Course Description
This course is designed to develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in agriscience. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.

Materials Needed
- Pen or pencil, paper, section in a 3-ring binder for classwork and projects, and appropriate dress

Some assignments require specific clothing for safety purposes. Students will know in advance what the clothing requirements will be and it is expected they adhere to these specifications. **If their dress is not appropriate for the activity, students may not be able to participate and may receive a zero for the assignment.**

Course Objectives
1. Describe the history of agriculture and its influence on the global economy
2. Practice agriscience safety skills and procedures
3. Apply scientific and technological principles to agriscience issues
4. Apply environmental principles to the agricultural industry
5. Investigate and utilize basic scientific skills and principles in plant science
6. Investigate and utilize basic scientific skills and principles in animal science
7. Demonstrate the use of agriscience tools, equipment, and instruments
8. Demonstrate agribusiness, employability and human relation skills
9. Apply leadership and citizenship skills
Major Units
This year, Agriculture Foundations will be broken into 4 quarters with each quarter covering a major topic. Those topics are; Leadership, Agriculture Business, Agriculture Mechanics and will conclude with Production Agriculture. Every effort will be made to ensure that these major topics will be relevant to agriculturalists and consumers alike. A more complete breakdown of specific topics will be given to students at the beginning of each unit. This course will conclude with students taking the agriculture certification exam based on topics covered within this class.

Grading Policy
Students and Parents are expected to keep well informed of their academic standing in all classes; utilizing the online grading system. The grading scale as determined by the county:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>&gt;59%</td>
</tr>
</tbody>
</table>

60% of grade based on summative assessments
40% of grade based on formative assessments
0% of grade based on diagnostic assessments

- Students are expected to turn assignments in **on time**; no late work is accepted. Students will turn in work in to their class’s assigned location for grading. Every assignment should include their name AND date.
- If a student is absent, it is their responsibility to make-up their schoolwork when they return.
- If a student is marked “TARDY” on the day an assignment or project is due, they are still responsible for turning in their work on the assigned day.

*Make-up work: refer to the school's make-up policy for excused absences, found in the handbook for acquiring and receiving credit for make-up work.

Methods of Assessment
Students will be evaluated on:
- Classroom and laboratory participation
- Homework
- Test and Quizzes
- Mind Mooooovers
- Projects and class assignments
Classroom Expectations

1. All policies in the Student Handbook are to be followed.
2. Proper behavior is to be exhibited at all times.
3. Be on time and ready to work with the bell rings.
4. Bring all supplies needed to class daily (notebook, pencil/pen, paper, etc.).
5. Be polite and courteous to other classmates. Vulgar language has consequences.
6. Follow land lab and shop safety rules at all times.
7. Please put ALL electronic devices away (unless authorized by classroom teacher at designated times).
8. All materials must be clean before the bell rings and students are dismissed from class.

9. TRY!

***The National FFA Organization is an intra-curricular component of the Agriculture Education 3-Circle Model. FFA membership is required by those enrolled in the agriculture education classes. Chapter, State and National dues are **($25.00)**. To participate in any career development event, show animals or travel to FFA contests, you must pay FFA dues.

- If a student(s) is not able to financially afford this membership, students are able to work in the agriculture shop, horticulture area, land lab, or Ag classroom for **3 hours** to earn their dues.

Remember, I understand that very few of you are interested in being FARMERS! Less than 2% of the American population is involved in PRODUCTION Agriculture. However, 100% of the population is involved in Agriculture consumption!
Please complete, sign, and return the following section to Mr. Brandner

Student Name: ____________________________  Class period: ____________________________

- I give permission for my child to watch any non-rated education video, G, PG or PG-13 movie that is relevant to the curriculum of this class.
- My student has permission to use the internet for school assignments
- I have read and understand the rules and requirements of Agriscience Foundations.

