 379H and replace with Biochemistry 379H.
		Rationale: A few years ago, the Department of Chemistry and Biochemistry split. This is a cleanup that was missed.
	4.	Add Public Health Departmental Honors  Rationale: The BS in Public Health was established in the 2010-12 catalog and was housed in the School of Biological Sciences. Public Health is moving to the School of Human Ecology. Up this date, public health majors seeking honors enrolled in Biology 379H and earned Biology Departmental Honors. However, some public health projects were not sufficiently biology research oriented to be approved for Biology Departmental Honors. Establishing Public Health Departmental Honors will resolve this issue.
	5.	Special Requirements of the College  Delete the statement that students must complete in residence at least twenty-four of the last thirty semester hours counted toward the degree.  Rationale: The University dropped this residency requirement.
	6.	Degrees and Programs Under Bachelor of Arts, Plan I, delete the majors of biochemistry, biology, and human ecology.  Rationale: Retirement of these majors is presented in a separate impact statement; these majors need

7. Update a general description of the Bachelor of Science and Arts to include the addition of the transcript-recognized minor outside of science that may be used to fulfill the additional requirement for the degree.

to be deleted here as well.

**Rationale:** This is specifically addressed in a separate impact statement for the Bachelor of Science and Arts but needs to be added here if approved.

3.	THIS PROPOSAL INV	OLVES (Please check all that apply)				
	☐ Courses in other co	Courses in proposer's college that are frequently taken by students other colleges				
	☐ Course in the core	Change in course sequencing for	Courses that have to be			
	curriculum	an existing program	added to the inventory			
	☐ Change in admission		Other: departmental			
	requirements (exte	rnal or catalog language (e.g., lists of	honors; relocate field of			
	internal)	acceptable courses maintained by	study; miscellaneous			
		department office)				
	CCORE OF BRODOGE	CHANCE				
4.	SCOPE OF PROPOSEI		W = \( \tau \)			
		npact other colleges/schools?	Yes 🗌 No 🖂			
	If yes, then how?					
		et change in the number of students in your colle	ge? Yes □ No ⊠			
		ore (or fewer) students do you expect?	- C			
	c. Do you anticipate a n taking classes in your	et increase (or decrease) in the number of student				
		the number of students and/or class seats involve	Yes □ No ⊠			
		et increase (or decrease) in the number of students				
	courses in other colle		Yes $\square$ No $\boxtimes$			
		the number of students and/or class seats involve				
	3 - /1	in the second se				
	If 4 a, b, c, or d was answ	vered with yes, please answer the following qu	estions. If the proposal has			
		acts for another college/school, such as requiri				
		e number of seats offered, at least one contact r				
		o you expect to be impacted?	nust be at the conege-level.			
		st be contacted and their response(s) included:				
	Person communic					
	Date of communi	ication:				
	Response:					
		volve changes to the core curriculum or other basis	ic education requirements (42-			
		ourses, flags)? If yes, explain: No				
	If yes, undergraduat	e studies must be informed of the proposed ch	anges and their response			
	included:					
	Person communic	cated with:				
	Date of communi	cation:				
	Response:					
		nge the number of hours required for degree com	nletion? If wes explain: No			
	The same proposal case	ingo the number of hours required for degree confi	pretton: If yes, explain. 110			
5.	COLLEGE/SCHOOL A	PPROVAL PROCESS				
		Biochemistry Departmental Honors: March 26	2015			
	Zoparamoni approvar date.	_				
	Collogo annu1 d-t-	Public Health Departmental Honors: August 12				
	College approval date:	Biochemistry Departmental Honors: April 24, 2				
		Public Health Departmental Honors: Septembe				
	Dean approval date:	September 28, 2015, David Vanden Bout, Association	28, 2015, David Vanden Bout, Associate Dean			

### PROPOSED NEW CATALOG TEXT:

#### **COLLEGE OF NATURAL SCIENCES**

Linda A. Hicke, PhD, Dean

Dean Appling, PhD, Associate Dean, Research and Facilities

David A. Vanden Bout-[Sacha E. Kopp,] PhD, Associate Dean, Undergraduate Education

Shelly Payne, PhD, Associate Dean, Faculty Affairs

Daniel F. Knopf, Associate Dean, Graduate Education

Catherine A. Stacy, PhD, Senior Assistant Dean, Strategy and Planning

Kelsey A. Evans, BA, Assistant Dean, External Relations

Jennifer Moon, PhD, Assistant Dean, Non-tenure Track Faculty {Note: title is under negotiation with HR}

Ricardo Medina, MBA CPA, Assistant Dean, Business Affairs and Administration

Susan C. Harkins, EdD, Assistant Dean, Texas Interdisciplinary Plan

Michael W. Raney, PhD, Assistant Dean, Student Affairs and First-Year Initiatives

