Grade: **9-12**

**Course:** Agricultural Business and Management

50. **Standard:** Develops math, reading and writing skills as they relate to the agribusiness industry.

51. **Standard:** Explores the scope of and careers in the agribusiness industry.

52. **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

54. **Standard:** Develops record-keeping skills.

55. **Standard:** Develops computer skills in agribusiness management.

56. **Standard:** Develops skills needed for employment in agribusiness management.

57. **Standard:** Develops skills in agribusiness management.

58. **Standard:** Develops basic knowledge in organizing an agricultural business.

59. **Standard:** Conducts and interprets a feasibility study for starting an agribusiness in a selected area of agriculture.

60. **Standard:** Identifies the problems and scope of management in agribusiness.

61. **Standard:** Keeps and uses financial records to analyze and solve management problems.

62. **Standard:** Develops and analyzes short- and long-range management plans for agribusiness's.

63. **Standard:** Explores ways to make the most efficient use of capital resources.

64. **Standard:** Manages and protects financial resources.

65. **Standard:** Develops math, reading and writing skills as they relate to the agribusiness sales and service industry.

67. **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

70. **Standard:** Develops record-keeping skills.

71. **Standard:** Develops computer skills in agribusiness sales and service.

72. **Standard:** Develops skills needed for employment in the sales and service industry of agriculture.

73. **Standard:** Develops management skills in agribusiness sales and service.

74. **Standard:** Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.

75. **Standard:** Identifies the availability of agricultural jobs and the pay, working conditions and worker benefits of each.

77. **Standard:** Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.

78. **Standard:** Completes sales tickets, writes checks and fills out shipping forms and other forms.

79. **Standard:** Competitively prices agricultural products and services.
Course: Agricultural Leadership and Development

38  **Standard**: Explores the scope of and careers in the agribusiness industry.

39  **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

51  **Standard**: Explores the scope of and careers in the agribusiness industry.

52  **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

63  **Standard**: Explores ways to make the most efficient use of capital resources.

66  **Standard**: Explores the scope of and careers in the agribusiness sales and service industry.

67  **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

68  **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

74  **Standard**: Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.

75  **Standard**: Identifies the availability of agricultural jobs and the pay, working conditions and worker benefits of each.

82  **Standard**: Explores the scope of and careers in the animal science and biotechnology industry.

83  **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

84  **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

101 **Standard**: Describes the underlying scientific principles of animal growth and development.

108 **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

109 **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

130 **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

131 **Standard**: Explores the scope of and career opportunities in the food science and safety industry.

133 **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

149 **Standard**: Explores the scope of and careers in the environmental science industry.

150 **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

151 **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

168 **Standard**: Identifies and lists uses and characteristics of natural resources.

176 **Standard**: Explores the scope of and careers in the agricultural mechanization industry.

177 **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

178 **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

191 **Standard**: Explores the scope of and careers in the small engine industry.

192 **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

193 **Standard**: Demonstrates skills in developing a supervised agricultural experience program.

208 **Standard**: Explores the scope of and careers in the metal fabrication industry.
209 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