Parent (Legal Guardian) Name: ____________________________________________

Phone number where parent can be reached: ____________________________

Email of Parent or Legal Guardian: ____________________________________________

_________________________________________  ______________________
Student signature  Date

_________________________________________  __________
Parent signature  Date

**This will be the first grade of the year! In order to receive full credit, all entries must be complete and turned in to Mr. Brandner by Friday.**
Course Description
This course is designed to develop competencies in the areas of safety; animal behavior; animal welfare; animal control; and employability skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.

Materials Needed
- Pen or pencil, paper, section in a 3-ring binder for classwork and projects, and appropriate dress

Some assignments require specific clothing for safety purposes. Students will know in advance what the clothing requirements will be and it is expected they adhere to these specifications. If their dress is not appropriate for the activity, students may not be able to participate and may receive a zero for the assignment.

Course Objectives
10. Describe animal science and the role of animals in society
11. Classify animals according to hierarchical taxonomy and agricultural use
12. Identify careers in the animal industry
13. Describe animal and human first aid and laboratory safety
14. Recognize normal and abnormal animal behaviors
15. Apply principles of comparative anatomy and physiology to uses within various animal systems
16. Evaluate the male and female reproductive systems
17. Demonstrate safe animal handling and management techniques
18. Analyze the communities responsibility in options for caring for unwanted/neglected livestock
19. Evaluate the importance of the food and fiber system to understand the impact on global economy
20. Examine the scope of career opportunities in and the importance of agriculture to the economy
21. Apply animal health practices

Grading Policy
Students and Parents are expected to keep well informed of their academic standing in all classes; utilizing the online grading system. The grading scale as determined by the county:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>&gt;59%</td>
</tr>
</tbody>
</table>

60% of grade based on summative assessments
40% of grade based on formative assessments
0% of grade based on diagnostic assessments

• Students are expected to turn assignments in on time; no late work is accepted. Students will turn in work in to their class’s assigned location for grading. Every assignment should include their name AND date.
• If a student is absent, it is their responsibility to make-up their schoolwork when they return.
• If a student is marked “TARDY” on the day an assignment or project is due, they are still responsible for turning in their work on the assigned day.

*Make-up work: refer to the school's make-up policy for excused absences, found in the handbook for acquiring and receiving credit for make-up work.

Methods of Assessment
Students will be evaluated on:
• Classroom and laboratory participation
• Homework
• Test and Quizzes
• Mind Mooooovers
• Projects and class assignments

Classroom Expectations
10. All policies in the Student Handbook are to be followed.
11. Proper behavior is to be exhibited at all times.
12. Be on time and ready to work with the bell rings.
13. Bring all supplies needed to class daily (notebook, pencil/pen, paper, etc.).
14. Be polite and courteous to other classmates. Vulgar language has consequences.
15. Follow land lab and shop safety rules at all times.
16. Please put ALL electronic devices away (unless authorized by classroom teacher at designated times).
17. All materials must be clean before the bell rings and students are dismissed from class.

The National FFA Organization is an intra-curricular component of the Agriculture Education 3-Circle Model. FFA membership is required by those enrolled in the agriculture education classes. Chapter, State and National dues are ($25.00). To participate in any career development event, show animals or travel to FFA contests, you must pay FFA dues.

- If a student(s) is not able to financially afford this membership, students are able to work in the agriculture shop, horticulture area, land lab, or Ag classroom for 3 hours to earn their dues.

Remember, I understand that very few of you are interested in being FARMERS! Less than 2% of the American population is involved in PRODUCTION Agriculture. However, 100% of the population is involved in Agriculture consumption!
Please complete, sign, and return the following section to Mr. Brandner

Student Name: ____________________________ Class period: ____________

I have read and understand all the requirements and expectations for this class.

____________________________________   ____________
Student signature       Date

____________________________________   ____________
Parent signature       Date

- I give permission for my child to watch any non-rated education video, G, PG or PG-13 movie that is relevant to the curriculum of this class.
- My student has permission to use the internet for school assignments
- I have read and understand the rules and requirements of Agriscience Foundations.

