

## **AGRICULTURE EDUCATION AGRISCIENCE AND BIOTECHNOLOGY**

The Agricultural Education Agriscience and Biotechnology component of the Governor's Honors Program provides experiences for outstanding students in biotechnology for plants, animals, and the environment. Four students per high school can be nominated for the Agriculture Education GHP. Two in the area of Agriscience and two in the area of Environmental Sciences. These four slots for Agriculture Education are in addition to the other allotted slots for other GHP areas. Nominating four Agriculture Education students from a high school does not have take away any of the other allotted slots for GHP from that high school. Agriculture Education has a separate allotment of four Agriculture Education students per high school.

This program is designed to provide a comprehensive contemporary program of research based Agriscience education for the career-bound agriculture student. Students need to understand biotechnology in order to understand the agriculture industry and the products, production, and use. Topics will include:

- Fundamentals of Agricultural Biotechnology
- Agricultural Biotechnology and Its Uses
- Genetics and Agricultural Biotechnology
- Microbiology and Agricultural Biotechnology
- Biochemistry and Agricultural Biotechnology
- Laboratory Techniques and Procedures
- Crop and Ornamental Horticulture Applications of Biotechnology
- Biotechnology Applications in Animal Production
- Biotechnology and the Environment
- Food Science Applications of Biotechnology

The program will focus on applications of biotechnology in agriculture. Activities will be organized around ways that people are likely to encounter biotechnology (such as the roles of a technician, consumer, researcher, food producer, etc.). Activities will include opportunities to practice important skills, such as applying mathematics, practicing communications, performing laboratory skills, applying the scientific method, conducting Supervised Agricultural Experiences, and participating in agriscience leadership organizations.

Students nominated should be interested in Agriscience and Biotechnology, possess good computer skills, be creative thinkers, and have good interpersonal skills. Students should possess problem solving abilities and be able to effectively research and critique information. Students will communicate in a variety of formats about the results of experiments, data collection, research, or their opinions on issues. Students also will design, critique, and perform experiments. Career and issues information will be incorporated into each topic.

**AGRICULTURE EDUCATION  
AGRISCIENCE AND BIOTECHNOLOGY**

THE FOLLOWING CRITERIA MUST BE MET BY STUDENTS NOMINATED IN THE AREA OF AGRISCIENCE/BIOTECHNOLOGY:

**ALL DOCUMENTATION MUST BE SUPPLIED.**

**CRITERIA**

**EVIDENCE/DOCUMENTATION**

*The student must:*

Have taken or be currently enrolled in an agricultural education course such as forestry, horticulture, agriculture, mechanics, animal science, plant science, or agriscience. Agriscience is highly recommended with an awareness and appreciation of biotechnology.

Transcript  
Application  
Teacher recommendation

Demonstrate knowledge, interest, and aptitude in an agricultural career and the ability to communicate in a variety of formats about the results of experiments, data collection, research, or opinions of agricultural issues.

Application  
Teacher recommendation

Attach a current photograph to their application.

Attach to front of application

Exhibit evidence of high academic proficiency. An overall GPA of 3.0 is required with an A in science courses (or B in honors or AP classes) and an A in agricultural education courses.

Application  
Transcript  
PSAT/SAT scores

Indicate a desire to participate in GHP in Agriscience and Biotechnology.

Teacher recommendation

Attach a resume describing activities. List activities in these areas (use these headings): (1) Participation in agriculture education classes; (2) Participation in Agriscience; (3) Participation in FFA and other Agriculture organizations; (4) Participation in other student organizations and community groups; (5) Leadership positions; (6) Academic achievements; (7) Agriculture Supervised Experience Projects.

Attach to application  
**MANDATORY**

AGRICULTURE EDUCATION –  
AGRISCIENCE/BIOTECHNOLOGY (Continued)

**CRITERIA**

Attach a portfolio, not to exceed 10 pages, which includes documentation of the student’s participation in agriscience activities, agriculture education classes, the FFA, and/or other student and agriculture related leadership organizations.

Exhibit achievement in the FFA and/or other student and agriculture related leadership organizations.

Have a strong endorsement from the school and a teacher having knowledge of the student’s capabilities.

Be able to work in an unsupervised setting and possess a thorough knowledge of safety and health precautions.

