AGRICULTURAL SCIENCE, AS

Program Description

The Associate of Science, Agricultural Science is a two-year transferable program. The curriculum includes a core of courses in agriculture, animal nutrition, math, science, and economics. Agricultural science is critical to maintaining and developing global food systems, and this work takes place in offices, laboratories, and in the field. This degree is the start of an educational path that will prepare you for a successful career in a high-demand industry.

Recommended Course Schedule

For General Agriculture Science Track

1st semester		Units
AGSC 100	Elements of Livestock Production	3
ENG 101 or ENG 100 or ENG 113	Composition I or Composition Enhanced or Composition I for International and Multilingual Students	3
IS 101	Introduction to Information Systems	3
MATH 126	Pre-Calculus I (or higher)	3
Fine arts [7]		3
	Semester Total	**15**
2nd semester		
CHEM 121	General Chemistry I	4
ENG 102 or ENG 114	Composition II or Composition II For International and Multilingual Students	3
MATH 127 or MATH 176 or MATH 181	Pre-Calculus II or Introductory Calculus for Business and Social Sciences or Calculus I	3
MKT 210	Marketing Principles	3
	Semester Total	**13**
3rd semester		
ACC 201	Financial Accounting	3
BIOL 190A & BIOL 190L	Introduction to Cell and Molecular Biology and Introduction to Cell and Molecular Biology Laboratory	4
CHEM 122	General Chemistry II	4
ECON 102	Principles of Microeconomics	3
CH 201 or CH 202	Ancient and Medieval Cultures (or any other General Education Humanities) [7] or The Modern World	3
	Semester Total	**17**
4th semester		
ACC 202	Managerial Accounting	3
AGSC 206	Fundamentals of Animal Nutrition (Fundamentals of Animal Nutrition)	3
APST 207	Practical Statistics (Practical Statistics)	3
BIOL 191A & BIOL 191L	Introduction to Organismal Biology and Intro to Organismal Biology Lab	4
CH 203	American Experiences and Constitutional Change (or any other U.S. and Nevada Constitutions course) [7]	3
	Semester Total	**16**
	Total Units	**61**

For Animal Science Track

1st semester		Units
AGSC 100	Elements of Livestock Production	3
ENG 101	Composition I	3
MATH 126	Pre-Calculus I (or higher)	3
ECON 102	Principles of Microeconomics	3
Fine Arts [7]		3
	Semester Total	**15**
2nd semester		
CHEM 121	General Chemistry I	4
ENG 102	Composition II	3
MATH 127 or MATH 176 or MATH 181	Pre-Calculus II or Introductory Calculus for Business and Social Sciences or Calculus I	3
NUTR 253	Cultural Considerations in Nutrition and Health Care (satisfies Diversity or any other general elective)	3
AGSC 255	Meat Industry, Food Safety, and Quality Systems (Meat Industry, Food Safety, and Quality Systems)	3
	Semester Total	**16**
3rd semester		
APST 207	Practical Statistics (Practical Statistics)	3
BIOL 190A & BIOL 190L	Introduction to Cell and Molecular Biology and Introduction to Cell and Molecular Biology Laboratory	4
CHEM 122	General Chemistry II	4
CH 201 or CH 202	Ancient and Medieval Cultures (or any other General Education Humanities) [7] or The Modern World	3
CH 203	American Experiences and Constitutional Change (or any other U.S and Nevada Constitution course) [7]	3
	Semester Total	**17**
4th semester		
AGSC 206	Fundamentals of Animal Nutrition (Fundamentals of Animal Nutrition)	3
BIOL 191A & BIOL 191L	Introduction to Organismal Biology and Intro to Organismal Biology Lab	4
CHEM 220	Introductory Organic Chemistry	4
General elective		3
	Semester Total	**14**
	Total Units	**62**

[6] If you are going for the UNR General Agricultural Science program, choose a Fine Arts course that is also a Diversity course.

[7] See the approved General Education (https://catalog.tmcc.edu/degrees-certificates/general-education/aa-as/) page for a complete list of courses.

Program Requirements

AA/AS degrees are designed for students who plan to transfer to a four-year college or university.