Parent (Legal Guardian) Name: ____________________________________________

Parent (Legal Guardian) Signature: _________________________________________

Phone number where parent can be reached: _________________________________

Email of Parent or Legal Guardian: _________________________________
Course Description

This course is designed to develop competencies in the areas of animal digestive systems; animal breeding; preventive medicine and disease control; control of parasites; animal marketing; and analyzing records. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment. This class will also learn all aspects of managing and working on a farm. Weekly trips to the Deland FFA Land Lab where students will apply what is learned in class is to be expected.

Materials Needed

- Pen or pencil, paper, section in a 3-ring binder for classwork and projects, and appropriate dress

Some assignments require specific clothing for safety purposes. Students will know in advance what the clothing requirements will be and it is expected they adhere to these specifications. If their dress is not appropriate for the activity, students may not be able to participate and may receive a zero for the assignment. Students may not wear open toed shoes on the land lab.

Course Objectives
22. Apply principles of animal nutrition to ensure the proper growth, development, and reproduction and economic production of animals
23. Evaluate animals for breeding readiness and soundness
24. Explain the reproductive system and breeding of selected animals
25. Prescribe and implement a prevention and treatment program for animal diseases, parasites and other disorders
26. Demonstrate knowledge of preventive medicine and disease control
27. Select animals for specific purposes and maximum performance based on anatomy and physiology
28. Prepare, groom, exhibit, and market animals
29. Maintain and analyze records
30. Provide for the biosecurity of agricultural animals and production facilities
31. Investigate agricultural cooperatives structure and function

Grading Policy

Students and Parents are expected to keep well informed of their academic standing in all classes; utilizing the online grading system. The grading scale as determined by the county:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>&gt;59%</td>
</tr>
</tbody>
</table>

60% of grade based on summative assessments
40% of grade based on formative assessments
0% of grade based on diagnostic assessments

- Students are expected to turn assignments in on time; no late work is accepted. Students will turn in work in to their class’s assigned location for grading. Every assignment should include their name AND date.
- If a student is absent, it is their responsibility to make-up their schoolwork when they return.
- If a student is marked “TARDY” on the day an assignment or project is due, they are still responsible for turning in their work on the assigned day.

*Make –up work: refer to the school’s make-up policy for excused absences, found in the handbook for acquiring and receiving credit for make-up work.

Methods of Assessment

Students will be evaluated on:
- Classroom and laboratory participation
Classroom Expectations
18. All policies in the Student Handbook are to be followed.
19. Proper behavior is to be exhibited at all times.
20. Be on time and ready to work with the bell rings.
21. Bring all supplies needed to class daily (notebook, pencil/pen, paper, etc.).
22. Be polite and courteous to other classmates. Vulgar language has consequences.
23. Follow land lab and shop safety rules at all times.
24. Please put ALL electronic devices away (unless authorized by classroom teacher at designated times).
25. All materials must be clean before the bell rings and students are dismissed from class.

The National FFA Organization is an intra-curricular component of the Agriculture Education 3-Circle Model. FFA membership is required by those enrolled in the agriculture education classes. Chapter, State and National dues are ($25.00). To participate in any career development event, show animals or travel to FFA contests, you must pay FFA dues.

- If a student(s) is not able to financially afford this membership, students are able to work in the agriculture shop, horticulture area, land lab, or Ag classroom for 3 hours to earn their dues.

Remember, I understand that very few of you are interested in being FARMERS! Less than 2% of the American population is involved in PRODUCTION Agriculture. However, 100% of the population is involved in Agriculture consumption!
Please complete, sign, and return the following section to Mr. Brandner

Student Name: ____________________________ Class period: ____________________________

I have read and understand all the requirements and expectations for this class.

________________________________________  _____________
Student signature                        Date

________________________________________  _____________
Parent signature                         Date

- I give permission for my child to watch any non-rated education video, G, PG or PG-13 movie that is relevant to the curriculum of this class.
- My student has permission to use the internet for school assignments
- I have read and understand the rules and requirements of Agriscience Foundations.

