

# UNIVERSITY STUDIES - BS, BIOMEDICAL SCIENCES CONCENTRATION

The University Studies major allows students to choose an area of concentration and two minors to constitute the 120 hours of the degree. The University Studies is a BS degree with an area of concentration in biomedical sciences. The area of concentration emphasizes applied biology in the context of the veterinary and human medical field, highlighting one health concepts and the interrelatedness of human, animal and environmental health and the factors affecting each. Students considering USVM as a major should note that all students are required to complete prerequisite coursework including biology, fundamentals of chemistry (2 semesters) and organic chemistry with lab (1 semester), prior to completing the area of concentration coursework. Minors must be chosen from an approved list (Biology or Biomedical Sciences cannot be chosen as minors to couple with this concentration). This major does not admit first time college students. Students can apply to change their curriculum according to approved university steps and in consultation with an academic advisor from the school. Students must maintain a minimum overall Texas A&M GPA of 2.0 and meet all requirements and prerequisite coursework for the declared area of concentration and two minors. The minors will be recognized after graduation on the student's transcript, but not on the student's diploma.

## Program Requirements

### First Year

Fall		Semester Credit Hours
BIOL 111	Introductory Biology I	4
CHEM 119	Fundamentals of Chemistry I	4
Mathematics ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics</a> ) <sup>1</sup>		3
Social and behavioral sciences ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences</a> )		3
<b>Semester Credit Hours</b>		<b>14</b>
Spring		
BIOL 112	Introductory Biology II	4
CHEM 120	Fundamentals of Chemistry II	4
Select one of the following:		3
ENGL 103	Introduction to Rhetoric and Composition	
ENGL 104	Composition and Rhetoric	
ENGL 203	Writing about Literature	
ENGL 210	Technical and Professional Writing	
Select one of the following:		3
MATH 142	Business Calculus	
MATH 151	Engineering Mathematics I	
MATH 171	Calculus I	
<b>Semester Credit Hours</b>		<b>14</b>

### Second Year

Fall		
CHEM 227 & CHEM 237	Organic Chemistry I and Organic Chemistry Laboratory	4
American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) <sup>2</sup>		3
Creative arts ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts</a> )		3
Government/Political science ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science</a> ) <sup>2</sup>		3
BIMS directed elective <sup>3,4</sup>		3
<b>Semester Credit Hours</b>		<b>16</b>

### Spring

American history ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history</a> ) <sup>2</sup>		3
Government/Political science ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science</a> ) <sup>2</sup>		3
Language, philosophy and culture ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture</a> )		3
BIMS directed elective <sup>3,4</sup>		6
<b>Semester Credit Hours</b>		<b>15</b>

### Third Year

Fall		
VTPB 421	Infectious Diseases of Humans and Animals	3
Technical elective <sup>4,5</sup>		3
General electives <sup>6</sup>		9
<b>Semester Credit Hours</b>		<b>15</b>

### Spring

BIMS 320/ GENE 320		3
Communication ( <a href="http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication">http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication</a> )		3
Technical elective <sup>4,5</sup>		3
General electives <sup>6</sup>		6
<b>Semester Credit Hours</b>		<b>15</b>

### Fourth Year

Fall		
General electives <sup>6</sup>		15
<b>Semester Credit Hours</b>		<b>15</b>
Spring		
Technical elective <sup>4,5</sup>		3
General electives <sup>6</sup>		13
<b>Semester Credit Hours</b>		<b>16</b>
<b>Total Semester Credit Hours</b>		<b>120</b>

<sup>1</sup> Except MATH 167; PHIL 240.

<sup>2</sup> Completion of four semesters of upper-level ROTC may be substituted for 3 hours of American history and 3 hours of political science.

