Agricultural Business Fundamentals I

8022/36 weeks

Table of Contents

Acknowledgments ......................................................................................................................................... 1
Course Description ........................................................................................................................................ 2
Task Essentials Table .................................................................................................................................... 3
Curriculum Framework ................................................................................................................................. 5
Exploring Leadership Opportunities through FFA ....................................................................................... 7
Developing Employability Skills .................................................................................................................. 10
Making Consumer Choices .......................................................................................................................... 17
Managing Financial Records and Reports ................................................................................................... 21
Performing Electronic Operations for AFNR ............................................................................................... 28
Understanding Basic Economics ................................................................................................................... 31
Understanding Agribusiness Structures and Procedures .............................................................................. 36
Marketing Agricultural Products or Services ............................................................................................... 42
Using Business Laws in Agribusiness ........................................................................................................... 47
Incorporating Mechanical Skills as Related to the Agricultural Business Systems Pathway ..................... 49
SOL Correlation by Task ................................................................................................................................. 59
Appendix: Credentials, Course Sequences, and Career Cluster Information ............................................. 64

Acknowledgments

The components of this instructional framework were developed by the following curriculum development panelists:

- Dr. Roman Bohdan, Assistant Professor of Business, Ferrum College, Ferrum
- Joe Guthrie, Senior Instructor, Virginia Tech, Blacksburg
Course Description

Suggested Grade Level: 10 or 11

Students develop the necessary knowledge, skills, habits, and attitudes for employment in agribusinesses. The course emphasizes personal financial management practices, consumer choices, financial records, business structures and procedures, and the economics of marketing agricultural products and services. Students will participate in supervised agricultural experiences, leadership opportunities, and investigate postsecondary options.
Task Essentials Table

- Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential.
- Tasks/competencies designated by empty-circle icons (☉) are optional.
- Tasks/competencies designated by minus icons (⊖) are omitted.
- Tasks marked with an asterisk (*) are sensitive.

| Note: Competencies 39-43 have been added to ensure compliance with federal legislation: National FFA Organization's Federal Charter Amendments Act (Public Law 116-7, https://www.congress.gov/116/plaws/publ7/PLAW-116publ7.pdf). All inquiries may be sent to cte@doe.virginia.gov. Students are provided opportunities for leadership, personal growth, and career success. Instruction is delivered through three major components: classroom and laboratory instruction, supervised agricultural experience (SAE) program, and student leadership (FFA). |
|---|---|
| 39 | ⊕ Identify the role of supervised agricultural experiences (SAEs) in agricultural education. |
| 40 | ⊕ Participate in an SAE. |
| **Exploring Leadership Opportunities through FFA** | |
| 41 | ⊕ Identify the benefits and responsibilities of FFA membership. |
| 42 | ⊕ Describe leadership characteristics and opportunities as they relate to agriculture and FFA. |
| 43 | ☉ Apply for an FFA degree and/or an agricultural proficiency award. |
| **Developing Employability Skills** | |
| 44 | ⊕ Create a professional online presence. |
| 45 | ⊕ Compose a cover letter. |
| 46 | ⊕ Prepare a résumé. |
| 47 | ☉ Design a portfolio. |
| 48 | ☉ Research a potential employer. |
| 49 | ⊕ Submit an electronic cover letter, résumé, and (optionally) portfolio. |
| 50 | ⊕ Use the SAE Record Book or an alternative method to document the SAE. |
| 51 | ⊕ Complete employment application forms. |
| 52 | ⊕ Complete a mock employment interview. |
| 53 | ⊕ Follow-up an interview with a thank-you letter, email, and/or phone call. |
| 54 | ⊕ Identify the benefits of SAE/Work-Based Learning (WBL). |
| **Making Consumer Choices** | |
| 55 | ⊕ Identify rights and responsibilities of consumers. |
| 56 | ⊕ Identify methods of handling consumer complaints. |
| 57 | ⊕ Identify consumer-protection agencies. |
| 58 | ⊕ Identify components of a guarantee, a warranty, and a contract. |
| 59 | ⊕ Explain information found on product labels. |
| **Managing Financial Records and Reports** | |

3
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**Using Business Laws in Agribusiness**

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<th>Task/Competency</th>
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<tr>
<td>99</td>
<td>Identify labor laws relative to agricultural business.</td>
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<td>Identify regulatory agencies and acts involved with agriculture.</td>
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**Incorporating Mechanical Skills as Related to the Agricultural Business Systems Pathway**

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<th>Task/Competency</th>
<th>Description</th>
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<tr>
<td>101</td>
<td>Demonstrate safety practices in agricultural mechanics adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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<td>102</td>
<td>Demonstrate equipment safety and operation adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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<td>103</td>
<td>Demonstrate standard measurement techniques used in the agribusiness systems pathway.</td>
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<td>104</td>
<td>Demonstrate drawing for agricultural mechanics.</td>
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<td>105</td>
<td>Demonstrate metalworking operations adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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<td>106</td>
<td>Demonstrate woodworking operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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<td>107</td>
<td>Demonstrate electrical operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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<td>108</td>
<td>Demonstrate small-engine operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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<td>109</td>
<td>Demonstrate plumbing operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
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**Curriculum Framework**

Note: Competencies 39-43 have been added to ensure compliance with federal legislation: National FFA Organization's Federal Charter Amendments Act (Public Law 116-7, https://www.congress.gov/116/plaws/publ7/PLAW-116publ7.pdf). All inquiries may be sent to cte@doe.virginia.gov. Students are provided opportunities for leadership, personal growth, and career success. Instruction is delivered through three major components: classroom and laboratory instruction, supervised agricultural experience (SAE) program, and student leadership (FFA).
Task Number 39
Identify the role of supervised agricultural experiences (SAEs) in agricultural education.

Definition
Identification should include

- defining an SAE program as an opportunity for students to consider multiple careers and occupations in the agriculture, food, and natural resources (AFNR) industries, learn expected workplace behavior, develop specific skills within an industry, and apply academic and occupational skills in the workplace or a simulated workplace environment
- researching the Foundational SAE
  - career exploration and planning
  - personal financial planning and management
  - workplace safety
  - employability skills for college and career readiness
  - agricultural literacy
- researching the Immersion SAE
  - entrepreneurship/ownership
  - placement/internships
  - research (experimental, analytical, invention)
  - school business enterprises
  - service learning
- developing a plan to participate in an SAE, based on personal and career goals
- researching available awards and degrees, based on SAE participation.

Teacher Resource: SAE Resources (https://thecouncil.ffa.org/sae-resources/), National Council for Agricultural Education

Process/Skill Questions

- What are examples of SAEs related to this course and in the AFNR industries?
- Where can a copy of the Virginia SAE Record Book be found?
- What is an Immersion SAE?
- How does a placement/internship SAE differ from an ownership/entrepreneurship SAE?
- How does an SAE provide relevant work experience and contribute to the development of critical thinking skills?
- How is the SAE an extended individualized instructional component of a student’s Career Plan of Study?
- How can an SAE be used to provide evidence of student growth and participation in authentic, work-related tasks?
• What are the four types of SAEs?
• What are the advantages of participating in work-based learning experiences and projects?
• How does one choose an appropriate SAE in which to participate?

Task Number 40
Participate in an SAE.

Definition
Participation should include

• developing, completing, or continuing a plan to participate in an SAE as a work-based learning experience, based on personal and career goals
• documenting experience, connections, positions held, and competencies attained, using the Virginia SAE Record Book
• researching available awards and degrees, based on SAE participation.

Teacher Resources:
• Supervised Agricultural Experiences (SAE) (https://thecouncil.ffa.org/sae/)
• The Agricultural Experience Tracker (AET) (https://www.theaet.com/)

Process/Skill Questions

• What are the advantages of participating in work-based learning experiences and projects?
• How do SAEs help prepare students for the workforce?
• What are some examples of SAEs in AFNR?

Exploring Leadership Opportunities through FFA
Task Number 41
Identify the benefits and responsibilities of FFA membership.

Definition
Identification should include

- benefits
  - listing opportunities to participate in community improvement projects and career development events (CDEs) and leadership development events (LDEs)
  - exploring leadership development opportunities

- responsibilities
  - researching the responsibilities of FFA officers, committees, and members
  - locating resources that guide participation in FFA activities
  - explaining the FFA Creed. Motto, Salute, and mission statement
  - explaining the meaning of the FFA emblem, colors, and symbols
  - explaining significant events and the history of the organization.

Process/Skill Questions

- How does one become an FFA member?
- What is the FFA’s mission and how does it accomplish its mission?
- What are the benefits and responsibilities of FFA membership?
- What five FFA activities are available through the local chapter?
- What are some significant events in FFA history? How have these events shaped membership over time?
- What is the FFA program of activities (POA), and how is it used?