To earn an AA/AS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AA/AS (http://catalog.tmcc.edu/degrees-certificates/general-education/aa-as/).
4. Have no financial or library obligation to the college.

Code	Title	Units
General Education Requirements		
English [1]		*3-6*
Including ENG 102 or ENG 114		
Fine Arts		*3*
Humanities		*3*
Recommend:		
CH 201	Ancient and Medieval Cultures	
or CH 202	The Modern World	
Mathematics		*3*
Required:		
MATH 126	Pre-Calculus I (or higher)	
Science (Lab Required)		*(6)*
Required:		
CHEM 121 & CHEM 122	General Chemistry I and General Chemistry II	8
Social Science		*3*
Required:		
ECON 102	Principles of Microeconomics	
Additional College Requirements		
Diversity [2]		*(3)*
Recommend:		
NUTR 253	Cultural Considerations in Nutrition and Health Care	
or Fine Arts that also counts as a Diversity		
Science (2 units satisfied though required CHEM 121 and CHEM 122, 4 units satisfied though degree requirements)		*(6)*
U.S. and Nevada Constitutions		*3*
Recommend:		
CH 203	American Experiences and Constitutional Change	
Degree Requirements		
AGSC 100	Elements of Livestock Production (Elements of Livestock Production)	3
BIOL 190A & BIOL 190L	Introduction to Cell and Molecular Biology and Introduction to Cell and Molecular Biology Laboratory	4
BIOL 191A & BIOL 191L	Introduction to Organismal Biology and Intro to Organismal Biology Lab	4
MATH 127	Pre-Calculus II [3]	3
or MATH 176	Introductory Calculus for Business and Social Sciences	
or MATH 181	Calculus I	
APST 207	Practical Statistics (Practical Statistics)	3
AGSC 206	Fundamentals of Animal Nutrition (Fundamentals of Animal Nutrition)	3
General Agriculture Science Track Requirements		*12*
ACC 201	Financial Accounting [4]	
ACC 202	Managerial Accounting [4]	
IS 101	Introduction to Information Systems [4]	
MKT 210	Marketing Principles [4]	
Animal Science Track Requirements		7
AGSC 255	Meat Industry, Food Safety, and Quality Systems (Meat Industry, Food Safety, and Quality Systems)	
CHEM 220	Introductory Organic Chemistry [5]	
General Electives for Animal Science Track		6
Recommend:		
NUTR 253	Cultural Considerations in Nutrition and Health Care (satisfies Diversity)	
Total Units		**61-62**

[1] If you place into ENG 102 or ENG 114, the additional 3 required units will become general elective units.
[2] If you are going for the UNR General Agricultural Science program, choose a Fine Arts course that is also a Diversity course.
[3] If MATH 181 is used as your General Education Mathematics course, the 3 units will become general elective units.
[4] Course needed for the UNR General Agriculture Emphasis.
[5] Course needed for UNR Animal Science Emphasis and the UNR Plant Science Emphasis.

Program Outcomes

Students completing the degree will:

PSLO1: Utilize appropriate terminology for agricultural practices including feed, forage, and management.

PSLO2: Explain the fundamental principles of livestock production and nutrition.

PSLO3: Explain concepts and theories related to evolutionary processes and anatomical and physiological functions of organisms.

PSLO4: Explain concepts and theories related to genetics, cellular processes, and molecular structure and function.

PSLO5: Utilize the scientific method to design a controlled experiment, collect, analyze, and interpret data; present findings in written and oral formats.

PSLO6: Apply quantitative reasoning skills to interpret agricultural data.

PSLO7: Demonstrate proficient use of basic laboratory equipment and follow safe laboratory practices.

Transfer Agreements

AA/AS degrees are designed for students who plan to transfer to a four-year college or university. General information about general transfer agreements can be found on the Academic Advisement website (https://www.tmcc.edu/advisement/transfer-students/transfer-agreements/). Students who intend to transfer to another college or university should speak with a TMCC Academic Advisor and consult with that institution. The transfer institution determines how TMCC courses will transfer. TMCC has agreements with the following institutions towards a bachelor's degree in the same or similar discipline.

- University of Nevada, Reno (https://www.unr.edu/admissions/transfer/credits/transfer-agreements/)