**Student Plan of Study - Animal Production and Processing**

**Revision # 4 June, 2015**

**Name____________________________**  
**Date______________**  
**School______________________________________**  
**Date_____________**  
**Advisor/Counselor Signature**  
**Date_______________**

Current Area of Interest: Agriculture, Food & Natural Resources/Animal Production and Processing - This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student’s educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>I. English/Language Arts Total 4 credits</th>
<th>II. Math Total 4 credits</th>
<th>III. Science Total 4 credits</th>
<th>IV. Social Studies Total 3 credits</th>
<th>V. Health/Personal Fitness Total 1 credit</th>
<th>VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives) Total 4 credits</th>
</tr>
</thead>
</table>
| 9  
9th Literature & Composition or Approved Dual Enrollment Course  
1 credit  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐ |
| 10  
10th Literature & Composition or World Literature & Composition or Approved Dual Enrollment Course  
1 credit  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐ |
| 11  
American Literature/Composition or AP English Language & Composition/American Lit or Approved Dual Enrollment Course  
1 credit  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐ |
| 12  
Advanced Composition or British Literature or AP/IB English Literature & Composition or Approved Dual Enrollment Course  
1 credit  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐  
Credit Earned ☐ |

At the end of the 11th grade, students planning to enter a University System of Georgia Institution or Technical College System of Georgia Institution should take the appropriate admissions test (SAT, ACT, Compass).

Legend:

- **Science**: Approved 4th Sciences may be used to meet both the required science and required elective in a Career, Technical, and Agricultural Education (CTAE) sequence of courses; see Fourth Science Requirements for more information. Students may take science courses in any sequence. Students必须 complete two credits of the same subject language for admission to University System of Georgia institutions.
- **Math**: Students should consult a counselor or advisor for related coursework.
- **Other Electives**: Any other of the previous courses or subject which they complete the required coursework to include at least one AP or one IB or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment and Georgia Virtual School courses may be available.

Richard Woods, Georgia’s School Superintendent  
"Educating Georgia’s Future"
### SAMPLE Pathway OCCUPATIONS
See *Georgia’s HOT Careers to 2020* for more information on high-skilled, high-wage and high-demand occupations.

<table>
<thead>
<tr>
<th>Occupation Specialties</th>
<th>Entry Level of Education Needed</th>
<th>2012 Annual Wage</th>
<th>Annual Openings 2012-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Scientists</td>
<td>Bachelor’s Degree</td>
<td>$73,400</td>
<td>1</td>
</tr>
<tr>
<td>Animal Breeders</td>
<td>High School</td>
<td>$37,230</td>
<td>2</td>
</tr>
<tr>
<td>Animal Trainers</td>
<td>High School</td>
<td>$24,300</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Georgia Department of Labor/ONET

### For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

### ****Current Georgia Graduation Rule

<table>
<thead>
<tr>
<th>Coursework</th>
<th>Credits</th>
<th>Coursework</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. English/Language Arts</td>
<td>4</td>
<td>V. Health &amp; Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>II. Math</td>
<td>4</td>
<td>VI. <strong>Career, Technical &amp; Agricultural Education and/or</strong></td>
<td></td>
</tr>
<tr>
<td>III. Science</td>
<td>4</td>
<td>**World Languages, and/or Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>IV. Social Studies</td>
<td>3</td>
<td>VII. Electives</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

**Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

***Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

**** Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

### Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution.
  Contact the selected institution for specific testing information. Additional admissions information can be found at Staying On Course. ([www.usg.edu/student_affairs/documents/Staying_on_Course.pdf](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf))

- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.

- Students who will continue their education and training in the US Military should take the ASVAB assessment.

- Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.

- Georgia’s dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

### Possible Student Pathway Credentialing Opportunities:

Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to [http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx](http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx).

### *Related Pathway Occupations:

- Animal Breeders
- Animal Scientists
- Animal Trainers
- Farm Workers
- Farm and Ranch Managers

### Other Related Agriculture, Food, & Natural Resources Occupations:

- Agriculture Scientists Teachers
- Veterinarians
- Veterinary Assistants
- Butchers
- Meat Processing Technician

*ONET Online

### Animal Production and Processing

Animal scientists conduct research to develop better ways to produce and process meat, poultry, eggs, and milk. Much of the research focuses on the health and breeding of livestock, but domestic animals, such as cats and dogs, are also a research concern. Animal scientists are experts in genetics, nutrition, reproduction, and animal production management. Developing new characteristics to introduce into animals (such as chickens that lay more eggs) and reducing the cost of raising animals and processing animal products are other goals of workers in this pathway.

Some animal scientists inspect and grade livestock and food products. Others develop special foods for animals, purchase livestock, or work in technical sales or marketing. Scientists may also advise producers on optimizing animal housing, handling waste matter, or lowering mortality rates of livestock and other animals. They recommend methods to improve disease control and increase the quality and quantity of animal production.

Because most jobs in this field are research-based, a bachelor’s degree in animal or agriculture science is required. A doctoral degree (Ph.D.) is necessary for leading research projects or teaching on the university level.

The farming and food production industry spends much money on breeding, raising, and feeding animals. The industry will continue to be interested in more efficient, less costly methods of raising animals. Therefore, employment of animal scientists at research firms will be needed to study new methods and develop healthier animals.