Task Number 42
Describe leadership characteristics and opportunities as they relate to agriculture and FFA.

Definition
Description should include

- examples of successful leaders
- types of leadership
positive leadership qualities and traits of successful leaders
opportunities for participating in leadership activities in FFA
demonstrating methods for conducting an effective meeting.

Process/Skill Questions

• Who are some successful leaders in the agriculture industry?
• What qualities make a successful leader?
• What are leadership traits?
• What is the difference between positive and negative leadership?

Task Number 43 Optional
Apply for an FFA degree and/or an agricultural proficiency award.

Definition

Application should include

• identifying types of FFA degrees
  o Greenhand
  o Chapter
  o State
  o American
• identifying proficiency award areas
  o entrepreneurship
  o placement
  o combined
  o agriscience research
• exploring CDEs and LDEs related to this course
• identifying all SAE criteria to be eligible for the award
• identifying the type of award
• applying for an FFA award.

Teacher Resource: FFA Agricultural Proficiency Awards (https://www.ffa.org/participate/awards/proficiencies/)
Process/Skill Questions

- Where are the awards and their application criteria located?
- What are the benefits of winning an FFA award?
- What are the benefits and requirements of an FFA degree?
- What FFA awards are available?
- How does the FFA degree program reward FFA members in all phases of leadership, skills, and occupational development?
- What is the highest degree that can be conferred upon an FFA member at the national level?
- What are the requirements for a Greenhand FFA degree?

Developing Employability Skills

Task Number 44
Create a professional online presence.

Definition
Creation should include

- managing social networks (ensuring posts are professional, keeping personal profiles private)
- posting a professional photograph
- posting a professional biography
- highlighting professional skills and personal attributes.

Process/Skill Questions

- How does one create a professional online presence?
- What are some of the benefits of a professional online presence?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.10.04
Task Number 45
Compose a cover letter.

Definition
Composition should include

- determining the type of cover letter
  o applying for a specific position
  o inquiring for positions available (i.e., letter of inquiry)
- using proper letter format
- referencing how the applicant learned of the position
- referencing the specific position for which the applicant is applying
- displaying a knowledge of the business
- referencing the résumé, by highlighting qualifications and relevant background
- requesting an interview
- paying attention to grammar and content.

Teacher Resources:

- Employment Skills Handbook, FFA
  (https://ffa.app.box.com/s/wbuf76xhx3xn4blorqaij2vh8cc6mtpb)

Process/Skill Questions

- Why is a cover letter important?
- What is the proper format for a cover letter?
- What should be included in a cover letter?
- Who should receive the cover letter?
- When should the cover letter be presented?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.04.02

CRP.10.04

Task Number 46
Prepare a résumé.

Definition
Résumé should include
- educational background
- relevant experience and/or work history
- technical skills and/or industry certifications
- honors and awards
- school and community activities
- offices held and/or leadership roles
- references
- links to professional online profile.

Teacher Resources:

- [Supervised Agricultural Experience (SAE), FFA](https://ffa.app.box.com/s/oe96v4ll79r5efehjzdargvdfn4d0hmihsps/folder/104046542156)
- [Employment Skills Résumé Generator Guide, FFA](https://ffa.app.box.com/s/oe96v4ll79r5efehjzdargvdfn4d0hmihsps/file/290513394810)

Process/Skill Questions

- What is the purpose of a résumé?
- How do employers use résumés in the hiring process?
- What are the standard components of a résumé?
- When preparing a résumé, what is the significance of including club memberships and community activities?
- Why is proofreading a vital step when writing a résumé?
- Who might serve as a reference?
- What should a résumé look like (e.g., font style and size, number of pages)?
- What are the benefits of a chronological résumé? Of a functional résumé?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.04.02

CRP.10.04

Task Number 47 Optional

Design a portfolio.

Definition
Design should include a résumé and a collection of electronic and/or nonelectronic documents representative of the student's knowledge, skills, and abilities.
Process/Skill Questions

- How can one use a portfolio in agricultural business?
- What materials should be included in one’s portfolio?
- What media can be used to create a portfolio?
- How do employers use portfolios in the hiring process?
- What knowledge, skills, and abilities would one highlight in a portfolio?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.04.02

CRP.10.04

Task Number 48 Optional

Research a potential employer.

Definition

Research should include

- information needed before applying for a position
  - know what skills the employer values
  - understand the products and services the employer provides
- information needed before interviewing for a position
  - review the employer’s mission, history, news, culture
  - collect information regarding potential interviewer, when possible
  - anticipate questions from the interviewer.

Process/Skill Questions

- What are ways to research a potential employer?
- What are some of the most common questions employers ask interviewees?
- Why should one practice the interview process prior to the actual interview?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.10.04
Task Number 49

Submit an electronic cover letter, résumé, and (optionally) portfolio.

Definition
Submission should include

- a professional email
- an appropriate subject line
- appropriate file titles (e.g., Résumé_Smith)
- correct grammar, specific content, and professional tone
- proofreading.

Process/Skill Questions

- What are the challenges in submitting applications electronically?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.04.02

CRP.10.04

Task Number 50

Use the SAE Record Book or an alternative method to document the SAE.

Definition
Use should include documenting agricultural experiences undertaken during high school.

Process/Skill Questions

- Why is it important to document the SAE?
- What types of information are documented in the SAE Record Book or Agricultural Experience Tracker (AET)?
- How is the SAE Record Book different from the AET?
Task Number 51

Complete employment application forms.

Definition
Completion should include

- all components of an employment application (e.g., name, address, social security number, education, work experiences, job title, references, other qualifications)
- preparation (organize and prepare copies of résumé and all relevant information)
- references (ask permission before listing someone as a reference).

The electronic application form should include complete, accurate, and effectively organized information. It should follow additional criteria specifically related to electronic transmittal of such information (e.g., attention to security concerns, inclusion of key words to enhance interest in the application).

Process/Skill Questions

- Why is it important to ask a person's permission before using his or her name as a reference?
- How can one be prepared to complete an online application?
- Why is honesty important when completing a job application? What could happen if a job applicant is not honest?
- Why should one dress professionally when visiting a company to obtain an application?
- What can a job application tell an employer about an applicant?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.10.04

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Task Number 52

Complete a mock employment interview.

Definition
Completion should give students the opportunity to

- practice interviewing skills
- play a variety of roles in the interview
- identify behaviors both desirable (e.g., maintaining eye contact, asking informed questions) and undesirable (e.g., speaking too softly, failing to answer questions completely).
Process/Skill Questions

- What are some skills useful in an interview?
- What are the benefits of mock interviews?
- What are some examples of inappropriate interview questions?
- What should one do if asked an inappropriate question?
- When should one ask questions during an interview?
- What specific questions might one ask about the company?
- Why is it important to research a company before an interview?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.10.04

Task Number 53

Follow-up an interview with a thank-you letter, email, and/or phone call.

Definition

- preparation for letter and email
  - appropriate business letter format
  - expression of appreciation for the interview
  - reminder of the applicant's qualifications
  - confirmation of the applicant's interest in the job
  - request for further action, perhaps a second interview or meeting
- preparation for phone call
  - prepared script or bulleted points
  - expression of appreciation for the interview
  - reminder of the applicant's qualifications
  - confirmation of the applicant's interest in the job
  - request for further action, perhaps a second interview or meeting.

Process/Skill Questions

- How can an interview follow-up letter help?
- What are the components of a follow-up letter or email?
- When should the letter be sent?
- When is email appropriate for correspondence?
Agriculture, Food, and Natural Resources (AFNR) Standards

CRV 4.01

CRP.10.04

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**Task Number 54**

**Identify the benefits of SAE/Work-Based Learning (WBL).**

**Definition**

should include explanation of the SAE/WBL instructional methods, as well as the requirements and benefits.

**Process/Skill Questions**

- What is the definition of *work-based learning*?
- Why are WBL experiences beneficial to students?
- What are some examples of WBL opportunities in agricultural education?

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**Making Consumer Choices**

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**Task Number 55**

**Identify rights and responsibilities of consumers.**

**Definition**

Identification should include explaining the following consumer rights and associated responsibilities with regard to consumer decision making:

- right to choose among products and services
- right to information through advertising, product labeling, warranties, publications, and consumer organizations
- right to safety and legal protection
- right to express dissatisfaction and be heard.