Assistant Dean, Honors, Research, and International Studies

[Catherine A. Stacy, PhD, Senior Assistant Dean, Strategy and Planning]

#### **GENERAL INFORMATION**

Arts and Sciences Education
Financial Assistance Available through the College
Student Services
Study Abroad
{no changes}

#### **Student Programs**

Biology Scholars Program
Emerging Scholars Program
{no changes}

## Freshman Research Initiative

The Freshman Research Initiative <u>in the Texas Institute for Discovery Education in Science (TIDES)</u> introduces undergraduate students to the world of scientific research at the beginning of their academic careers by integrating a three-semester research experience into coursework required for the degree. All students begin with an introductory research methods course in the first semester, followed by two semesters of work on real, cutting-edge research projects in fields like biology, biochemistry, nanotechnology, molecular biology, astronomy, physics, mathematics, and computer science. After finishing the course sequence, interested students are assisted in joining faculty or other research laboratories for further work.

Texas Interdisciplinary Plan Undergraduate Research UTeach-Natural Sciences Women in Natural Sciences {no changes}

#### ADMISSION AND REGISTRATION

{changes addressed in a separate impact statement}

## ACADEMIC POLICIES AND PROCEDURES

Academic Standards
Mathematics Placement
Repetition of a Course
Concurrent Enrollment
Undergraduates in a Graduate Course
Petitions for Degree Requirements
{no changes}

#### Honors

{no changes}

University Honors
Graduation with University Honors
Dean's Scholars Honors Programs
Health Science Scholars Program
Polymathic Scholars Program
Turing Scholars in Computer Science
Honors in Advanced Human Development and Family Sciences Program
Honors in Advanced Nutritional Sciences Program
{no changes}

# **College Honors**

**Departmental Honors Astronomy Departmental Honors**{no changes}

#### **Biochemistry Departmental Honors**

Majors who plan to seek special departmental honors in biochemistry should apply to the honors adviser for admission to the honors program no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in biochemistry and chemistry of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Biochemistry; (2) two semesters of [Chemistry] Biochemistry 379H, [Chemistry] Biochemistry Honors Tutorial Course; (3) a thesis and a presentation based on research; the research topic and the thesis must be approved by the supervising faculty member and the undergraduate faculty adviser; (4) a University grade point average of at least 3.00 and a grade point average in biochemistry and chemistry of at least 3.50; (5) completion at the University of at least sixty semester hours of coursework counted toward the degree; and (6) approval of the honors adviser.

Biology Departmental Honors
Chemistry Departmental Honors
Computer Science Departmental Honors
Human Development and Family Sciences Departmental Honors
Human Ecology Departmental Honors
Mathematics Departmental Honors
Nutrition Departmental Honors
Physics Departmental Honors
{no changes}

## **Public Health Departmental Honors**

Majors who plan to seek departmental honors in public health should apply to the honors adviser for admission to the honors program no later than the beginning of the senior year. Students are encouraged to apply as early as the beginning of their junior year. A University grade point average of at least 3.0 and a grade point average in public health of at least 3.5 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Public Health; (2) two semesters of Public Health 379H, *Honors Tutorial Course*; (3) a thesis and presentation based on research and approved by the research supervisor and the honors adviser; (4) a University grade point average of at least 3.0, a grade point average in public health of at least 3.5, and grades of at least a B in Public Health 379H; and (5) completion at the University of at least sixty semester hours of coursework counted toward the degree.

# **Textiles and Apparel Departmental Honors** {no changes}

#### GRADUATION

## Special Requirements of the College

All students must fulfill the General Requirements for graduation. Students in the College of Natural Sciences must also fulfill the following requirements.

- 1. The University requires that the student complete in residence at least sixty semester hours of the coursework counted toward the degree. For the Bachelor of Arts, Plan I, these sixty hours must include at least eighteen hours in the major.
- [2. All University students must complete in residence at least twenty four of the last thirty semester hours counted toward the degree. For students seeking the Bachelor of Science in Medical Laboratory Science, this rule applies to the academic work completed at the University.]
- 2. [3-] The University requires that at least six semester hours of advanced coursework in the major be completed in residence. Additional hours in the professional or major sequence in many cases are required by individual natural sciences degree programs.
- 3. [4-] A candidate for a degree must be registered in the College of Natural Sciences either in residence or in absentia the semester or summer session the degree is to be awarded. Graduation applications must be submitted no later than the date given in the academic calendar. The application and supplemental in absentia instructions are available via the College of Natural Sciences Web Site.

