

**DeLand High School**  
Agriscience Foundations  
Career Technical Education  
2017-2018 Course Syllabi  
Teacher: Mr. Brett Brandner  
aljohns2@volusia.k12.fl.us



### Course Description

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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

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- 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

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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

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We will be exploring the various sectors of agriculture and their importance to our daily lives. Major units include Introduction of Agriculture, Leadership & The National FFA Organization, Safety, AgriSCIENCE, Environmental Science, Principles of Plant Science, Animal Sciences, and the Agriculture Global Marketplace.

## Grading Policy

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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:

| Grade | Percentage |
|-------|------------|
| A     | 100-90%    |
| B     | 80-89%     |
| C     | 70-79%     |
| D     | 60-69%     |
| F     | >59%       |

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

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Students will be evaluated on:

- Classroom and laboratory participation
- Homework
- Test and Quizzes
- Mind Moovooovers
- Projects and class assignments

## Classroom Expectations

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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.**

**DeLand High School**  
Animal Science 2  
Career Technical Education  
2017-2018 Course Syllabi  
Teacher: Mr. Brandner  
bcbrandn@volusia.k12.fl.us



### 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

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### Course Objectives

1. Describe animal science and the role of animals in society
2. Classify animals according to hierarchical taxonomy and agricultural use
3. Identify careers in the animal industry
4. Describe animal and human first aid and laboratory safety
5. Recognize normal and abnormal animal behaviors
6. Apply principles of comparative anatomy and physiology to uses within various animal systems
7. Evaluate the male and female reproductive systems
8. Demonstrate safe animal handling and management techniques
9. Analyze the communities responsibility in options for caring for unwanted/neglected livestock
10. Evaluate the importance of the food and fiber system to understand the impact on global economy
11. Examine the scope of career opportunities in and the importance of agriculture to the economy
12. Apply animal health practices

## Grading Policy

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## Methods of Assessment

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- Homework
- Test and Quizzes
- Mind Moovovers
- Projects and class assignments

## Classroom Expectations

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16. Bring all supplies needed to class daily (notebook, pencil/pen, paper, etc.).

17. Be polite and courteous to other classmates. Vulgar language has consequences.
18. Follow land lab and shop safety rules at all times.
- 19. Please put ALL electronic devices away (unless authorized by classroom teacher at designated times).**
20. All materials must be clean before the bell rings and students are dismissed from class.

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Student Name: \_\_\_\_\_ Class period: \_\_\_\_\_

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

\_\_\_\_\_  
Student signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent signature

\_\_\_\_\_  
Date

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Parent (Legal Guardian) Signature: \_\_\_\_\_

Phone number where parent can be reached: \_\_\_\_\_

Email of Parent or Legal Guardian: \_\_\_\_\_



**DeLand High School**  
Animal Science/Horticulture 3/4  
Career Technical Education  
2017-2018 Course Syllabi  
Teacher: Mr. Brandner  
bcbrandn@volusia.k12.fl.us



### Course Description

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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

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- 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

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1. Apply principles of animal nutrition to ensure the proper growth, development, and reproduction and economic production of animals
2. Evaluate animals for breeding readiness and soundness
3. Explain the reproductive system and breeding of selected animals
4. Prescribe and implement a prevention and treatment program for animal diseases, parasites and other disorders
5. Demonstrate knowledge of preventive medicine and disease control
6. Select animals for specific purposes and maximum performance based on anatomy and physiology
7. Prepare, groom, exhibit, and market animals
8. Maintain and analyze records
9. Provide for the biosecurity of agricultural animals and production facilities

## 10. Investigate agricultural cooperatives structure and function

### Grading Policy

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### Methods of Assessment

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Students will be evaluated on:

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- Test and Quizzes
- Mind Moovovers
- Projects and class assignments

### Classroom Expectations

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\_\_\_\_\_  
Student signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
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\_\_\_\_\_  
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**DeLand High School**  
Technical Ag Operations 2  
Career Technical Education  
2017-2018 Course Syllabi  
Teacher: Mr. Brandner  
bcbrandn@volusia.k12.fl.us



### Course Description

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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

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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

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1. Practice personal, equipment, and shop safety
  2. Select and use hand and power tools
  3. Plan, draw, and construct a project
  4. Install simple electrical circuits
  5. Basic Oxy Acetylene welding and cutting
  6. Basic electric arc welding
  7. Perform basic plumbing and irrigation procedures
  8. Mix and pour concrete and use masonry materials
  9. Construct and maintain agricultural structures
  10. Evaluate the importance of the food and fiber system to understand the impact on global economy
  11. Examine the scope of career opportunities in and the importance of agriculture to the economy
  12. Demonstrate employability skills
-

## Grading Policy

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## Classroom Expectations

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**DeLand High School**  
Technical Ag Operations 3  
Career Technical Education  
2017-2018 Course Syllabi  
**Teacher: Mr. Brandner**  
**bcbrandn@volusia.k12.fl.us**



### Course Description

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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

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- 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

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1. Service and maintain small gasoline engines
  2. Perform preventive maintenance, checks, and services for agricultural equipment
  3. Design and maintain an irrigation system
  4. Demonstrate knowledge of new and emerging technologies in agriculture
  5. Explain the components of the American business system
  6. Investigate agricultural cooperatives structure and function
  7. Advanced welding and cutting techniques
  8. Design and construction of agricultural projects
-

## Grading Policy

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