**Teacher Resources:**

*Agricultural Sales User’s Manual*, FFA
(https://ffa.app.box.com/s/a5dkpp2007k9rpaolzhv5xg6o852d04i/file/289846371438)
Process/Skill Questions

- What is the difference between a right and a responsibility of customers?
- Where can resources be located identifying customers' rights and responsibilities?
- What are some consumer-safety organizations, and what are their roles?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

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**Task Number 56**

**Identify methods of handling consumer complaints.**

**Definition**

Identification should include

- being polite
- using proper forms of address
- maintaining one's composure
- employing active-listening skills
- understanding available options to satisfy customers
- responding to feedback in-person and on digital platforms.

**Process/Skill Questions**

- What are some methods to handle consumer complaints?
- Why is it so important to maintain composure when a consumer is complaining?
- Why should organizations empower employees to solve basic customer complaints?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03
Task Number 57

Identify consumer-protection agencies.

Definition
Identification should include

- Better Business Bureau (BBB)
- state attorney general's office
- Virginia Department of Agriculture and Consumer Services (VDACS)
- U.S. Department of Agriculture (USDA)
- U.S. Food and Drug Administration (FDA)

Process/Skill Questions

- What are some government agencies that protect the consumer?
- What is the role of VDACS?
- Why should bad business practices be reported?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Task Number 58

Identify components of a guarantee, a warranty, and a contract.

Definition
Identification of warranty and guarantee components should include

- privilege of return
- effective date
- terms of the warranty or guarantee.

Identification of contract components should include

- parties involved
- consideration
- effective date
- responsibilities of the contracting parties.
Process/Skill Questions

- What is meant by a privilege of return?
- What are the four parts of a legal contract?
- Why is the effective date an important consideration?
- What are the differences between a guarantee and a warranty?
- How are contracts most commonly used in agricultural business?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Task Number 59

Explain information found on product labels.

Definition
Explanation will vary according to type of product and may include

- legally required details, which should be listed first
- brand name
- product name
- series name
- packaging size
- company contact information
- country of origin
- nutrient content claims
- trans fat
- food allergens
- animal production claims and hormone labeling
- irradiated food labeling
- biotech food labeling
- barcode
- product certifications (e.g., organic, grass-fed, natural, free-range).

Process/Skill Questions

- What is an example of a warning label on a product?
- What are the requirements for warning labels?
- Why should a label never be removed from the product container?
- Which government agencies regulate product labeling?
• What might be the consequences of not using a product as labeled?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Managing Financial Records and Reports

Task Number 60
Maintain a filing system for financial records.

Definition
Maintenance should include

• monitoring business performance by reviewing
  o income statements
  o cashflow statements
  o equity statements
• setting up manual and electronic records management systems using numerical, chronological, and/or tickler filing systems
• indexing, coding, and filing manual and electronic financial records, using numerical, chronological, and/or tickler filing systems
• retrieving information from files.

Process/Skill Questions

• Why is recordkeeping important?
• What skills are needed for recordkeeping?
• What are the differences between handwritten and computer-generated records?
• What are some software programs to assist in keeping accurate records?
• What would happen if a business failed to keep accurate records?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.02.02
Task Number 61

Identify net worth and profit-and-loss (P&L) statements.

Definition

Identification should include purpose and interpretation of the following financial statements:

- Balance sheet
- Income statement
- Cashflow risk management

Process/Skill Questions

- What is meant by the net worth of a business?
- How is net worth calculated?
- What are liabilities? How are they identified?
- How would a loan institution use one’s net worth to determine loan qualification?
- What is the difference between current and non-current liabilities?
- What is meant by non-cash income?
- What is an example of a non-cash expense?
- How does a business use a P&L statement?
- What is the difference between a cashflow and a P&L statement? When should one evaluate a P&L statement?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.02.02

Task Number 62

Prepare financial reports to communicate the performance of an AFNR business.

Definition

Preparation should include communicating

- efficiency
- profitability
• net worth
• financial ratios
• working capital ratio
• leverage.

Process/Skill Questions

• What are financial ratios, and how are they used by a business?
• What is leverage, and how is it used?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.02.02

Task Number 63

Analyze financial information and reports to monitor business performance and support decision making.

Definition

Analysis should

• consider data collected and efficiency factors
  o income statements
  o balance sheets
  o cashflow statements
  o inventory reports
  o break-even analysis
  o return-on-investment (ROI)
  o taxes
  ▪ income
  ▪ property
  ▪ sales
  ▪ employment
  ▪ estate
• observe efficiency factors attained, P&L statements, partial budgets, and other financial assessments
• evaluate efficiency, profitability, net worth, and financial ratios.

Process/Skill Questions

• Why is it important to summarize records at the end of the year?
• What are some examples of ways to keep records of an agricultural business?
• How might these forms be helpful in applying for loans or expanding one’s operation?
• How can year-end reports be used to improve a business? How can a record summary be used to apply for FFA awards?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.02.02

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**Task Number 64**

**Prepare a personal budget.**

**Definition**

Preparation should include

• a statement of short- and long-term goals
• a plan for managing money over a short- and long-term period
• a plan that allows for discretionary income and takes into account the cost-of-living increases.

**Process/Skill Questions**

• What kinds of items fall into the short-term budget category? Long-term budget category?
• What resources are available to help prepare a personal budget?
• What are some strategies to help one maintain a budget?
• What items would fall into discretionary income? How can maintaining a budget prepare one for unexpected expenses?

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**Task Number 65**

**Prepare financial reports to describe the performance of an AFNR business.**

**Definition**

Preparation should include describing

• efficiency
• profitability
• net worth
• financial ratios
• working-capital ratio
• leverage.

Process/Skill Questions

• When should a checking account be balanced?
• When should withdrawals from an ATM be recorded?
• What are consequences of failure to balance a checking account?
• What should one do if their balance and the bank’s balance do not match?
• What happens if an account becomes overdrawn?
• When should interest be recorded?
• What are the benefits of using an interest-building account? What are the risks?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.02.02

Task Number 66

Identify personal financial management tools and strategies.

Definition

Identification should include

• saving
• investing (e.g., 401-K, healthcare spending account [HSA], individual retirement account [IRA])
• calculating simple and compound interest
• borrowing (e.g., business loans, student loans, mortgages)
• guarding against identity theft
• obtaining a personal credit report and credit score on a regular basis.

Process/Skill Questions

• Why should one have a personal financial management strategy?
• What is identity theft?
• How can one guard against identity theft?
• What steps can one take to evaluate the risks vs. benefits of an investment?
• What is an advantage of placing money in a savings account?
Task Number 67

Identify insurance as a risk-management strategy.

Definition

Identification should include a definition of the term *risk management*, an explanation of the ways insurance can reduce financial risk, and an analysis of the advantages and disadvantages of insurance as a risk-management strategy in financial planning to include:

- evaluating insurance as a risk-management strategy
- distinguishing among the types, costs, and benefits of insurance coverage, including automobile, life, property, health, and professional liability
- explaining the roles of insurance in financial planning.

Process/Skill Questions

- How can insurance reduce financial risk personally or in a business?
- What are some advantages and disadvantages in using insurance as a risk-management strategy?
- What are some of the roles of insurance in financial planning?
Task Number 68
Complete mock income tax forms.

Definition

Completion should include

- W-2
- 1099
- 1040
- 1040A
- 1040EZ
- SC-18 quarterly form for self-employed.

Process/Skill Questions

- When must individuals file tax forms?
- What are some examples when a 1040EZ form cannot be filed by an individual?
- Why do self-employed individuals pay income tax on a quarterly basis?
- What are the implications of not filing tax forms? Under what circumstances would one not file tax forms?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.02.02

Task Number 69
Calculate depreciation.

Definition
Calculation should include listing depreciable assets and calculating straight-line and other methods of depreciation.

Process/Skill Questions

- What is depreciation?
- How does one calculate depreciation, using the straight-line method?
- How does one determine which assets are depreciable?
- How is life expectancy of equipment determined when calculating depreciation?
- How does depreciation affect taxes?
- What items depreciate the fastest?
Task Number 70
Calculate net returns.

Definition

Calculation should include

- unit cost of production (e.g., fixed, variable, and marginal costs)
- returns in the production process
- formula for determining profit.

Process/Skill Questions

- What is the formula for determining profit?
- What is the average total cost of production?
- What is a break-even point?
- What is meant by the unit cost of a product?
- What is downsizing? How does this affect unit cost of products?
- How can variable costs be controlled?
- How are break-even points calculated?
- How does one determine if a cost is fixed or variable?

Performing Electronic Operations for AFNR
Task Number 71
Identify the methods and benefits of precision agriculture.

Definition
Identification should include

- types
  - telematics
  - global navigation satellite systems (GNSS) assistance
  - robotics
  - automated hardware
  - agricultural drones
  - variable rate technology (cellular and wireless)
- discussion of the different technologies and their functions.

