



October 31, 2015

Dr. Steve Neal  
Assistant Dean for Academic Affairs  
100E Agricultural Administration Building  
2120 Fyffe Rd  
Columbus, OH 43210

Dear Dr. Neal,

Enclosed please find the proposed curriculum plan for the Associate of Science in Biochemical Sciences (BIOCHSC-AS) with Biology (BIO), Food Science (FSC) and Pre-Veterinary Medicine (PVM) specializations, submitted for consideration by the FAES Academic Affairs Committee. The modifications of the current curriculum plan respond to the Ohio Department of Higher Education (ODHE) revised requirements for this degree program as indicated in the revised ODHE Guidelines and Procedures for Academic Program Review document, and are in alignment with the approved curriculum plan template for the Ohio State ATI Associate of Science degree program. The changes address the reduction in credit hours and alignment with the general education curriculum for this degree program. In addition, the proposed curriculum plan provides students with a course of study that will prepare them to transition smoothly to the corresponding four-year degree program(s) on the Columbus campus of The Ohio State University.

In conjunction with the Baccalaureate Biology, Food Science and Technology, and Animal Sciences Animal Biosciences programs in Columbus, this program is being changed to take advantage of specific strengths found at the Ohio State ATI and Columbus campuses:

Biology specialization:

- MATH 1150 Pre-calculus was removed (-5 cr)
- PHYSICS 1200 Mechanics, Kinematics, Fluids, Waves was removed (-5 cr)
- Electives were removed (-6 cr)
- MICCRBIO 4000 Basic and Practical Microbiology was added (+4 cr)
- RELSTDS 2370 Introduction to Comparative Religion was added (+3 cr)
- Total credit hours were changed from 69 to 60

Food Science specialization:

- One Art/Humanities course was removed (-3 cr)
- AGRCOMM 3130 Oral Expression in Agriculture was removed (-3 cr)
- COMLDR 3537 Data Analysis in the Applied Sciences was removed (-3 cr)
- Total credit hours were changed from 69 to 60
- Concurrence for the program has been received from the Department of Food Science and Technology

Pre-Veterinary Medicine specialization:

- One Art/Humanities course was removed (-3 cr)
- AGRCOMM 2367 Agricultural Issues in Contemporary Society was removed (-3 cr)
- CHEM 2520 was moved from required to an elective option (-4 cr)
- PHYSICS 1200 was moved from required to an elective option (-5 cr)
- AGRCOMM 3130 Oral Expression in Agriculture was added (+3 cr)

- ANMLTEC 3140T Animal Anatomy and Physiology was added (+4 cr)
- Electives were changed from 7 to 6 (-1 cr)
- Total credit hours was changed from 69 to 60

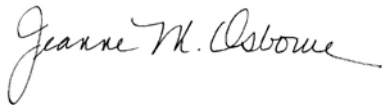
The proposed curriculum plan was developed by the Program Coordinator for the major. The courses that are included in the current and proposed curriculum plan were selected in consultation with other faculty involved in the program as well as stakeholder advisory committees and/or individuals. The proposed curriculum plan and course sequence were approved by the Arts, Science and Business Technologies Division at Ohio State ATI and the Ohio State ATI Academic Affairs committee. Ohio State ATI is committed to protecting the academic progress of students. In order that this proposed program change will not disrupt progress toward their degree, course substitutions and manual management of the degree audits will occur as needed for students enrolled in this degree program during the transition. When appropriate, coursework completed by students under the current degree program will be utilized for completion of the proposed degree program.

Enclosed please find the following documents:

- Current curriculum plans and course sequences for the Biochemical Sciences degree program (with specializations)
- Proposed curriculum plans and course sequences for the Biochemical Sciences degree program (with specializations)
- Concurrence for the Food Science specialization curriculum plan/course sequence

Please let me know if there are questions or additional information or documentation is required to accompany this submission. We look forward to hearing from the FAES Academic Affairs Committee regarding next steps in the approval process.