<sup>3</sup> Select from ANSC 107, ANSC 108, ANSC 210, ANSC 303/ NUTR 303, ANSC 318, ANSC 320; ANSC 326/FSTC 326, ANSC 327/ FSTC 327, BICH 410, BICH 411, BICH 412, BICH 414, BICH 431/ GENE 431, BICH 432/GENE 432; BIMS 110, BIMS 125, BIMS 201, BIMS 289, BIMS 291, BIMS 380, BIMS 392, BIMS 405/GENE 405, BIMS 421/GENE 421, BIMS 481, BIMS 484, BIMS 485, BIMS 489, BIMS 491; ENTO 208, ENTO 209, ENTO 210, ENTO 423, ENTO 426/VIBS 426, ENTO 431/FIVS 431, ENTO 432/FIVS 432; NRSC 101; NUTR 222; URPN 370; VIBS 111, VIBS 204, VIBS 210, VIBS 211, VIBS 222, VIBS 243, VIBS 277/NRSC 277, VIBS 285, VIBS 289, VIBS 310, VIBS 311, VIBS 343, VIBS 401, VIBS 404, VIBS 407/NRSC 407, VIBS 408, VIBS 411, VIBS 413, VIBS 422, VIBS 424/VTPP 424, VIBS 443, VIBS 447, VIBS 450/NRSC 450, VIBS 456, VIBS 485, VIBS 489; VLCS 422, VLCS 485; VSCS 485, VTPB 212, VTPB 221, VTPB 285, VTPB 289, VTPB 301/RWFM 309, VTPB 303, VTPB 407, VTPB 409, VTPB 410, VTPB 411, VTPB 415, VTPB 438, VTPB 460, VTPB 485, VTPB 487/BIOL 487, VTPB 489; VTPP 123, VTPP 223, VTPP 224, VTPP 234, VTPP 235, VTPP 401/BMEN 400, VTPP 420, , VTPP 425, VTPP 427, VTPP 429, VTPP 438, VTPP 444, VTPP 452, VTPP 485, VTPP 489, VTPP 491.

<sup>4</sup> Up to 9 course hours may be selected from BIMS 484, BIMS 485; BIMS 491; VIBS 285, VIBS 485, VLCS 485; VSCS 485; VTPB 285, VTPB 485; VTPP 285, VTPP 291, VTPP 485, VTPP 491. No more than 6 hours of BIMS 484 may be used. Restriction to be enforced by the BIMS advising office.

<sup>5</sup> Select from BIMS 380, BIMS 392, BIMS 405/ GENE 405, BIMS 421/GENE 421; BIMS 481, BIMS 484, BIMS 485, BIMS 489, BIMS 491, VIBS 310, VIBS 311, VIBS 343, VIBS 401, VIBS 404, VIBS 407/NRSC 407, VIBS 408, VIBS 411, VIBS 413, VIBS 422, VIBS 424/VTPP 424, VIBS 426/ENTO 426, VIBS 443, VIBS 447, VIBS 450/NRSC 450, VIBS 456, VIBS 485, VIBS 489; VLCS 422, VLCS 485; VSCS 485, VTPB 301/RWFM 309, VTPB 303, VTPB 407, VTPB 409, VTPB 410, VTPB 411, VTPB 415, VTPB 438, VTPB 460, VTPB 485, VTPB 487/BIOL 487; VTPB 489, VTPP 401/ BMEN 400, VTPP 420, VTPP 424/VIBS 424, VTPP 425, VTPP 429, VTPP 438, VTPP 444, VTPP 452, VTPP 485, VTPP 489, VTPP 491.

<sup>6</sup> Includes 30-36 hours used to satisfy the two minor requirements and 7-13 hours any 100-499 course not used elsewhere (except MATH 102-104 (<http://catalog.tamu.edu/undergraduate/course-descriptions/math/>)); only 1 KINE 199 may be used in this area.

All students are required to complete 3 hours of International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) credit (ICD) and 3 hours of Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) (CD) credits. A course satisfying a core category, a college department requirement, or a free elective can be used to satisfy this requirement. Select in consultation with academic advisor.

Graduation requirements require two courses with the (UWRT) Writing Intensive, or 1 course with the Writing Intensive (UWRT)/1 course Oral communication (UCRT) attribute. Consult your academic advisor for choices. These credits may come from the concentration field of study or the minor areas.

Students must complete 36 hours 3/400 level coursework in residency at TAMU.