Process/Skill Questions

- What are some examples of technology used in agribusiness?
- What is the purpose of precision agriculture?
- What technology advances could benefit agribusiness in the future?
- How have technologies increased efficiency in agribusiness?
- How can cellular communication benefit an agribusiness?
- How could a precision agriculture device on a tractor save an agricultural producer money?

Task Number 72
Create records and correspondence, using word-processing software, spreadsheets, databases, and email.

Definition
Creation should include

- recordkeeping, using spreadsheets and databases
- letters and correspondence, using word processing and email.

Process/Skill Questions

- How are spreadsheets used in agribusiness?
- Why is etiquette important when corresponding via email?
- How can one identify software suited to agribusiness needs?
• How are databases used in agriculture?
• When is email more appropriate for communication than speaking in-person or via telephone?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.03.01

Task Number 73
Conduct research.

Definition
Research should include

• choosing a topic related to the course
• identifying and exploring reliable sources (e.g., universities, extension programs)
• summarizing one’s findings.
• How does one determine which website(s) to use for research?
• What are some legal considerations of using website content?
• How can one evaluate the credibility of web resources?
• What are some reliable and trustworthy resources for agricultural research?
• What are other sources of information apart from the Internet?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Task Number 74
Conduct an oral and visual presentation, using presentation software.

Definition
Presentation should include

• assigned topic
• electronic presentation, using graphics and other visual enhancements
• elements of effective public speaking (e.g., voice level, posture, eye contact).
Process/Skill Questions

- What are some examples of presentation software?
- What are some characteristics of an effective public speaker?
- Why should one test electronic equipment prior to a presentation?
- How can one become a more effective speaker?
- How does one determine the appropriate length of a presentation?
- What should not be included in a professional presentation?

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Task Number 75
Implement procedures for sharing, backing up, and restoring files.

Definition
Implementation should include

- adopting the process of routinely saving and backing up work
- using alternative methods of saving work (e.g., remote servers, portable drives, web servers, online/cloud storage [e.g., Google Drive, Dropbox])
- retrieving data from backup files and restoring it to the computer.

Process/Skill Questions

- Why is it important to back up work?
- What are examples of methods/media used to back up work?
- What are the consequences of failing to back up work?
- How can one insure that saved work is secure?
- How can one restore data on a computer?
- What can one do as a steward of files to protect against a data breach?

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Understanding Basic Economics
Task Number 76

**Explain the importance of economics.**

**Definition**

Explanation should include the role of

- consumers
- goods and services (e.g., wants and needs, production, resources)
- producers
- scarcity
- optimal distribution of resources in society.

**Process/Skill Questions**

- What is the effect of scarcity?
- How does one identify the target market for a product?
- How does one differentiate between a want and need?
- What is the role of opportunity cost?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.01

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Task Number 77

**Identify the components of the economic process.**

**Definition**

Identification should include

- production and consumption
- incentives, including the profit motive
- tradeoffs, weighing the costs and benefits of alternatives
- consumers
- producers
- market.

**Process/Skill Questions**

- What is the *profit motive*?
- What is the economic goal of producers? Consumers?
- What is *revenue*?
• What incentives do producers have to meet consumers' desires?
• Why must producers change their products to meet consumer demands?
• What happens to price if production does not meet demand?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.01

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**Task Number 78**

**Identify basic economic principles.**

**Definition**
Identification should include

• utility
• law of demand
• law of supply
• equilibrium
• scarcity
• surplus
• marginal analysis
• opportunity cost
• efficiency.

**Process/Skill Questions**

• How does the interaction between consumers and producers determine prices of goods and services?
• What is the definition of demand?
• What is the definition of supply?
• How does a marginal analysis guide a producer's decision about how much to produce?
• How is opportunity cost induced by scarcity and by the need to make choices?
• How is efficiency most often assessed?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.01
Task Number 79
Differentiate among economic resources.

Definition
Differentiation should include

- factors of production, intermediate goods, labor (i.e., human resources)
- capital resources (i.e., man-made, such as tools, buildings, and equipment)
- natural resources (i.e., those provided by nature).

Process/Skill Questions

- How are labor resources involved in the production of goods and services?
- How are capital resources incorporated into the goods and services being produced?
- How are natural resources used in the production of goods and services?
- How do natural, capital, and human resources result in the delivery of goods and services?
- How can technologies improve factors of production?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.01

Task Number 80
Identify the consequences of choice.

Definition
Identification should include

- how the costs and benefits of decision making affect the future
- how some choices lead to unintended consequences.

Process/Skill Questions

- How does being uninformed contribute to adverse consequences in the future?
- How does ignorance, error, and immediacy of interest contribute to adverse, unintended consequences?
- What is immediacy of interest, and how does it cause unintended consequences?
Task Number 81
Identify the three main types of economic systems.

Definition
Identification should include

- market
- command
- traditional.

Process/Skill Questions

- What is the primary economic system in the United States?
- What is the difference between centralized and decentralized economic decision making?
- What are the essential roles of government in a market economy?
- How does a government enforce property rights?
- How does a government prevent concentration of economic power?
- Who primarily determines how businesses are operated in a free-enterprise system?
- What is the role of trade in agriculture?

Task Number 82
Identify characteristics of free enterprise.

Definition
Identification should include

- economic freedom
- competition
- equal opportunity
- voluntary (willing) exchange
- property rights
profit motive
binding contracts.

Process/Skill Questions

- What is economic freedom?
- What is voluntary exchange?
- Why is it important for buyers and sellers to be able to engage freely and willingly in the market transaction?
- How does competition affect the economy?
- How does competition benefit consumers and lower prices?

Understanding Agribusiness Structures and Procedures

Task Number 83
Define the role of entrepreneurship in the agricultural industry.

Definition

Definition should include an explanation of

- the terms entrepreneurship and entrepreneur
- different types of services provided by agricultural entrepreneurs.

Process/Skill Questions

- What is the role of an entrepreneur in agribusiness?
- What are some advantages of becoming an entrepreneur?
- What are some examples of local agribusiness entrepreneurs?
- Who is involved in creating an entrepreneurship?
Task Number 84
Describe agricultural business structures.
Definition

Description should include

- cooperative
- corporation
- limited liability company
- partnership
- sole proprietorship
- nonprofits
- associations.

Process/Skill Questions

- What are the differences among the seven different agricultural business structures?
- What is necessary to start up each type of agricultural business?

- How many employees are required for each type of business?

Task Number 85 Optional

Explain the benefits and challenges of owning an agricultural business.

Definition
Explanation should include the
• benefits
  o independence
  o personal satisfaction
  o creativity
  o financial freedom
  o job security
• challenges
  o market-related risk
  o access to finance and credit
  o low bargaining power
  o access to information
  o vulnerability to economic shocks
  o access to training.

Process/Skill Questions

• What would be some of the disadvantages of owning a business?
• Why should one research the market carefully before buying or opening an agricultural business?
• What strengths, weaknesses, opportunities, and threats (SWOT) come with owning one’s own agricultural business?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.04.01

ABS.04.03

Task Number 86 Optional

Develop an organizational chart.

Definition
Development should include

• understanding the function of a job description
• explaining the purpose of an organizational chart, the elements to be included, and how it will be used in the agribusiness.
Process/Skill Questions

- What is an organizational chart? How does it define the structure of a company?
- How is an organizational chart used in an agricultural business?
- What role does an organizational chart play in company decision-making processes?
- When is the appropriate time to adjust the organizational chart?

- Who should be involved in adjusting the organizational chart?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.04

ABS.04.02

Task Number 87 Optional

Interpret a rent/lease agreement.

Definition

Interpretation should include

- components of a rent/lease agreement
- responsibility of facilities maintenance
- lease termination
- payment terms
- types of rent/lease agreements
- legal aspects of the agreement.

Process/Skill Questions

- What are the components of a rent/lease agreement?
- Why is it important to complete a written rent/lease agreement?
- What could be the consequences of breaking a rent/lease agreement?
- Who should write a lease/rent agreement?
- What are potential responsibilities of maintaining facilities?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03
Task Number 88

Identify elements of sales and purchase contracts.

Definition
Identification should include

- negotiation of the sale
- contract agreements
- requirements to meet statute of frauds.

Process/Skill Questions

- What is consideration?
- What characteristics constitute capacity?
- When does the statute of frauds apply?
- What must the contract have to be enforceable if the statute of frauds applies?
- What is surety or guaranty?
- What is an executor?
- What is personal liability?
- What are examples of contracts involving real estate?
- What is the ordinary course of a seller's business?
- What does it mean for a contract to be signed by the party against whom enforcement is sought?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.05.02

Task Number 89

Record the purchase or sale of equipment and supplies.