Sincerely,



Jeanne M. Osborne  
Assistant Director, Academic Affairs

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Biology Specialization**

Ohio State ATI – AS Degree		Major:	Biology Specialization	
Subject	Sem Crs	Course Dept. & Number	Course Title	Crs
English Composition and Literature	6 cr	ENGLISH 1110.01 AGRCOMM 2367	First-Year English Composition Agricultural Issues in Contemporary Society	3 3
Humanities	9 cr	HISTORY 1152  COMPSTD 2301 MUSIC 2250	American Civilization since 1877 Introduction to World Literature Music Cultures of the World	3 3 3
Social and Behavioral Sciences	6 cr	RURLSOC 1500 AEDECON 2001	Introduction to Rural Sociology Principles of Food & Resource Economics	3 3
Natural Science (physical and biological) and/or Mathematics	10-13 cr	BIOLOGY 1113  CHEM 1210 MATH 1150	Bio Sci: Energy Transfer and Development General Chemistry 1 Pre-Calculus	4 5 5
Open Option or Cultures and Ideas	3 cr	CHEM 1220	General Chemistry 2	5
College/Career Orientation	1 cr	GENSTDS 1201T BIOTECH 1201T	College Orientation Exploring Biochemical Sciences and Biotechnology	0.5 0.5
<b>Minimum General Total</b>	<b>36 cr</b>			<b>41</b>
Minimum of 24 cr. of transferable courses applicable to OSU bachelor's degree.  Developed in consultation with affiliated department/unit where appropriate.	24 cr	BIOLOGY 1114  CHEM 2510 CHEM 2520 MATH 1151 PHYSICS 1200  ELECTIVES	Bio Sci: Form, Function, Diversity and Ecology Organic Chemistry 1 Organic Chemistry 2 Calculus I Mechanics, Kinematics, Fluids, Waves	4 4 4 5 5 6
<b>Other Course Total</b>	<b>24 min cr</b>			<b>28</b>
<b>Degree Totals</b>	<b>60 cr min– 70 cr max</b>			<b>69</b>

BIOCHSC-AS BIO  
Catalog Year  
2014-2015

**Biochemical Sciences  
Biology Specialization  
Associate of Science**

<u>Course</u>	<u>Title</u>	<u>Credits</u>
<b><u>1<sup>st</sup> Year – Autumn Semester</u></b>		
BIOTECH 1201T	Exploring Biochemical Sciences and Biotechnology	.5
CHEM 1210	General Chemistry 1	5
ENGLISH 1110.01	First-Year English Composition	3
GENSTDS 1201T	College Orientation	.5
MATH 1150	Pre-Calculus	5
MUSIC 2250	Music Cultures of the World	<u>3</u>
		<b>17</b>
<b><u>1<sup>st</sup> Year – Spring Semester</u></b>		
CHEM 1220	General Chemistry 2	5
HISTORY 1152	American Civilization since 1877	3
MATH 1151	Calculus I	5
PHYSICS 1200	Mechanics, Kinematics, Fluids, Waves	<u>5</u>
		<b>18</b>
<b><u>2<sup>nd</sup> Year – Autumn Semester</u></b>		
AEDECON 2001	Principles of Food and Resource Economics	3
AGRCOMM 2367	Agricultural Issues in Contemporary Society	3
BIOLOGY 1113	Bio Sci: Energy Transfer and Development	4
CHEM 2510	Organic Chemistry 1	4
ELECTIVE	Elective - see back for list of elective options	<u>4</u>
		<b>18</b>
<b><u>2<sup>nd</sup> Year – Spring Semester</u></b>		
BIOLOGY 1114	Bio Sci: Form, Function, Diversity and Ecology	4
CHEM 2520	Organic Chemistry 2	4
COMPSTD 2301	Introduction to World Literature	3
ELECTIVE	Elective - see back for list of elective options	2
RURLSOC 1500	Introduction to Rural Sociology	<u>3</u>
		<b>16</b>
	<b>Total Credits</b>	<b>69</b>

**BIOCHSC-AS BIO**  
**Catalog Year**  
**2014-2015**

**Biochemical Sciences**  
**Biology Specialization**  
**Associate of Science**

**Elective options – 6 credits required:**

ANMLTEC 2200T	Introduction to Animal Sciences	3
ANMLTEC 3130T	Principles of Animal Nutrition	2
ANMLTEC 3140T	Animal Anatomy and Physiology	4
AGRCOMM 3130	Oral Expression in Agriculture	3
COMLDR 3537	Data Analysis in the Applied Sciences	3
ENR 2100	Introduction to Environmental Science	3
PHYSICS 1201	E&M, Optics, Modern Physics	5
PSYCH 1100	Introduction to Psychology	3

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Food Science Specialization**

Ohio State ATI – AS Degree		Major:	Food Science Specialization	
Subject	Sem Crs	Course Dept. & Number	Course Title	Crs
English Composition and Literature	6 cr	ENGLISH 1110.01 AGRCOMM 2367	First-Year English Composition Agricultural Issues in Contemporary Society	3 3
Humanities	9 cr	HISTORY 1152  COMPSTD 2301 MUSIC 2250	American Civilization since 1877 Introduction to World Literature Music Cultures of the World	3 3 3
Social and Behavioral Sciences	6 cr	RURLSOC 1500 AEDECON 2001	Introduction to Rural Sociology Principles of Food & Resource Economics	3 3
Natural Science (physical and biological) and/or Mathematics	10-13 cr	BIOLOGY 1113  CHEM 1210 MATH 1150	Bio Sci: Energy Transfer and Development General Chemistry 1 Pre-Calculus	4 5 5
Open Option or Cultures and Ideas	3 cr	CHEM 1220	General Chemistry 2	5
College/Career Orientation	1 cr	GENSTDS 1201T BIOTECH 1201T	College Orientation Exploring Biochemical Sciences and Biotechnology	0.5 0.5
<b>Minimum General Total</b>	<b>36 cr</b>			<b>41</b>
Minimum of 24 cr. of transferable courses applicable to OSU bachelor's degree.  Developed in consultation with affiliated department/unit where appropriate.	24 cr	AGRCOMM 3130 CHEM 2510 CHEM 2520 COMLDR 3537  MATH 1151 MICRBIO 4000  PHYSICS 1200	Oral Expression in Agriculture Organic Chemistry 1 Organic Chemistry 2 Data Analysis in the Applied Sciences Calculus I Basic and Practical Microbiology Mechanics, Kinematics, Fluids, Waves	3 4 4 3 5 4 5
<b>Other Course Total</b>	<b>24 min cr</b>			<b>28</b>
<b>Degree Totals</b>	<b>60 cr min– 70 cr max</b>			<b>69</b>