Parent (Legal Guardian) Name: _______________________________________________________

Parent (Legal Guardian) Signature: ___________________________________________________

Phone number where parent can be reached: ____________________________________________

Email of Parent or Legal Guardian: ________________________________________________
**Course Description**

This course is designed to develop competencies in the areas of safety; selection and use of tools; planning and building projects and construction of agricultural structures, including the use of electrical circuits, plumbing, concrete and masonry; and employability skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.

**Materials Needed**

- Pen or pencil, paper, section in a 3-ring binder for classwork and projects, and appropriate dress

Some assignments require specific clothing for safety purposes. Students will know in advance what the clothing requirements will be and it is expected they adhere to these specifications. If their dress is not appropriate for the activity, students may not be able to participate and may receive a zero for the assignment. **Students are required to wear long pants, closed toed shoes, and clear safety glasses every day in the mechanics lab.**

**Course Objectives**

32. Practice personal, equipment, and shop safety
33. Select and use hand and power tools
34. Plan, draw, and construct a project
35. Install simple electrical circuits
36. Basic Oxy Acetylene welding and cutting
37. Basic electric arc welding
38. Perform basic plumbing and irrigation procedures
39. Mix and pour concrete and use masonry materials
40. Construct and maintain agricultural structures
41. Evaluate the importance of the food and fiber system to understand the impact on global economy
42. Examine the scope of career opportunities in and the importance of agriculture to the economy
43. Demonstrate employability skills

Grading Policy
Students and Parents are expected to keep well informed of their academic standing in all classes; utilizing the online grading system. The grading scale as determined by the county:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>&gt;59%</td>
</tr>
</tbody>
</table>

- 60% of grade based on summative assessments
- 40% of grade based on formative assessments
- 0% of grade based on diagnostic assessments

• Students are expected to turn assignments in on time; no late work is accepted. Students will turn in work in to their class’s assigned location for grading. Every assignment should include their name AND date.
• If a student is absent, it is their responsibility to make-up their schoolwork when they return.
• If a student is marked “TARDY” on the day an assignment or project is due, they are still responsible for turning in their work on the assigned day.

*Make-up work: refer to the school’s make-up policy for excused absences, found in the handbook for acquiring and receiving credit for make-up work.

Methods of Assessment
Students will be evaluated on:
- Classroom and laboratory participation
- Homework
- Test and Quizzes
- Mind Mooooovers
- Projects and class assignments

Classroom Expectations
26. All policies in the Student Handbook are to be followed.
27. Proper behavior is to be exhibited at all times.
28. Be on time and ready to work with the bell rings.
29. Bring all supplies needed to class daily (notebook, pencil/pen, paper, etc.).
30. Be polite and courteous to other classmates. Vulgar language has consequences.
31. Follow land lab and shop safety rules at all times.
32. Please put ALL electronic devices away (unless authorized by classroom teacher at designated times).
33. All materials must be clean before the bell rings and students are dismissed from class.

The National FFA Organization is an intra-curricular component of the Agriculture Education 3-Circle Model. FFA membership is required by those enrolled in the agriculture education classes. Chapter, State and National dues are ($25.00). To participate in any career development event, show animals or travel to FFA contests, you must pay FFA dues.

- If a student(s) is not able to financially afford this membership, students are able to work in the agriculture shop, horticulture area, land lab, or Ag classroom for 3 hours to earn their dues.

Remember, I understand that very few of you are interested in being FARMERS! Less than 2% of the American population is involved in PRODUCTION Agriculture. However, 100% of the population is involved in Agriculture consumption!
Please complete, sign, and return the following section to Mr. Brandner

Student Name: ____________________________  Class period: _______________________

I have read and understand all the requirements and expectations for this class.

____________________________________  __________
Student signature                     Date

____________________________________  __________
Parent signature                     Date

- I give permission for my child to watch any non-rated education video, G, PG or PG-13 movie that is relevant to the curriculum of this class.
- My student has permission to use the internet for school assignments
- I have read and understand the rules and requirements of Agriscience Foundations.