Definition
Record should include

- inventory of current equipment and supplies
- value of equipment and supplies needed
- review of business records.
Process/Skill Questions

- How does one justify buying a new computer system for an agricultural business?
- Why are warranties and maintenance agreements important when buying equipment and supplies?
- When should equipment be sold or traded?
- How does one determine the value of equipment?
- Why should one keep business records on equipment?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.05.02

Task Number 90

Set profit goals.

Definition
Setting goals should include

- definition of profit goals
- discussion of why profit goals are necessary
- research to set realistic profit goals
- determination of profit goals for an agricultural business
- SWOT analysis.

Process/Skill Questions

- How does one determine the profit goals for a business?
- What percentage profit should one expect a business to make?
- How often should one adjust profit goals?
- What effects do supply and demand have on profit margin?
- What are the perceived challenges to achieving this profit goal?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.03.01
Task Number 91
Identify sources of capital.

Definition
Identification should include

- definition of capital
- cost of capital (e.g., interest rates)
- sources of capital, including private, public, and governmental.

Process/Skill Questions

- What is capital?
- What are some sources of capital?
- What factors determine the source of capital an agricultural business should use?
- What are the differences among private, public, and government sources of capital?
- What purpose do government subsidies serve?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.03.01

Marketing Agricultural Products or Services

Task Number 92
Identify agricultural markets.

Definition

Identification should include

- commodity
- livestock
- direct
- wholesale
- cooperative.
Process/Skill Questions

- What resources are available when researching current commodity prices?
- Where can one find past trends in the commodity markets?
- What is the difference between direct and wholesale marketing?
- How is a cooperative structured?
- How are the commodity and livestock markets similar? How are they different?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.04.01
ABS.05.01

Task Number 93

**Explain the importance of marketing in agriculture.**

**Definition**
Explanation should include

- definition of *marketing*
- discussion of the importance of marketing in an agricultural business.

Process/Skill Questions

- Why is marketing important in an agricultural business?
- How do agricultural marketing principles differ from other industry markets?
- Where is the growing trend in marketing?
- What are different strategies for marketing an agricultural business?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.05.01

Task Number 94

**Identify the components of the marketing process.**

**Definition**
Identification should include
• identifying clients
• branding the product or service
• influencing purchasing behavior.

Process/Skill Questions

• What is meant by *branding*?
• What is *marketing*?
• What is the purpose of marketing?
• What is meant by *influencing the behavior of customers*?
• How are clients identified?
• How can one identify the customer base?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.05.01

ABS.05.03

Task Number 95

**Identify personal traits that are beneficial to an agricultural salesperson or brand ambassador.**

**Definition**

Identification should include, but is not limited to,

• honesty
• integrity
• trustworthiness
• caring about the needs of clients
• rapport with clients
• ability to maintain relationships.
• What character traits should a salesperson have?
• Why is it important that a salesperson have knowledge of the product being marketed?
• How does a salesperson build rapport with clients?
• Why should salespeople be vested in their clients?
• Why would a client return to a business/salesperson?
• What is the role of a brand ambassador?
Task Number 96 Optional
Identify various media outlets for promoting agricultural products and services.

Definition
Identification should include, but is not limited to,

- newspapers
- magazines
- Internet
- television
- radio
- networking
- social media.

Process/Skill Questions

- What are some sources of agricultural marketing information?
- How can the Internet be used to obtain agricultural market information?
- What is demographic research?
- What are some common means of advertising?
- Which methods of promotion are most effective?
- How have promotional methods changed?
Task Number 97

**Explain the economic impact of agriculture and forest industries on Virginia’s economy.**

**Definition**
Explanation should include

- job creation
- share of gross domestic product (GDP)
- major commodities
- the multiplier effect.

**Teacher Resource:** [The Economic Impact of Virginia’s Agriculture and Forest Industries](https://www.vdacs.virginia.gov/pdf/weldoncooper2017.pdf)

**Process/Skill Questions**

- What is the definition of the *multiplier effect*?
- What are Virginia’s top commodity and market items?

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Task Number 98

**Explain Virginia’s role in the local, national, and global markets.**

**Definition**

Explanation should include

- trade agreements
- export facilities
- trade offices
- global policies’ effect on agricultural business
- lobbying.

**Process/Skill Questions**
• What are trade agreements?
• Where are export facilities located in Virginia?
• What global policies affect agricultural businesses?
• What trade agreements affect Virginia agribusiness?
• Who regulates global markets for Virginia’s agricultural exports?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Using Business Laws in Agribusiness

Task Number 99

Identify labor laws relative to agricultural business.

Definition
Identification should include

• Fair Labor Standards Act (e.g., minimum wage law)
• Occupational Safety and Health Administration (OSHA)
• tax exemption for minimum-wage earners
• lower youth minimum wage
• child labor laws and adherence to federal regulations
• overtime pay
• indirect employment
• health care
• employer-employee privacy
• migrant labor laws and regulations.


Process/Skill Questions

• What are some labor laws that apply to agriculture at the production level?
• Why are some agricultural enterprises exempt from minimum wage laws?
• Why are some agricultural enterprises exempt from overtime laws?
• When an agricultural producer contracts with a farm labor contractor, in what ways does that shift responsibilities from the agricultural producer to the contractor?
• What restrictions are there on young people working in agricultural positions?
• When might young people working in agricultural positions be paid less, legally, than adults working in the same position?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Task Number 100
Identify regulatory agencies and acts involved with agriculture.

Definition
Identification should include the responsibilities of the following:

• U.S. Department of Agriculture (https://www.usda.gov/)
  o Animal and Plant Health Inspection Services (https://www.aphis.usda.gov/aphis/home/)
  o Natural Resources Conservation Service (https://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/)
    o U.S. Forest Service (https://www.fs.usda.gov/)
• U.S. Department of Education (https://www.ed.gov/)
• U.S. Department of Health and Human Services (https://www.hhs.gov/)
  o Centers for Disease Control and Prevention (https://www.cdc.gov/)
  o U.S. Food and Drug Administration (https://www.fda.gov/)
• U.S. Department of the Interior (https://www.doi.gov/)
  o Bureau of Land Management (https://www.blm.gov/)
• U.S. Department of Labor (https://www.dol.gov/)
  o Migrant and Seasonal Worker Protection Act (https://www.dol.gov/agencies/whd/agriculture/msp)
  o Occupational Safety and Health Administration (https://www.osha.gov/)
• U.S. Environmental Protection Agency (https://www.epa.gov/)
• U.S. Small Business Administration (https://www.sba.gov/)
• Virginia Department of Agriculture and Consumer Services (https://www.vdacs.virginia.gov/)
• Virginia Department of Conservation and Recreation (https://www.dcr.virginia.gov/)
• Virginia Department of Environmental Quality (https://www.deq.virginia.gov/)
• Virginia Department of Forestry (https://dof.virginia.gov/)
• Department of Labor and Industry (https://www.doli.virginia.gov/)
• Virginia Department of Wildlife Resources (https://dwr.virginia.gov/)

Process/Skill Questions

• What federal agencies regulate agriculture at the production level?
• What are examples of regulations for which each identified federal agency is responsible?
• What state agencies regulate agriculture at the production level?
• What are examples of regulations for which each identified state agency is responsible?
• How do state and federal agencies’ roles and responsibilities differ?
• How often are laws amended at the state level? At the federal level?

Agriculture, Food, and Natural Resources (AFNR) Standards

ABS.01.03

Incorporating Mechanical Skills as Related to the Agricultural Business Systems Pathway

Task Number 101

Demonstrate safety practices in agricultural mechanics adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition

Demonstrating safe practices and procedures must include

• passing written tests with 100 percent accuracy on
  o general lab/workshop safety
  o safety and operating procedures for all tools, equipment, and machinery
  o the major parts of all tools, equipment, and machinery
• passing a performance test with 100 percent accuracy for all tools, equipment, and machinery
• following manufacturer instructions and reviewing safety manuals, when applicable
• following all safety guidelines and procedures when using tools, equipment, and machinery in the agricultural mechanics laboratory or areas related to plant systems
• selecting appropriate personal protective equipment (PPE) for the procedure
• following the safety standards and regulations of the U.S. Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), the Equipment and Engine Training Council (EETC) Education Committee, and adhering to safety data sheets (SDS).