BIOCHSC-AS FSC  
Catalog Year  
2014-2015

**Biochemical Sciences  
Food Science Specialization  
Associate of Science**

<u>Course</u>	<u>Title</u>	<u>Credits</u>
<b><u>1<sup>st</sup> Year – Autumn Semester</u></b>		
BIOTECH 1201T	Exploring Biochemical Sciences and Biotechnology	.5
CHEM 1210	General Chemistry 1	5
ENGLISH 1110.01	First-Year English Composition	3
GENSTDS 1201T	College Orientation	.5
MATH 1150	Pre-Calculus	5
MUSIC 2250	Music Cultures of the World	<u>3</u>
		<b>17</b>
<b><u>1<sup>st</sup> Year – Spring Semester</u></b>		
CHEM 1220	General Chemistry 2	5
HISTORY 1152	American Civilization since 1877	3
MATH 1151	Calculus I	5
PHYSICS 1200	Mechanics, Kinematics, Fluids, Waves	<u>5</u>
		<b>18</b>
<b><u>2<sup>nd</sup> Year – Autumn Semester</u></b>		
AEDECON 2001	Principles of Food and Resource Economics	3
AGRCOMM 2367	Agricultural Issues in Contemporary Society	4
BIOLOGY 1113	Bio Sci: Energy Transfer and Development	4
CHEM 2510	Organic Chemistry 1	3
COMLDR 3537	Data Analysis in the Applied Sciences	<u>3</u>
		<b>17</b>
<b><u>2<sup>nd</sup> Year – Spring Semester</u></b>		
AGRCOMM 3130	Oral Expression in Agriculture	3
CHEM 2520	Organic Chemistry 2	4
COMPSTD 2301	Introduction to World Literature	3
MICRBIO 4000	Basic and Practical Microbiology	4
RURLSOC 1500	Introduction to Rural Sociology	<u>3</u>
		<b>17</b>
	<b>Total Credits</b>	<b>69</b>

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Pre-Veterinary Medicine Specialization**

Ohio State ATI – AS Degree		Major:	Pre-Veterinary Medicine Specialization	
Subject	Sem Crs	Course Dept. & Number	Course Title	Crs
English Composition and Literature	6 cr	ENGLISH 1110.01 AGRCOMM 2367	First-Year English Composition Agricultural Issues in Contemporary Society	3 3
Humanities	9 cr	HISTORY 1152  COMPSTD 2301 MUSIC 2250	American Civilization since 1877 Introduction to World Literature Music Cultures of the World	3  3 3
Social and Behavioral Sciences	6 cr	RURLSOC 1500 AEDECON 2001	Introduction to Rural Sociology Principles of Food & Resource Economics	3 3
Natural Science (physical and biological) and/or Mathematics	10-13 cr	BIOLOGY 1113  CHEM 1210 MATH 1150	Bio Sci: Energy Transfer and Development General Chemistry 1 Pre-Calculus	4  5 5
Open Option or Cultures and Ideas	3 cr	CHEM 1220	General Chemistry 2	5
College/Career Orientation	1 cr	GENSTDS 1201T BIOTECH 1201T	College Orientation Exploring Biochemical Sciences and Biotechnology	0.5 0.5
<b>Minimum General Total</b>	<b>36 cr</b>			<b>41</b>
Minimum of 24 cr. of transferable courses applicable to OSU bachelor's degree.  Developed in consultation with affiliated department/unit where appropriate.	24 cr	BIOLOGY 1114  CHEM 2510 CHEM 2520 MICRBIO 4000  PHYSICS 1200  ELECTIVES	Bio Sci: Form, Function, Diversity and Ecology Organic Chemistry 1 Organic Chemistry 2 Basic and Practical Microbiology Mechanics, Kinematics, Fluids, Waves	4  4 4 4  5  7
<b>Other Course Total</b>	<b>24 min cr</b>			<b>28</b>
<b>Degree Totals</b>	<b>60 cr min– 70 cr max</b>			<b>69</b>