Parent (Legal Guardian) Name: __________________________________________________

Parent (Legal Guardian) Signature: ____________________________________________

Phone number where parent can be reached: ________________________________

Email of Parent or Legal Guardian: __________________________________________
Course Description
This course is designed to develop competencies in the areas of welding; small gasoline engine service and repair; preventative maintenance procedures; irrigation system repair; refrigeration; new and emerging technologies; financial management skills; and employability skills. Laboratory-based activities are an integral part of this course. These include the safe use and application of appropriate technology, scientific testing and observation equipment.

Materials Needed
- Pen or pencil, paper, section in a 3-ring binder for classwork and projects, and appropriate dress

Some assignments require specific clothing for safety purposes. Students will know in advance what the clothing requirements will be and it is expected they adhere to these specifications. If their dress is not appropriate for the activity, students may not be able to participate and may receive a zero for the assignment. **Students are required to wear long pants, closed toed shoes, and clear safety glasses every day in the mechanics lab.**

Course Objectives
44. Service and maintain small gasoline engines
45. Perform preventive maintenance, checks, and services for agricultural equipment
46. Design and maintain an irrigation system
47. Demonstrate knowledge of new and emerging technologies in agriculture
48. Explain the components of the American business system
49. Investigate agricultural cooperatives structure and function
50. Advanced welding and cutting techniques
51. Design and construction of agricultural projects
Grading Policy

Students and Parents are expected to keep well informed of their academic standing in all classes; utilizing the online grading system. The grading scale as determined by the county:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>&gt;59%</td>
</tr>
</tbody>
</table>

60% of grade based on summative assessments
40% of grade based on formative assessments
0% of grade based on diagnostic assessments

- Students are expected to turn assignments in on time; no late work is accepted. Students will turn in work in to their class’s assigned location for grading. Every assignment should include their name AND date.
- If a student is absent, it is their responsibility to make-up their schoolwork when they return.
- If a student is marked “TARDY” on the day an assignment or project is due, they are still responsible for turning in their work on the assigned day.

*Make up work: refer to the school’s make-up policy for excused absences, found in the handbook for acquiring and receiving credit for make-up work.

Methods of Assessment

Students will be evaluated on:
- Classroom and laboratory participation
- Homework
- Test and Quizzes
- Mind Mooooovers
- Projects and class assignments
Classroom Expectations

34. All policies in the Student Handbook are to be followed.
35. Proper behavior is to be exhibited at all times.
36. Be on time and ready to work with the bell rings.
37. Bring all supplies needed to class daily (notebook, pencil/pen, paper, etc.).
38. Be polite and courteous to other classmates. Vulgar language has consequences.
39. Follow land lab and shop safety rules at all times.
40. Please put ALL electronic devices away (unless authorized by classroom teacher at designated times).
41. All materials must be clean before the bell rings and students are dismissed from class.

The National FFA Organization is an intra-curricular component of the Agriculture Education 3-Circle Model. FFA membership is required by those enrolled in the agriculture education classes. Chapter, State and National dues are ($25.00). To participate in any career development event, show animals or travel to FFA contests, you must pay FFA dues.

- If a student(s) is not able to financially afford this membership, students are able to work in the agriculture shop, horticulture area, land lab, or Ag classroom for 3 hours to earn their dues.

Remember, I understand that very few of you are interested in being FARMERS! Less than 2% of the American population is involved in PRODUCTION Agriculture. However, 100% of the population is involved in Agriculture consumption!
Please complete, sign, and return the following section to Mr. Brandner

Student Name: ___________________________ Class period: ______________________

I have read and understand all the requirements and expectations for this class.

____________________________________   ______________
Student signature               Date

____________________________________   ______________
Parent signature               Date

• I give permission for my child to watch any non-rated education video, G, PG or PG-13 movie that is relevant to the curriculum of this class.
• My student has permission to use the internet for school assignments
• I have read and understand the rules and requirements of Agriscience Foundations.

Parent (Legal Guardian) Name: ________________________________________________

Parent (Legal Guardian) Signature: ____________________________________________

Phone number where parent can be reached: ________________________________

Email of Parent or Legal Guardian: __________________________________________