Process/Skill Questions

• Why is it important to have every student achieve 100 percent on the state/local safety test?
• What are some examples of basic housekeeping standards?
• What is the appropriate procedure for selecting and using a fire extinguisher?
• What do the colors in the safety color-coding system indicate relative to the degree of hazard?
• What information should be sent with emergency responders to the hospital with the student if a chemical is splashed in an eye or wound?
• Which state and national safety standards followed in school labs/workshops?
• What are the dangers of running an engine in a confined space without proper ventilation?
• Why is it important to achieve 100 percent accuracy on tests regarding safety and operating procedures before using tools, equipment, and machinery?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01
CS.03.01
CS.03.02
CS.03.03
CS.03.04

Task Number 102
Demonstrate equipment safety and operation adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition
Demonstration should include
• using applicable PPE
• using language, symbols, and procedures related to the operation of equipment
• operating equipment following instructor and manufacturer specifications and guidelines
• identifying and using power tools and equipment
• following all safety procedures according to manufacturer specifications, using industry standards and instructor guidelines.

Process/Skill Questions

• Why are symbols used for the operation of equipment?
• Where can one find the safety rules for using the equipment at school?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01
CS.03.01
CS.03.02
CS.03.03
CS.03.04
PST.01.02
PST.02.01
PST.02.02

Task Number 103
Demonstrate standard measurement techniques used in the agribusiness systems pathway.

Definition
Demonstration may include

• accurately reading a ruler with graduations in standard and metric units
• calculating volume and area
• using conversion factors (e.g., fractions to decimals, pints to quarts, feet to meters)
• using calculations of basic decimals and fractions.
Process/Skill Questions

- What measurement techniques are frequently used in plant science?
- Why is it important to be able to use conversion factors?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01
CS.03.01
CS.03.02
CS.03.03
CS.03.04
PST.01.02
PST.02.01
PST.02.02

Task Number 104
Demonstrate drawing for agricultural mechanics.

Definition
Demonstration may include

- identifying and selecting equipment and supplies for drawing
- drawing views of objects and landscaping plans
- drawing a laboratory project plan
- exploring computer-aided design (CAD) programs.

Process/Skill Questions

- What views of objects can be drawn?
- What are the steps in drawing an object?
- What is the purpose of a project plan?
- What CAD programs are used in the plant systems career pathway?
- What are the advantages of using CAD programs?
Task Number 105 Optional
Demonstrate metalworking operations adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition
Demonstration should include

- identifying and using tools and equipment
- following all safety procedures according to manufacturer specifications
- using industry standards and instructor guidelines
- identifying applicable PPE
- identifying metals by physical properties
- identifying metalworking tools, equipment, and supplies
- identifying the processes involved in changing the physical property of metals
- identifying and selecting tools, equipment, and supplies for tool fitting
- reconditioning an agricultural mechanics tool
- identifying arc and gas welding tools, equipment, and supplies
- using the arc and gas welding equipment, following all safety procedures, using industry standards and instructor guidelines
- explaining the procedures for down-hand welding
- estimating a bill of materials
- constructing an approved metalworking project, using all safety procedures and following industry standards and instructor guidelines
- preparing and applying a finish, following all safety procedures, using industry standards and instructor guidelines.

Process/Skill Questions

- How is metalworking used in agriculture?
- What safety measures must be taken when working with metals?
- What steps are involved in changing the physical property of metals?
- What are the appropriate procedures for each application of tool fitting?
- What are the steps involved in reconditioning an agricultural mechanics tool?
- Why is tool reconditioning important?
- What safety precautions should be taken when arc welding?
• What steps should be followed when arc welding?
• What safety precautions should be taken when gas welding?
• What is the procedure for correctly performing down-hand welding?
• What steps are involved in constructing a metalworking project?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01
CS.03.01
CS.03.02
CS.03.03
CS.03.04
PST.01.02
PST.02.01
PST.02.02
PST.04.02

Task Number 106 Optional

Demonstrate woodworking operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition
Demonstration should include

• identifying all applicable PPE
• identifying and using hand tools, power tools, woodworking tools, and supplies, following all safety procedures according to manufacturer specifications, following industry standards and instructor guidelines
• selecting and using wood fasteners
• estimating a bill of materials
• constructing an agricultural woodworking project, using hand tools and power tools, using all safety procedures and following industry standards and instructor guidelines
• preparing and applying finishes, using all safety procedures, following industry standards and instructor guidelines.

Process/Skill Questions

• What safety precautions apply to the use of hand tools and power tools? Woodworking tools?
• What types of wood fasteners are available?
• What are the steps in estimating a bill of materials?
• What is the purpose of a bill of materials in project planning?
• What are the steps in constructing a woodworking project?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01
CS.03.01
CS.03.02
CS.03.03
CS.03.04
PST.01.02
PST.02.01
PST.02.02
PST.04.02
PST.01.03
Task Number 107 Optional

Demonstrate electrical operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition
Demonstration should include

- identifying all applicable PPE
- explaining the principles, language, and symbols of electricity
- using tools and equipment related to electricity, using all safety procedures and following industry standards and instructor guidelines
- using calculations related to electricity
- constructing an approved electrical project, using all safety procedures and following industry standards and instructor guidelines.

Process/Skill Questions

- What are the tools used in electrical work?
- What electricity projects would relate to the plant industry?
- How are watts, volts, and amperes calculated?
- What is Ohm’s law?
- How does Ohm’s law apply to electricity?
- What is the proper depth to bury underground cable?
- What class of wire or cable should be used for underground use?
- Why is contacting Virginia811.com essential before excavating?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01

CS.03.01

CS.03.02

CS.03.03

CS.03.04
Task Number 108 Optional

Demonstrate small-engine operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition
Demonstration should include

- identifying all applicable PPE
- explaining the principles, language, and theory of small engines
- explaining the safety measures and procedures that should be followed and the PPE that should be used when repairing small engines
- using tools and equipment related to small engines, using all safety procedures and following industry standards and instructor guidelines
- completing an approved small-engine project (e.g., troubleshooting, maintaining, servicing), using all safety procedures and following industry standards and instructor guidelines.

Process/Skill Questions

- What are the symbols used in small-engine work?
- What are the tools used in small-engine work?
- What small-engine projects would relate to the plant systems pathway?
- Why is an annual engine maintenance program important?

Agriculture, Food, and Natural Resources (AFNR) Standards

CRP.01.01
Task Number 109 Optional

Demonstrate plumbing operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.

Definition
Demonstration should include

- explaining the principles, language, and symbols of plumbing
- explaining the safety measures that should be followed when conducting plumbing operations
- using tools and equipment related to plumbing, using all safety procedures and following industry standards and instructor guidelines
- using calculations related to plumbing
- completing an approved plumbing project, using tools and equipment related to plumbing, using all safety procedures and following industry standards and instructor guidelines.

Process/Skill Questions

- What are the tools used in plumbing work?
- What plumbing projects would relate to the plant systems pathway?

**Agriculture, Food, and Natural Resources (AFNR) Standards**

CRP.01.01
CS.03.01
CS.03.02
CS.03.03
CS.03.04
PST.01.02
PST.02.01
PST.02.02
PST.04.03

---

**SOL Correlation by Task**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Identify the role of supervised agricultural experiences (SAEs) in agricultural education. English: 10.1, 10.3, 10.5, 10.8, 11.1, 11.3, 11.5, 11.8</td>
</tr>
<tr>
<td>40</td>
<td>Participate in an SAE. English: 10.1, 10.5, 10.6, 10.7, 10.8, 11.1, 11.5, 11.6, 11.7, 11.8</td>
</tr>
</tbody>
</table>

**Exploring Leadership Opportunities through FFA**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Identify the benefits and responsibilities of FFA membership. English: 10.5, 10.6, 10.7, 10.8, 11.5, 11.6, 11.7, 11.8</td>
</tr>
<tr>
<td>42</td>
<td>Describe leadership characteristics and opportunities as they relate to agriculture and FFA. English: 10.5, 11.5</td>
</tr>
<tr>
<td>43</td>
<td>Apply for an FFA degree and/or an agricultural proficiency award. English: 10.5, 11.5</td>
</tr>
</tbody>
</table>