BIOCHSC-AS PVM  
Catalog Year  
2014-2015

**Biochemical Sciences**  
**Pre-Veterinary Medicine Specialization**  
**Associate of Science**

<u>Course</u>	<u>Title</u>	<u>Credits</u>
<b><u>1<sup>st</sup> Year – Autumn Semester</u></b>		
BIOTECH 1201T	Exploring Biochemical Sciences and Biotechnology	.5
CHEM 1210	General Chemistry 1	5
ENGLISH 1110.01	First-Year English Composition	3
GENSTDS 1201T	College Orientation	.5
MATH 1150	Pre-Calculus	5
MUSIC 2250	Music Cultures of the World	<u>3</u>
		<b>17</b>
<b><u>1<sup>st</sup> Year – Spring Semester</u></b>		
BIOLOGY 1113	Bio Sci: Energy Transfer and Development	4
CHEM 1220	General Chemistry 2	5
HISTORY 1152	American Civilization since 1877	3
PHYSICS 1200	Mechanics, Kinematics, Fluids, Waves	<u>5</u>
		<b>17</b>
<b><u>2<sup>nd</sup> Year – Autumn Semester</u></b>		
AEDECON 2001	Principles of Food and Resource Economics	3
AGRCOMM 2367	Agricultural Issues in Contemporary Society	3
CHEM 2510	Organic Chemistry 1	4
ELECTIVE	Elective - see back for list of elective options	4
RURLSOC 1500	Introduction to Rural Sociology	<u>3</u>
		<b>17</b>
<b><u>2<sup>nd</sup> Year – Spring Semester</u></b>		
BIOLOGY 1114	Bio Sci: Form, Function, Diversity and Ecology	4
CHEM 2520	Organic Chemistry 2	4
COMPSTD 2301	Introduction to World Literature	3
ELECTIVE	Elective - see back for list of elective options	3
MICRBIO 4000	Basic and Practical Microbiology	<u>4</u>
		<b>18</b>
	<b>Total Credits</b>	<b>69</b>

BIOCHSC-AS PVM  
Catalog Year  
2014-2015

**Biochemical Sciences  
Pre-Veterinary Medicine Specialization  
Associate of Science**

**Elective options – 7 credits required:**

ANMLTEC 2200T	Introduction to Animal Sciences	3
ANMLTEC 2300T	Introduction to Animal Sciences Laboratory	1
ANMLTEC 3130T	Principles of Animal Nutrition	2
ANMLTEC 3140T	Animal Anatomy and Physiology	4
AGRCOMM 3130	Oral Expression in Agriculture	3
COMLDR 3537	Data Analysis in the Applied Sciences	3
MATH 1151	E&M, Optics, Modern Physics	5
PHYSICS 1201	Calculus I	5
PSYCH 1100	Introduction to Psychology	3

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Biology Specialization**

Ohio State ATI		Major: Biology Specialization	
General Education		General Education	
Subject	Sem Cr		Sem Cr..
<b>ENGLISH COMPOSITION/ ORAL COMMUNICATION</b> ENGLISH 1110.01 AGRCOMM 2367 or 3130 or ENR 2367	3	ENGLISH 1110.01	3
	3	AGRCOMM 2367	3
<b>MATHEMATICS/ STATISTICS AND LOGIC MATHEMATICS</b>	4-5	MATH 1151	5
<b>ARTS AND HUMANITIES</b> Select at least 1 course from 2 of the following areas: Historical Study Culture and Ideas* Literature* Art*	min. 6	HISTORY 1152 COMPSTD 2301* MUSIC 2250* <b>RELSTDS 2370*</b>	3 3 3 <b>3</b>
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Social and Behavioral Sciences AEDECON 2001 RURLSOC 1500	3 3	AEDECON 2001 RURLSOC 1500	3 3
<b>NATURAL SCIENCES</b>	min. 6	BIOLOGY 1113 CHEM 1210	4 5
Additional OTM course(s) (from 5 GE categories above) or Open Option (course(s) as defined by OSU Columbus major)		BIOLOGY 1114	4
<b>COLLEGE/CAREER ORIENTATION</b>	1	GENSTDS 1201T BIOTECH 1201T	0.5 0.5
<b>Total General Education</b>		<b>Total General Education</b>	
	<b>37-40</b>		<b>43</b>
Transferable and major courses applicable to OSU bachelor's degree  Developed in consultation with affiliated department/unit where appropriate		CHEM 1220 CHEM 2510 CHEM 2520 <b>MICRBIO 4000</b>	5 4 4 <b>4</b>
		<b>Total Transferable and Major Courses</b>	
		<b>17</b>	
<b>DEGREE TOTAL</b>		<b>DEGREE TOTAL</b>	
<b>60-65</b>		<b>60</b>	

\*COMPSTD 2301 (Literature), MUSIC 2250 (Art), and RELSTDS 2370 (Culture and Ideas) courses offered at Ohio State ATI also fulfill a global studies general education requirement, in addition to the areas that they are designated.

