

MATH-2160	Calculus III	5
PHYS-1300	Physics I (and lab & recitation)	5
	or	
PHYS-2400	Physics I w/ Calculus (and lab & recitation)	
PHYS-1350	Physics II (and lab & recitation)	5
	or	
PHYS-2450	Physics II w/ Calculus (and lab & recitation)	

**Recommended technical electives or courses required for transfer (14 credits selected from below):**

Class		Credits
ENGR-1010	Introduction to Engineering Design	3
ENGR-1070	Graphics for Engineers	3
ENGR-2010	Introduction to Circuits and Electronics	3
ENGR-2020	Statics	3
MATH-2210	Applied Differential Equations	3

**Recommended Plan of Study**

1st Semester		Credits
ENGL-1010	English Composition I	3
ENGR-1010	Introduction to Engineering Design	3
MATH-1600	Analytic Geometry & Calculus I	5
PRDV-1010	Achieving College Success	3
	Technical elective (1)	3
	<b>Total Credits</b>	<b>17</b>

2nd Semester		Credits
ENGL-1020	English Composition II	3
ENGR-1020	Programming and Problem Solving	3
MATH-2150	Calculus II	5
	Technical elective (2)	3
	Humanities GE elective	3
	<b>Total Credits</b>	<b>17</b>

3rd Semester		Credits
MATH-2200	Calculus III	5
PHYS-2400	Physics I with Calculus (and lab & recitation)	5
	Technical elective (3)	3
	Oral Communication GE elective	3
	<b>Total Credits</b>	<b>16</b>

4th Semester		Credits
PHYS-2450	Physics II with Calculus	5
	Technical elective (4)	3

Technical elective (5)	3
Social Science GE elective	3
<b>Total Credits</b>	<b>14</b>
<b>Total AS Credits</b>	<b>64</b>

## (Pre) Food Science

### AS.0110 (67 Credits)

#### Associate of Science

#### Scottsbluff

The food science emphasis area allows students to complete two years of study at WNCC and then continue their studies leading toward a bachelor of science degree in Food Science and Technology at the University of Nebraska – Lincoln (UNL).

#### Notes

- Students who plan to transfer to UNL, or another four-year college or university, should consult with their faculty advisor and transfer advisor early in their WNCC career to determine a curriculum best suited to their transfer goals.

#### Transfer to University of Nebraska – Lincoln

- Careful consideration should be given to the course requirements of the Applied Science program at UNL.
- UNL prefers the communication course to be SPCH-1110 (Public Speaking).
- UNL accepts 60 credit credits toward the eventual bachelor of applied science degree. MATH-1150 (College Algebra) transfers as three (3) credits rather than four (4). MATH-1210 (Trigonometry) transfers as two (2) credits rather than three (3).
- UNL requires additional Achievement-Centered Education (ACE) electives. These can be taken through UNL as soon as a student applies for and is accepted for admission to UNL. These courses can also be taken at WNCC. The following courses are offered at WNCC that satisfy the UNL's nine ACE credit hour requirements:

Class		Credit
HIST-2100	World Civilization (4000 BC – 500 AD)	3
HIST-2110	World Civilization (1500 AD – present)	3
POLS-1600	International Relations	3

- Students who transfer to UNL are encouraged to apply for admission early in their program. ACE elective classes can be taken through UNL during the student's time at WNCC thereby lessening the credit load in the

fourth semester and guaranteeing maximum credit hour transfer.

- In addition to the general education requirements for the AS degree, 43 credits of core courses are required for the degree in pre-food science.
- Depending on the student's choice of electives, it is possible that the total credits earned for the AS degree will exceed 60 credit credits.
- Students should understand that the courses included in the lists of core requirements and recommended electives will be required by receiving institutions at some point in their journey to the bachelor's degree.

### Core Requirements (43 credits)

- A minimum of 15-16 credits of combined science and math credits are required for the AS degree. This coursework must include a minimum of three (3) credits of math and four (4) credits of science from BIOS, CHEM or PHYS options.

Class		Credits
BIOS-1010	General Biology (and lab)	4
BIOS-1300	Botany (and lab)	4
BIOS-1380	General Zoology (and lab)	4
BIOS-2120	Genetics (and lab)	4
CHEM-1090	General Chemistry I (and lab)	4
CHEM-1100	General Chemistry II (and lab)	4
CHEM-2510	Organic Chemistry I (and lab)	4
CHEM-2520	Organic Chemistry II (and lab)	4
MATH-1210	Trigonometry	3
MATH-1600	Analytic Geometry & Calculus I	5
MATH-2170	Applied Statistics	3

### Recommended Plan of Study

1st Semester		Credits
BIOS-1010	General Biology (and lab)	4
CHEM-1090	General Chemistry I (and lab)	4
ENGL-1010	English Composition I	3
MATH-1210	Trigonometry	3
PRDV-1010	Achieving College Success	3
<b>Total Credits</b>		<b>17</b>
2nd Semester		Credits
BIOS-1300	General Botany (and lab)	4
CHEM-1100	General Chemistry II (and lab)	4
ENGL-1020	English Composition II	3
MATH-1600	Analytic Geometry and Calculus I	5
<b>Total Credits</b>		<b>16</b>

3rd Semester		Credits
BIOS-2120	Genetics (and lab)	4
CHEM-2510	Organic Chemistry I (and lab)	4
MATH-2170	Statistics	3
	Humanities GE elective	3
	Social Science GE elective	3
<b>Total Credits</b>		<b>17</b>
4th Semester		Credits
BIOS-1380	General Zoology (and lab)	4
CHEM-2520	Organic Chemistry II (and lab)	4
	Oral Communication GE elective	3
	Electives	6
<b>Total Credits</b>		<b>17</b>
<b>Total AS Credits</b>		<b>67</b>

## Foreign Language (Spanish)

### AA.1609A (60 Credits)

#### Associate of Arts

#### Alliance • Scottsbluff • Sidney

The Foreign Language Program provides a two-year course of study in Spanish to meet the vocational, avocation, and academic needs of the student. Because Intermediate levels of Spanish are sometimes not offered every year, students should check with their faculty advisor. The courses of study suggested below are planned to meet the requirements for the Associate of Arts degree awarded by WNCC, as well as to meet the requirements for junior standing at four-year colleges and universities, where students may continue work toward a baccalaureate degree. The Foreign Language track applies equally to those students whose interest is more avocation and to those whose interest is vocational.

Those interested in avocational foreign language study often desire to broaden themselves through the study of foreign languages and cultures or to experience through such a course of study personal enjoyment and satisfaction. On the other hand, those who realize that the knowledge of foreign language makes them more desirable to a prospective employer are interested in foreign language for vocational purposes. Academic courses in general areas of study are also deemed important to correspond with the philosophy of WNCC. Courses are included which are in addition to the foreign language study.