**Developing Employability Skills**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Create a professional online presence. English: 10.1, 11.1</td>
</tr>
<tr>
<td>45</td>
<td>Compose a cover letter. English: 10.5, 10.6, 10.7, 11.5, 11.6, 11.7</td>
</tr>
<tr>
<td>Task/Competency</td>
<td>SOL Correlations</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>46 Prepare a résumé.</td>
<td>English: 10.6, 10.7, 11.6, 11.7</td>
</tr>
<tr>
<td>47 Design a portfolio.</td>
<td>English: 10.1, 10.6, 10.7, 11.1, 11.6, 11.7</td>
</tr>
<tr>
<td>48 Research a potential employer.</td>
<td>English: 10.5, 10.8, 11.5, 11.8</td>
</tr>
<tr>
<td>49 Submit an electronic cover letter, résumé, and (optionally) portfolio.</td>
<td>English: 10.8, 11.8</td>
</tr>
<tr>
<td>50 Use the SAE Record Book or an alternative method to document the SAE.</td>
<td>English: 10.6, 10.7, 11.6, 11.7</td>
</tr>
<tr>
<td>51 Complete employment application forms.</td>
<td>English: 10.6, 10.7, 11.6, 11.7</td>
</tr>
<tr>
<td>52 Complete a mock employment interview.</td>
<td>English: 10.1, 11.1</td>
</tr>
<tr>
<td>53 Follow-up an interview with a thank-you letter, email, and/or phone call.</td>
<td>English: 10.1, 11.1</td>
</tr>
<tr>
<td>54 Identify the benefits of SAE/Work-Based Learning (WBL).</td>
<td>English: 10.5, 11.5</td>
</tr>
</tbody>
</table>

**Making Consumer Choices**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 Identify rights and responsibilities of consumers.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>56 Identify methods of handling consumer complaints.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>57 Identify consumer-protection agencies.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>58 Identify components of a guarantee, a warranty, and a contract.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>59 Explain information found on product labels.</td>
<td>English: 10.5, 11.5</td>
</tr>
</tbody>
</table>

**Managing Financial Records and Reports**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 Maintain a filing system for financial records.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td></td>
<td>Mathematics: COM.1, COM.7, COM.9</td>
</tr>
<tr>
<td>61 Identify net worth and profit-and-loss (P&amp;L) statements.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>62 Prepare financial reports to communicate the performance of an AFNR business.</td>
<td>English: 10.6, 10.7, 11.6, 11.7</td>
</tr>
<tr>
<td>63 Analyze financial information and reports to monitor business performance and support decision making.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>64 Prepare a personal budget.</td>
<td>English: 10.1, 11.1</td>
</tr>
<tr>
<td>65 Prepare financial reports to describe the performance of an AFNR business.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>66 Identify personal financial management tools and strategies.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>67 Identify insurance as a risk-management strategy</td>
<td>English: 10.3, 10.5, 11.3, 11.5</td>
</tr>
<tr>
<td>68 Complete mock income tax forms.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>Task/Competency</td>
<td>SOL Correlations</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>69 Calculate depreciation.</td>
<td></td>
</tr>
<tr>
<td>70 Calculate net returns.</td>
<td></td>
</tr>
<tr>
<td><strong>Performing Electronic Operations for AFNR</strong></td>
<td></td>
</tr>
<tr>
<td>71 Identify the methods and benefits of precision agriculture.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>72 Create records and correspondence, using word-processing software, spreadsheets, databases, and email.</td>
<td>English: 10.6, 10.7, 11.6, 11.7 Mathematics: COM.1, COM.7, COM.9</td>
</tr>
<tr>
<td>73 Conduct research.</td>
<td>English: 10.8, 11.8</td>
</tr>
<tr>
<td>74 Conduct an oral and visual presentation, using presentation software.</td>
<td>English: 10.1, 10.5, 11.1, 11.5 Mathematics: COM.12</td>
</tr>
<tr>
<td>75 Implement procedures for sharing, backing up, and restoring files.</td>
<td>English: 10.1, 10.2, 10.5, 11.1, 11.2, 11.5 Mathematics: COM.10</td>
</tr>
<tr>
<td><strong>Understanding Basic Economics</strong></td>
<td></td>
</tr>
<tr>
<td>76 Explain the importance of economics.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>77 Identify the components of the economic process.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>78 Identify basic economic principles.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>79 Differentiate among economic resources.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>80 Identify the consequences of choice.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>81 Identify the three main types of economic systems.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>82 Identify characteristics of free enterprise.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td><strong>Understanding Agribusiness Structures and Procedures</strong></td>
<td></td>
</tr>
<tr>
<td>83 Define the role of entrepreneurship in the agricultural industry.</td>
<td>English: 10.3, 10.5, 11.3, 11.5</td>
</tr>
<tr>
<td>84 Describe agricultural business structures.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>85 Explain the benefits and challenges of owning an agricultural business.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>86 Develop an organizational chart.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>87 Interpret a rent/lease agreement.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>88 Identify elements of sales and purchase contracts.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>89 Record the purchase or sale of equipment and supplies.</td>
<td>English: 10.6, 10.7, 11.6, 11.7</td>
</tr>
<tr>
<td>90 Set profit goals.</td>
<td>English: 10.3, 10.5, 10.8, 11.3, 11.5, 11.8</td>
</tr>
<tr>
<td>91 Identify sources of capital.</td>
<td>English: 10.3, 10.5, 11.3, 11.5</td>
</tr>
<tr>
<td><strong>Marketing Agricultural Products or Services</strong></td>
<td></td>
</tr>
<tr>
<td>92 Identify agricultural markets.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>Task/Competency</td>
<td>SOL Correlations</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>93 Explain the importance of marketing in agriculture.</td>
<td>English: 10.3, 10.5, 11.3, 11.5</td>
</tr>
<tr>
<td>94 Identify the components of the marketing process.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>95 Identify personal traits that are beneficial to an agricultural salesperson or brand ambassador.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>96 Identify various media outlets for promoting agricultural products and services.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>97 Explain the economic impact of agriculture and forest industries on Virginia’s economy.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>98 Explain Virginia’s role in the local, national, and global markets.</td>
<td>English: 10.5, 11.5</td>
</tr>
</tbody>
</table>

**Using Business Laws in Agribusiness**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>99 Identify labor laws relative to agricultural business.</td>
<td>English: 10.5, 10.8, 11.5, 11.8</td>
</tr>
<tr>
<td>100 Identify regulatory agencies and acts involved with agriculture.</td>
<td>English: 10.5, 10.8, 11.5, 11.8</td>
</tr>
</tbody>
</table>

**Incorporating Mechanical Skills as Related to the Agricultural Business Systems Pathway**

<table>
<thead>
<tr>
<th>Task/Competency</th>
<th>SOL Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 Demonstrate safety practices in agricultural mechanics adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
<td>English: 10.5, 10.6, 10.7, 10.8, 11.5, 11.6, 11.7, 11.8 Science: CH.1</td>
</tr>
<tr>
<td>102 Demonstrate equipment safety and operation adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
<td></td>
</tr>
<tr>
<td>103 Demonstrate standard measurement techniques used in the agribusiness systems pathway.</td>
<td>Science: CH.1</td>
</tr>
<tr>
<td>104 Demonstrate drawing for agricultural mechanics.</td>
<td></td>
</tr>
<tr>
<td>105 Demonstrate metalworking operations adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>106 Demonstrate woodworking operations as they relate to the agribusiness systems pathway adhering to all safety</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>Task/Competency</td>
<td>SOL Correlations</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>requirements, industry recommended practices, and instructor guidelines.</td>
<td></td>
</tr>
<tr>
<td>107 Demonstrate electrical operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>108 Demonstrate small-engine operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
<td>English: 10.5, 11.5</td>
</tr>
<tr>
<td>109 Demonstrate plumbing operations as they relate to the agribusiness systems pathway adhering to all safety requirements, industry recommended practices, and instructor guidelines.</td>
<td>English: 10.5, 11.5</td>
</tr>
</tbody>
</table>
Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

<table>
<thead>
<tr>
<th>Credentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Work Readiness Assessment (CWRA+)</td>
</tr>
<tr>
<td>Customer Service Specialist (CSS) Examination</td>
</tr>
<tr>
<td>Microsoft 365 Fundamentals Examination</td>
</tr>
<tr>
<td>Microsoft Certified Azure Fundamentals Examination</td>
</tr>
<tr>
<td>National Career Readiness Certificate Assessment</td>
</tr>
<tr>
<td>Professional Communications Certification Examination</td>
</tr>
<tr>
<td>Workplace Readiness Skills for the Commonwealth Examination</td>
</tr>
</tbody>
</table>

Concentration sequences: A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.