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Biology Specialization**

Ohio State ATI		Major: Biology Specialization	
General Education		General Education	
Subject	Sem Cr		Sem Cr..
<b>ENGLISH COMPOSITION/ ORAL COMMUNICATION</b> ENGLISH 1110.01 AGRCOMM 2367 or 3130 or ENR 2367	3	ENGLISH 1110.01	3
	3	AGRCOMM 2367	3
<b>MATHEMATICS/ STATISTICS AND LOGIC MATHEMATICS</b>	4-5	MATH 1151	5
<b>ARTS AND HUMANITIES</b> Select at least 1 course from 2 of the following areas: Historical Study Culture and Ideas* Literature* Art*	min. 6	HISTORY 1152	3
		COMPSTD 2301*	3
		MUSIC 2250*	3
		RELSTDS 2370*	3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Social and Behavioral Sciences AEDECON 2001 RURLSOC 1500	3	AEDECON 2001	3
	3	RURLSOC 1500	3
<b>NATURAL SCIENCES</b>	min. 6	BIOLOGY 1113	4
		CHEM 1210	5
Additional OTM course(s) (from 5 GE categories above) or Open Option (course(s) as defined by OSU Columbus major)		BIOLOGY 1114	4
<b>COLLEGE/CAREER ORIENTATION</b>	1	GENSTDS 1201T	0.5
		BIOTECH 1201T	0.5
<b>Total General Education</b>	<b>37-40</b>	<b>Total General Education</b>	<b>43</b>
Transferable and major courses applicable to OSU bachelor's degree  Developed in consultation with affiliated department/unit where appropriate		CHEM 1220	5
		CHEM 2510	4
		CHEM 2520	4
		MICRBIO 4000	4
		<b>Total Transferable and Major Courses</b>	<b>17</b>
<b>DEGREE TOTAL</b>	<b>60-65</b>	<b>DEGREE TOTAL</b>	<b>60</b>

\*COMPSTD 2301 (Literature), MUSIC 2250 (Art), and RELSTDS 2370 (Culture and Ideas) courses offered at Ohio State ATI also fulfill a global studies general education requirement, in addition to the areas that they are designated.

BIOCHSC-AS BIO  
Catalog Year  
2015-2016

**Biochemical Sciences  
Biology Specialization  
Associate of Science**

<u>Course</u>	<u>Title</u>	<u>Credits</u>
<b><u>1<sup>st</sup> Year – Autumn Semester</u></b>		
BIOTECH 1201T	Exploring Biochemical Sciences and Biotechnology	0.5
CHEM 1210	General Chemistry I	5
ENGLISH 1110.01	First-Year English Composition	3
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	3
GENSTDS 1201T	College Orientation	0.5
RURLSOC 1500	Introduction to Rural Sociology	<u>3</u>
		<b>15</b>
<b><u>1<sup>st</sup> Year – Spring Semester</u></b>		
AGRCOMM 2367	Agricultural Issues in Contemporary Society	3
CHEM 1220	General Chemistry II	5
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	3
MATH 1151	Calculus	<u>5</u>
		<b>16</b>
<b><u>2<sup>nd</sup> Year – Autumn Semester</u></b>		
AEDECON 2001	Principles of Food and Resource Economics	3
BIOLOGY 1113	BioSci: Energy Transfer and Development	4
CHEM 2510	Organic Chemistry I	4
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	<u>3</u>
		<b>14</b>
<b><u>2<sup>nd</sup> Year – Spring Semester</u></b>		
BIOLOGY 1114	Bio Sci: Form, Function, Diversity and Ecology	4
CHEM 2520	Organic Chemistry II	4
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	3
MICRBIO 4000	Basic and Practical Microbiology	<u>4</u>
		<b>15</b>
	<b>Total Credits</b>	<b>60</b>

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Food Science Specialization**