# **Applying for Graduation**

{no changes}

#### **DEGREES AND PROGRAMS**

The College of Natural Sciences offers the following undergraduate degrees:

- 1. Bachelor of Science and Arts, with majors in astronomy, biochemistry, biology, chemistry, computer science, human development and family sciences, human ecology, nutrition, mathematics, neuroscience, and physics.
- 2. Bachelor of Science degrees in astronomy, biochemistry, biology, chemistry, computer science, environmental science, human development and family sciences, mathematics, medical laboratory science, neuroscience, nutrition, physics, public health, and textiles and apparel.

3. Bachelor of Arts, Plan I, with majors in astronomy, [biochemistry, biology,] chemistry, computer science, [human ecology,] mathematics, and physics.

The Bachelor of Science and Arts degree offers a cross-disciplinary experience for students who want to combine a strong core science experience with coursework in areas such as business, communications, fine arts, and the liberal arts. Students choose a major comprised of forty-eight hours of science and mathematics. Students choose either a <u>transcript-recognized minor outside of sciences</u>, fifteen <u>hours</u> [-hour minor] in a field of study outside of sciences, or an eighteen to twenty-four hour transcript-recognized certificate such as business foundations, core texts and ideas (studying books that shaped western civilization and thought), food and society, forensic science, pre-health professions, teaching, and textile conservation, among others.

The Bachelor of Science degrees provide deep exploration of science fields for students preparing for graduate science programs and careers as specialized scientists. The degrees contain between eighty to ninety hours of science and mathematics, and typically have multiple specialized options that reflect niche areas of study.

The Bachelor of Arts, Plan I, is shared with the College of Liberal Arts.

A student may not earn more than one Bachelor of Arts, Bachelor of Science and Arts, or Bachelor of Science in Environmental Science degree from the University. A student may earn only one undergraduate degree in a particular field of study from the College of Natural Sciences. A student who holds a Bachelor of Arts or a Bachelor of Science and Arts degree from the University may earn a second major designation in another field of study that will appear on the University transcript.

The title of a graduate's degree appears on his or her diploma, but the major does not. The degree, the major, and the transcript-recognized certificate appear on the graduate's University transcript.

A natural sciences student who wishes to add another major in the college must meet the criterion described in the Admission and Registration section.

Applicability of Certain Courses
Physical Activity Courses
ROTC Courses
Courses Taken on the Pass/Fail Basis
Courses in a Single Field
College Algebra
{no changes}

# Transcript-Recognized Certificate Programs

{no changes}

# Certificate in Computational Science and Engineering

{no changes}

#### **Forensic Science Certificate**

{changes addressed in a separate impact statement}

### **Certificate in Scientific Computation**

{changes addressed in a separate impact statement}

#### **Evidence and Inquiry Certificate**

{no changes}

#### **Food and Society Certificate**

{changes addressed in a separate impact statement}

#### **Pre-Health Professions Certificate**

{changes addressed in a separate impact statement}

#### **Certificate in Textile Conservation and Museum Studies**

{no changes}

## **UTeach Natural Sciences Secondary Teaching Option Certificate**

{no changes}

### **UTeach Teacher Certification**

{no changes}

**Related Fields of Study** 

Bachelor of Arts, Plan I

**Bachelor of Science and Arts** 

**Bachelor of Science in Astronomy** 

**Bachelor of Science in Biochemistry** 

**Bachelor of Science in Biology** 

**Bachelor of Science in Chemistry** 

**Bachelor of Science in Environmental Science** 

# **Bachelor of Science in Human Development and Family Sciences**

{changes addressed in separate impact statements}

# **Bachelor of Science in Interdisciplinary Science**

{deletion addressed in a separate impact statement}

**Bachelor of Science in Mathematics** 

**Bachelor of Science in Medical Laboratory Science** 

**Bachelor of Science in Neuroscience** 

**Bachelor of Science in Nutrition** 

**Bachelor of Science in Physics** 

**Bachelor of Science in Public Health** 

**Bachelor of Science in Textiles and Apparel** 

{changes addressed in separate impact statements}

# **COURSES (PAGES IN THIS SECTION)**

Change in location of Public Health Course Inventory, see below.

# **School of Human Ecology**

Human Development and Family Sciences: HDF

{no changes, other than those made through course inventory}

Human Ecology: HE

{no changes, other than those made through course inventory}

 $\{no\ changes, other\ than\ those\ made\ through\ course\ inventory\}$ 

Nutrition: NTR

Public Health: PBH

Textiles and Apparel: TXA

{no changes, other than those made through course inventory}

**Department of Molecular Biosciences** 

Biochemistry: BCH

{no changes, other than those made through course inventory}

{Public Health: PBH]

COLLEGE OF NATURAL SCIENCES FACULTY