<table>
<thead>
<tr>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Business Management III (8026/36 weeks)</td>
</tr>
<tr>
<td>Agricultural Fabrication and Emerging Technologies (8019/36 weeks)</td>
</tr>
<tr>
<td>Agricultural Power Systems (8018/36 weeks)</td>
</tr>
<tr>
<td>Agricultural Power Systems, Advanced (8020/36 weeks)</td>
</tr>
<tr>
<td>Agricultural Production Technology (8010/36 weeks)</td>
</tr>
<tr>
<td>Agricultural Structural Systems (8017/36 weeks)</td>
</tr>
<tr>
<td>Community Forestry and Tree Management (8048/36 weeks)</td>
</tr>
<tr>
<td>Ecology and Environmental Management (8046/36 weeks)</td>
</tr>
<tr>
<td>Equine Science, Advanced (8094/36 weeks)</td>
</tr>
<tr>
<td>Fisheries and Wildlife Management (8041/36 weeks)</td>
</tr>
<tr>
<td>Floral Design II (8056/36 weeks)</td>
</tr>
<tr>
<td>Floriculture (8038/36 weeks)</td>
</tr>
<tr>
<td>Forestry Management, Advanced (8044/36 weeks)</td>
</tr>
<tr>
<td>Foundations of Agriculture, Food, and Natural Resources (8006/36 weeks)</td>
</tr>
<tr>
<td>Greenhouse Plant Production and Management (8035/36 weeks)</td>
</tr>
<tr>
<td>Horticulture Sciences (8034/36 weeks)</td>
</tr>
<tr>
<td>Landscaping II (8039/36 weeks)</td>
</tr>
<tr>
<td>Livestock Production Management (8012/36 weeks)</td>
</tr>
<tr>
<td>Operating the Farm Business (8014/36 weeks)</td>
</tr>
<tr>
<td>Outdoor Recreation, Parks, and Tourism Systems Management (8043/36 weeks)</td>
</tr>
</tbody>
</table>
- Small Animal Care I (8083/36 weeks)
- Small Animal Care II (8084/36 weeks)
- Small Engine Repair (8082/36 weeks)
- Turfgrass Management, Advanced (8054/36 weeks)
- Veterinary Science II (8089/36 weeks, 140 hours)

**Career Cluster: Agriculture, Food and Natural Resources**

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agribusiness Systems</strong></td>
<td>Agricultural Commodity Broker</td>
</tr>
<tr>
<td></td>
<td>Agricultural Economist</td>
</tr>
<tr>
<td></td>
<td>Agricultural Loan Officer</td>
</tr>
<tr>
<td></td>
<td>Agricultural Products Sales Representative</td>
</tr>
<tr>
<td></td>
<td>Farm Products Purchasing Agent and Buyer</td>
</tr>
<tr>
<td></td>
<td>Farm, Ranch Manager</td>
</tr>
<tr>
<td></td>
<td>Farmer/Rancher</td>
</tr>
<tr>
<td></td>
<td>Feed, Farm Supply Store Sales Manager</td>
</tr>
<tr>
<td></td>
<td>Sales Manager</td>
</tr>
<tr>
<td><strong>Animal Systems</strong></td>
<td>Agricultural Products Sales Representative</td>
</tr>
<tr>
<td></td>
<td>Aquacultural Manager</td>
</tr>
<tr>
<td></td>
<td>Poultry Manager</td>
</tr>
<tr>
<td><strong>Environmental Service Systems</strong></td>
<td>Agricultural Products Sales Representative</td>
</tr>
<tr>
<td></td>
<td>Secondary School Teacher</td>
</tr>
<tr>
<td><strong>Natural Resources Systems</strong></td>
<td>Fish and Game Officer</td>
</tr>
<tr>
<td></td>
<td>Forest Manager, Forester</td>
</tr>
<tr>
<td></td>
<td>Park Manager</td>
</tr>
<tr>
<td><strong>Plant Systems</strong></td>
<td>Agricultural Products Sales Representative</td>
</tr>
<tr>
<td></td>
<td>Certified Crop Advisor</td>
</tr>
<tr>
<td></td>
<td>Crop Grower</td>
</tr>
<tr>
<td></td>
<td>Custom Harvester</td>
</tr>
<tr>
<td></td>
<td>Farm, Ranch Manager</td>
</tr>
<tr>
<td></td>
<td>Farmer/Rancher</td>
</tr>
<tr>
<td></td>
<td>Floral Designer</td>
</tr>
<tr>
<td></td>
<td>Floral Shop Manager</td>
</tr>
<tr>
<td></td>
<td>Golf Course Superintendent</td>
</tr>
<tr>
<td></td>
<td>Nursery and Greenhouse Manager</td>
</tr>
<tr>
<td></td>
<td>Secondary School Teacher</td>
</tr>
<tr>
<td></td>
<td>Turf Farmer</td>
</tr>
<tr>
<td><strong>Power, Structural, and Technical Systems</strong></td>
<td>Agricultural Equipment Parts Manager</td>
</tr>
<tr>
<td></td>
<td>Agricultural Equipment Parts Salesperson</td>
</tr>
<tr>
<td>Pathway</td>
<td>Occupations</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Accounting</strong></td>
<td>Accountant&lt;br&gt;Accounting Clerk&lt;br&gt;Controller&lt;br&gt;Cost Analyst&lt;br&gt;Management Accountant&lt;br&gt;Merger and Acquisitions Manager&lt;br&gt;Personal Financial Advisor&lt;br&gt;Revenue Agent&lt;br&gt;Tax Accountant</td>
</tr>
<tr>
<td><strong>Banking Services</strong></td>
<td>Account Executive&lt;br&gt;Accountant&lt;br&gt;Bill and Account Collector&lt;br&gt;Branch Manager&lt;br&gt;Compliance Officer&lt;br&gt;Credit Analyst&lt;br&gt;Debt Counselor&lt;br&gt;Financial Manager&lt;br&gt;Loan Officer&lt;br&gt;Personal Financial Advisor</td>
</tr>
<tr>
<td><strong>Business Finance</strong></td>
<td>Accountant&lt;br&gt;Accounting Clerk&lt;br&gt;Auditor&lt;br&gt;Bill and Account Collector&lt;br&gt;Cash Manager&lt;br&gt;Controller&lt;br&gt;Cost Analyst&lt;br&gt;Economist&lt;br&gt;Financial Analyst&lt;br&gt;Management Accountant&lt;br&gt;Project Manager&lt;br&gt;Revenue Agent&lt;br&gt;Shipping and Receiving Clerk&lt;br&gt;Tax Accountant&lt;br&gt;Tax Preparer</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td>Customer Service Representative&lt;br&gt;Insurance Appraiser&lt;br&gt;Insurance Processing Clerk&lt;br&gt;Insurance Sales Agent&lt;br&gt;Risk and Insurance Manager&lt;br&gt;Underwriter</td>
</tr>
<tr>
<td><strong>Securities and Investments</strong></td>
<td>Financial Analyst&lt;br&gt;Fund Manager</td>
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</table>
### Career Cluster: Finance

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Meeting and Convention Planner</td>
</tr>
<tr>
<td></td>
<td>Securities and Commodities Sales Agent</td>
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<td>Tax Preparer</td>
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### Career Cluster: Marketing

<table>
<thead>
<tr>
<th>Pathway</th>
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<tr>
<td><strong>Marketing Communications</strong></td>
<td>Advertising Account Executive</td>
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<tr>
<td></td>
<td>Advertising and Promotions Manager</td>
</tr>
<tr>
<td></td>
<td>International Merchandising Manager</td>
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<tr>
<td></td>
<td>Marketing Communication Manager</td>
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<tr>
<td></td>
<td>Marketing Manager</td>
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<tr>
<td></td>
<td>Public Information Director</td>
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<tr>
<td></td>
<td>Public Relations Manager</td>
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<td></td>
<td>Public Relations Specialist</td>
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<tr>
<td></td>
<td>Sales Manager</td>
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<tr>
<td><strong>Marketing Management</strong></td>
<td>Advertising and Promotions Manager</td>
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<tr>
<td></td>
<td>Brand Manager</td>
</tr>
<tr>
<td></td>
<td>Chief Executive Officer</td>
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<td></td>
<td>Entrepreneur</td>
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<tr>
<td></td>
<td>Franchisee</td>
</tr>
<tr>
<td></td>
<td>General Manager</td>
</tr>
<tr>
<td></td>
<td>Marketing Communication Manager</td>
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<tr>
<td></td>
<td>Marketing Manager</td>
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<tr>
<td></td>
<td>Public Information Director</td>
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<td></td>
<td>Public Relations Manager</td>
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<td></td>
<td>Retail Manager</td>
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<tr>
<td></td>
<td>Shipping and Receiving Clerk</td>
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<td><strong>Marketing Research</strong></td>
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<td></td>
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<td>Product Planner</td>
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<td>Investment Banker</td>
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<td></td>
<td>Manufacturer's Sales Representative</td>
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<tr>
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<td></td>
<td>Salesperson</td>
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<td>Pathway</td>
<td>Occupations</td>
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<td>-------------------------------------------------------------------</td>
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<tr>
<td>Wholesale and Manufacturing, Technical and Scientific Products</td>
<td>Sales Representative</td>
</tr>
</tbody>
</table>