<b>Ohio State ATI</b>		<b>Major: Food Science Specialization</b>	
<b>General Education</b>		<b>General Education</b>	
Subject	Sem Cr	Course	Sem Cr.
<b>ENGLISH COMPOSITION/ ORAL COMMUNICATION</b> ENGLISH 1110.01 AGRCOMM 2367 or 3130 or ENR 2367	3	ENGLISH 1110.01	3
	3	AGRCOMM 2367	3
<b>MATHEMATICS/ STATISTICS AND LOGIC</b> MATHEMATICS	4-5	MATH 1150	5
<b>ARTS AND HUMANITIES</b> Select at least 1 course from 2 of the following areas: Historical Study Culture and Ideas* Literature* Art*	min. 6	Choose 2 of the following courses: HISTORY 1152 COMPSTD 2301* MUSIC 2250* RELSTDS 2370*	3 3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Social and Behavioral Sciences AEDECON 2001 RURLSOC 1500	3 3	AEDECON 2001 RURLSOC 1500	3 3
<b>NATURAL SCIENCES</b>	min. 6	BIOLOGY 1113 CHEM 1210	4 5
Additional OTM course(s) (from 5 GE categories above)  or Open Option (course(s) as defined by OSU Columbus major)		MICRBIO 4000	4
COLLEGE/CAREER ORIENTATION	1	GENSTDS 1201T BIOTECH 1201T	0.5 0.5
<b>Total General Education</b>	<b>37-40</b>	<b>Total General Education</b>	<b>37</b>
Transferable and major courses applicable to OSU bachelor's degree  Developed in consultation with affiliated department/unit where appropriate		CHEM 1220 CHEM 2510 CHEM 2520 MATH 1151 PHYSICS 1200	5 4 4 5 5
		<b>Total Transferable and Major Courses</b>	<b>23</b>
<b>DEGREE TOTAL</b>	<b>60-65</b>	<b>DEGREE TOTAL</b>	<b>60</b>

\*COMPSTD 2301 (Literature), MUSIC 2250 (Art), and RELSTDS 2370 (Culture and Ideas) courses offered at Ohio State ATI also fulfill a global studies general education requirement, in addition to the areas that they are designated.

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Food Science Specialization**

Ohio State ATI		Major: Food Science Specialization	
General Education		General Education	
Subject	Sem Cr	Course	Sem Cr.
<b>ENGLISH COMPOSITION/ ORAL COMMUNICATION</b> ENGLISH 1110.01 AGRCOMM 2367 or 3130 or ENR 2367	3	ENGLISH 1110.01	3
	3	AGRCOMM 2367	3
<b>MATHEMATICS/ STATISTICS AND LOGIC</b> MATHEMATICS	4-5	MATH 1150	5
<b>ARTS AND HUMANITIES</b> Select at least 1 course from 2 of the following areas: Historical Study Culture and Ideas* Literature* Art*	min. 6	Choose 2 of the following courses: HISTORY 1152 COMPSTD 2301* MUSIC 2250* RELSTDS 2370*	3 3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Social and Behavioral Sciences AEDECON 2001 RURLSOC 1500	3 3	AEDECON 2001 RURLSOC 1500	3 3
<b>NATURAL SCIENCES</b>	min. 6	BIOLOGY 1113 CHEM 1210	4 5
Additional OTM course(s) (from 5 GE categories above)  or Open Option (course(s) as defined by OSU Columbus major)		MICRBIO 4000	4
<b>COLLEGE/CAREER ORIENTATION</b>	1	GENSTDS 1201T BIOTECH 1201T	0.5 0.5
<b>Total General Education</b>			<b>37</b>
Transferable and major courses applicable to OSU bachelor's degree  Developed in consultation with affiliated department/unit where appropriate		CHEM 1220 CHEM 2510 CHEM 2520 MATH 1151 PHYSICS 1200	5 4 4 5 5
		<b>Total Transferable and Major Courses</b>	<b>23</b>
<b>DEGREE TOTAL</b>		<b>60-65</b>	<b>60</b>

\*COMPSTD 2301 (Literature), MUSIC 2250 (Art), and RELSTDS 2370 (Culture and Ideas) courses offered at Ohio State ATI also fulfill a global studies general education requirement, in addition to the areas that they are designated.

BIOCHSC-AS FSC  
Catalog Year  
2015-2016

**Biochemical Sciences  
Food Science Specialization  
Associate of Science**

<u>Course</u>	<u>Title</u>	<u>Credits</u>
<b><u>1<sup>st</sup> Year – Autumn Semester</u></b>		
BIOTECH 1201T	Exploring Biochemical Sciences and Biotechnology	0.5
CHEM 1210	General Chemistry I	5
ENGLISH 1110.01	First-Year English Composition	3
GENSTDS 1201T	College Orientation	0.5
MATH 1150	Precalculus	<u>5</u>
		<b>14</b>
<b><u>1<sup>st</sup> Year – Spring Semester</u></b>		
AGRCOMM 2367	Agricultural Issues in Contemporary Society	3
CHEM 1220	General Chemistry II	5
MATH 1151	Calculus I	5
RURLSOC 1500	Introduction to Rural Sociology	<u>3</u>
		<b>16</b>
<b><u>2<sup>nd</sup> Year – Autumn Semester</u></b>		
AEDECON 2001	Principles of Food and Resource Economics	3
BIOLOGY 1113	BioSci: Energy Transfer and Development	4
CHEM 2510	Organic Chemistry I	4
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	<u>3</u>
		<b>14</b>
<b><u>2<sup>nd</sup> Year – Spring Semester</u></b>		
CHEM 2520	Organic Chemistry II	4
MICRBIO 4000	Basic and Practical Microbiology	4
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	3
PHYSICS 1200	Mechanics, Kinematics, Fluids, Waves	<u>5</u>
		<b>16</b>
	<b>Total Credits</b>	<b>60</b>