**EVIDENCE/DOCUMENTATION**

Portfolio  
**MANDATORY**  
(Please send with application)

Teacher recommendation  
Application

Teacher recommendation

Teacher recommendation

**Note: Portfolio, Resume, and Research Abstract must be included with nomination form. For additional information contact Mr. Blane Marable, GHP Agriscience Coordinator, (706) 542-9793 or bmarable@doe.k12.ga.us, or Dr. Joe Searle, Director, GHP, (404) 657-0183.**

## **AGRICULTURE EDUCATION ENVIRONMENTAL SCIENCE**

The Agricultural Education Environmental Science component of the Governor's Honors Program provides experiences for outstanding students in soils and hydrology, forestry, and natural resources. Four students per high school can be nominated for the Agriculture Education GHP. Two in the area of Agriscience and two in the area of Environmental Sciences. These four slots for Agriculture Education are in addition to the other allotted slots for other GHP areas. Nominating four Agriculture Education students from a high school does not have take away any of the other allotted slots for GHP from that high school. Agriculture Education has a separate allotment of four Agriculture Education students per high school.

This program is designed to provide a comprehensive contemporary program of research based Agriscience education for the career-bound agriculture student. Students need to understand environmental science in order to understand the agriculture industry and the products, production, and use. Topics will include:

- Soils and Hydrology
- Forest Science
- Wildlife Management
- Natural Resources
- Conservation Management
- Environmental Issues
- Urban and Community Forestry
- Environmental Science and Stewardship

The program will focus on applications of environmental science in agriculture. Activities will be organized around ways that people are likely to encounter environmental science (such as the roles of a technician, consumer, researcher, food producer, etc.). Activities will include opportunities to practice important skills, such as applying mathematics, practicing communications, performing laboratory skills, applying the scientific method, conducting Supervised Agricultural Experiences, and participating in agriscience leadership organizations.

Students nominated should be interested in Environmental Science, possess good computer skills, be creative thinkers, and have good interpersonal skills. Students should possess problem solving abilities and be able to effectively research and critique information. Students will communicate in a variety of formats about the results of experiments, data collection, research, or their opinions on issues. Students also will design, critique, and perform experiments. Career and issues information will be incorporated into each topic.

**AGRICULTURE EDUCATION  
ENVIRONMENTAL SCIENCE**

THE FOLLOWING CRITERIA MUST BE MET BY STUDENTS NOMINATED IN THE AREA OF  
AGRISCIENCE/ENVIRONMENTAL SCIENCE:

**ALL DOCUMENTATION MUST BE SUPPLIED.**

**CRITERIA**

**EVIDENCE/DOCUMENTATION**

*The student must:*

Have taken or be currently enrolled in an agricultural education course such as forestry, horticulture, agriculture, mechanics, animal science, plant science, or agriscience. Agriscience is highly recommended with an awareness and appreciation of environmental science.

Transcript  
Application  
Teacher recommendation

Demonstrate knowledge, interest, and aptitude in an agricultural career and the ability to communicate in a variety of formats about the results of experiments, data collection, research, or opinions of agricultural issues.

Application  
Teacher recommendation

Attach a current photograph to their application.

Attach to front of application

Exhibit evidence of high academic proficiency. An overall GPA of 3.0 is required with an A in science courses (or B in honors or AP classes) and an A in agricultural education courses.

Application  
Transcript  
PSAT/SAT scores

Indicate a desire to participate in GHP in Environmental Science.

Teacher recommendation

Attach a resume describing activities. List activities in these areas (use these headings): (1) Participation in agriculture education classes; (2) Participation in Agriscience; (3) Participation in FFA and other Agriculture organizations; (4) Participation in other student organizations and community groups; (5) Leadership positions; (6) Academic achievements; (7) Agriculture Supervised Experience Projects.

Attach to application  
**MANDATORY**

AGRICULTURE EDUCATION – ENVIRONMENTAL  
SCIENCE (Continued)

**CRITERIA**

Attach a portfolio, not to exceed 10 pages, which includes documentation of the student’s participation in agriscience activities, agriculture education classes, the FFA, and/or other student and agriculture related leadership organizations.

Exhibit achievement in the FFA and/or other student and agriculture related leadership organizations.

Have a strong endorsement from the school and a teacher having knowledge of the student’s capabilities.

Be able to work in an unsupervised setting and possess a thorough knowledge of safety and health precautions.

**EVIDENCE/DOCUMENTATION**

Portfolio  
**MANDATORY**  
(Please send with application)

Teacher recommendation  
Application

Teacher recommendation

Teacher recommendation

**Note: Portfolio, Resume, and Research Abstract must be included with nomination form. For additional information contact Mr. Blane Marable, GHP Agriscience Coordinator, (706) 542-9793 or bmarable@doe.k12.ga.us, or Dr. Joe Searle, Director, GHP, (404) 657-0183.**