**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Pre-Veterinary Medicine Specialization**

Ohio State ATI		Major: Pre-Veterinary Medicine Specialization	
General Education		General Education	
Subject	Sem Cr	Course	Sem Cr.
<b>ENGLISH COMPOSITION/ ORAL COMMUNICATION</b> ENGLISH 1110.01 AGRCOMM 2367 or 3130 or ENR 2367	3	ENGLISH 1110.01	3
	3	<b>AGRCOMM 3130</b>	<b>3</b>
<b>MATHEMATICS/ STATISTICS AND LOGIC MATHEMATICS</b>	4-5	MATH 1150	5
<b>ARTS AND HUMANITIES</b> Select at least 1 course from 2 of the following areas: Historical Study Culture and Ideas* Literature* Art*	min. 6	Choose two of the following courses: HISTORY 1152 COMPSTD 2301* MUSIC 2250* RELSTDS 2370*	3 3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Social and Behavioral Sciences AEDECON 2001 RURLSOC 1500	3 3	AEDECON 2001 RURLSOC 1500	3 3
<b>NATURAL SCIENCES</b>	min. 6	BIOLOGY 1113 CHEM 1210	4 5
Additional OTM course(s) (from 5 GE categories above) or Open Option (course(s) as defined by OSU Columbus major)		<b>ANMLTEC 3140T</b>	<b>4</b>
<b>COLLEGE/CAREER ORIENTATION</b>	1	GENSTDS 1201T BIOTECH 1201T	0.5 0.5
<b>Total General Education</b>		<b>Total General Education</b>	
	<b>37-40</b>		<b>37</b>
Transferable and major courses applicable to OSU bachelor's degree  Developed in consultation with affiliated department/unit where appropriate		BIOLOGY 1114 CHEM 1220 CHEM 2510 MICRBIO 4000 <b>ELECTIVES</b>	4 5 4 4 <b>6</b>
		<b>Total Transferable and Major Courses</b>	<b>23</b>
<b>DEGREE TOTAL</b>		<b>DEGREE TOTAL</b>	
<b>60-65</b>		<b>60</b>	

\*COMPSTD 2301 (Literature), MUSIC 2250 (Art), and RELSTDS 2370 (Culture and Ideas) courses offered at Ohio State ATI also fulfill a global studies general education requirement, in addition to the areas that they are designated.

**ASSOCIATE OF SCIENCE DEGREE  
BIOCHEMICAL SCIENCES CURRICULUM PLAN  
Pre-Veterinary Medicine Specialization**

Ohio State ATI		Major: Pre-Veterinary Medicine Specialization	
General Education		General Education	
Subject	Sem Cr	Course	Sem Cr.
<b>ENGLISH COMPOSITION/ ORAL COMMUNICATION</b> ENGLISH 1110.01 AGRCOMM 2367 or 3130 or ENR 2367	3	ENGLISH 1110.01	3
	3	AGRCOMM 3130	3
<b>MATHEMATICS/ STATISTICS AND LOGIC MATHEMATICS</b>	4-5	MATH 1150	5
<b>ARTS AND HUMANITIES</b> Select at least 1 course from 2 of the following areas: Historical Study Culture and Ideas* Literature* Art*	min. 6	Choose two of the following courses: HISTORY 1152 COMPSTD 2301* MUSIC 2250* RELSTDS 2370*	3 3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b> Social and Behavioral Sciences AEDECON 2001 RURLSOC 1500	3	AEDECON 2001	3
	3	RURLSOC 1500	3
<b>NATURAL SCIENCES</b>	min. 6	BIOLOGY 1113 CHEM 1210	4 5
Additional OTM course(s) (from 5 GE categories above) or Open Option (course(s) as defined by OSU Columbus major)		ANMLTEC 3140T	4
<b>COLLEGE/CAREER ORIENTATION</b>	1	GENSTDS 1201T BIOTECH 1201T	0.5 0.5
<b>Total General Education</b>	<b>37-40</b>	<b>Total General Education</b>	<b>37</b>
Transferable and major courses applicable to OSU bachelor's degree  Developed in consultation with affiliated department/unit where appropriate		BIOLOGY 1114	4
		CHEM 1220	5
		CHEM 2510	4
		MICRBIO 4000	4
		ELECTIVES	6
		<b>Total Transferable and Major Courses</b>	<b>23</b>
<b>DEGREE TOTAL</b>	<b>60-65</b>	<b>DEGREE TOTAL</b>	<b>60</b>

\*COMPSTD 2301 (Literature), MUSIC 2250 (Art), and RELSTDS 2370 (Culture and Ideas) courses offered at Ohio State ATI also fulfill a global studies general education requirement, in addition to the areas that they are designated.

**BIOCHSC-AS PVM**  
**Catalog Year**  
**2015-2016**

**Biochemical Sciences**  
**Pre-Veterinary Medicine Specialization**  
**Associate of Science**

<u>Course</u>	<u>Title</u>	<u>Credits</u>
<b><u>1<sup>st</sup> Year – Autumn Semester</u></b>		
BIOTECH 1201T	Exploring Biochemical Sciences and Biotechnology	0.5
CHEM 1210	General Chemistry I	5
ENGLISH 1110.01	First-Year English Composition	3
GENSTDS 1201T	College Orientation	0.5
MATH 1150	Precalculus	<u>5</u>
		<b>14</b>
<b><u>1<sup>st</sup> Year – Spring Semester</u></b>		
AGRCOMM 3130	Oral Expression in Agriculture	3
BIOLOGY 1113	BioSci: Energy Transfer and Development	4
CHEM 1220	General Chemistry II	5
RURLSOC 1500	Introduction to Rural Sociology	<u>3</u>
		<b>15</b>
<b><u>2<sup>nd</sup> Year – Autumn Semester</u></b>		
ANMLTEC 3140T	Animal Anatomy and Physiology	4
AEDECON 2001	Principles of Food and Resource Economics	3
CHEM 2510	Organic Chemistry I	4
ELECTIVE	From approved list in consultation with Advisor	3
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	<u>3</u>
		<b>17</b>
<b><u>2<sup>nd</sup> Year – Spring Semester</u></b>		
BIOLOGY 1114	Bio Sci: Form, Function, Diversity and Ecology	4
MICRBIO 4000	Basic and Practical Microbiology	4
ELECTIVE	From approved list in consultation with Advisor	3
GEN ED ELECTIVE	COMPSTD 2301 or HISTORY 1152 or MUSIC 2250 or RELSTDS 2370	<u>3</u>
		<b>14</b>
	<b>Total Credits</b>	<b>60</b>

**BIOCHSC-AS PVM**  
**Catalog Year**  
**2016-2017**

**Biochemical Sciences**  
**Pre-Vet Specialization**  
**Associate of Science**

**GEN ED ELECTIVES - 6 cr**

6 hours MUST come from:		3
Arts & Humanities	HISTORY 1152 American Civilization since 1877	3
	COMPSTD 2301 Introduction to World Literature	3
	MUSIC 2250 Music Cultures of the World	3
	RELSTDS 2370 Introduction to Comparative Religion	

**ELECTIVES – 6 cr**

ANMLTEC 2200T	Introduction to Animal Sciences	3
ANMLTEC 2300T	Introduction to Animal Sciences Laboratory	1
CHEM 2520	Organic Chemistry II	4*
COMLDR 3537	Data Analysis in the Applied Sciences	3
ENR 2100	Introduction to Environmental Sciences	3
MATH 1151	Calculus I	5
PHYSICS 1200	Mechanics, Kinematics, Fluids, Waves	5
PHYSICS 1201	E&M, Optics, Modern Physics	5
ANMLTEC 3150T	Livestock Genetic Improvement	3
<b>OR</b>		
ANMLTEC 3157T	Dairy Cattle Genetic Improvement	3

\*Students are strongly encouraged to complete the organic chemistry sequence (CHEM 2510, required and CHEM 2520, elective) while at Ohio State ATI if they intend to enroll in a program in which both Chemistry courses are required (e.g., continue with a Pre-Veterinary Medicine focus)

**From:** Vodovotz, Yael

**Sent:** Wednesday, August 05, 2015 1:16 PM

**To:** Pfister, Jill

**Cc:** Osborne, Jeanne; Barringer, Sheryl

**Subject:** RE: REVISED ATI Pathways for Completion of the Associate of Science and the Bachelor's Degree for Majors in Food Science and Technology and Food Business Management

Jill,

The Academic Affairs committee examined the pathways and we agreed to grant you departmental concurrence.

Thanks

yael

Yael Vodovotz, PhD.

Professor

The Ohio State University

Department of Food Science and Technology

227 Parker Food Science and Technology Bldg.

2015 Fyffe Rd.

Columbus, OH 43210

Tel: 614-247-7696

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**THE OHIO STATE UNIVERSITY**

***Department of Animal Sciences***

***College of Food, Agricultural, and Environmental Sciences***

2027 Coffey Road  
Columbus, OH 43210-1095  
Fax (613)292-7116

November 20, 2015

To Whom It May Concern:

I have reviewed the BIOSCHC-AS degree program. This letter provides support from the Department of Animal Sciences for aforementioned ATI curriculum providing a pathway for a B.S. degree with a major in Animal Sciences on the Columbus campus.

Sincerely,

Pasha A. Lyvers Peffer  
Department of Animal Sciences  
Chair, Academic Affairs