210 Standard: Demonstrates skills in developing a supervised agricultural experience program.

228 Standard: Explores the scope of and careers in the concrete construction industry.

229 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

230 Standard: Demonstrates skills in developing a supervised agricultural experience program.

244 Standard: Explores the scope of and careers in the agricultural building construction industry.

245 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

246 Standard: Demonstrates skills in developing a supervised agricultural experience program.

264 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

265 Standard: Demonstrates skills in developing a supervised agricultural experience program.

279 Standard: Explores the scope of and careers in the agricultural electrification industry.

280 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

281 Standard: Demonstrates skills in developing a supervised agricultural experience program.

302 Standard: Explores the scope of and careers in the agricultural machinery, equipment and tractor industry.

303 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

304 Standard: Demonstrates skills in developing a supervised agricultural experience program.

314 Standard: Explores the scope of and careers in the soil and water conservation industry.

315 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

316 Standard: Demonstrates skills in developing a supervised agricultural experience program.

344 Standard: Explores the scope of and careers in the plant production industry.

345 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

346 Standard: Demonstrates skills in developing a supervised agricultural experience program.

366 Standard: Explores the scope of and careers in the agricultural products and processing industry.

367 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

368 Standard: Demonstrates skills in developing a supervised agricultural experience program.

381 Standard: Explores the scope of and careers in the forest production and management industry.

382 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

383 Standard: Demonstrates skills in developing a supervised agricultural experience program.

413 Standard: Explores the scope of and careers in the natural resource industry.

414 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

415 Standard: Demonstrates skills in developing a supervised agricultural experience program.

431 Standard: Explores the scope of and careers in the floriculture industry.
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<td>469</td>
<td><strong>Standard</strong>: Explores the scope of and careers in the nursery production and management industry.</td>
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<td>487</td>
<td><strong>Standard</strong>: Explores the scope of and careers in the landscape design and management industry.</td>
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</table>

**Course: Agricultural Mechanics Technology I**

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<td><strong>Standard</strong>: Explores the scope of and careers in the agribusiness sales and service industry.</td>
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<td>162</td>
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<tr>
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<td><strong>Standard</strong>: Develops math, reading and writing skills as they relate to the small engine industry.</td>
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<td><strong>Standard</strong>: Identifies small engine types and parts.</td>
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<tr>
<td>212</td>
<td><strong>Standard</strong>: Develops computer skills relevant to the metal fabrication industry.</td>
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</table>
Standard: Develops skills needed for employment in the metal fabrication industry.

Standard: Develops management skills relevant to the metal fabrication industry.

Standard: Uses measuring instruments in metal fabrication.

Standard: Sets up welding and cutting equipment.

Standard: Identifies the properties of metals.

Standard: Performs welding and cutting operations in a safe and efficient manner.

Standard: Operates metal fabrication tools.

Standard: Performs soldering operations.

Standard: Operates the hydraulic iron worker safely and efficiently.

Standard: Operates the drill press safely and efficiently.

Standard: Operates grinders safely and efficiently.

Standard: Operates power metal saws safely and efficiently.

Standard: Develops math, reading and writing skills as they relate to the concrete construction industry.

Standard: Explores the scope of and careers in the concrete construction industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to concrete work.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the concrete construction industry.

Standard: Develops skills needed for employment in the concrete construction industry.

Standard: Estimates concrete construction and material costs.

Standard: Prepares a concrete construction job.

Standard: Constructs concrete forms and reinforcement.

Standard: Mixes and pours concrete.

Standard: Finishes poured concrete surfaces.

Standard: Develops math, reading and writing skills as they relate to the agricultural building construction industry.

Standard: Explores the scope of and careers in the agricultural building construction industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to building construction.

Standard: Describes safety rules and first-aid procedures.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the agricultural building construction industry.

Standard: Develops skills needed for employment in the agricultural construction industry.

Standard: Uses wood working and other construction tools safely and efficiently.

Standard: Develops management skills relevant to the agricultural building construction industry.

Standard: Maintains and stores wood-working and other construction tools.
Standard: Develops math, reading and writing skills as they relate to irrigation and plumbing.

Standard: Explores the scope of and careers in the irrigation and plumbing industry.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to irrigation and plumbing.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the irrigation and plumbing industry.

Standard: Develops skills needed for employment in the irrigation and plumbing industry.

Standard: Selects irrigation and plumbing materials and tools.

Standard: Estimates irrigation and plumbing materials cost.

Standard: Lays out irrigation and plumbing jobs.

Standard: Cuts and joins pipe.

Standard: Installs irrigation and plumbing systems.

Standard: Maintains and repairs irrigation and plumbing.

Standard: Develops math, reading and writing skills as they relate to the agricultural electrification industry.

Standard: Explores the scope of and careers in the agricultural electrification industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to electrification.

Standard: Develops computer skills relevant to the agricultural electrification industry.

Standard: Develops skills needed for employment in the agricultural electrification industry.

Standard: Develops management skills relevant to the agricultural electrification industry.

Standard: Identifies the principles and applications of electrical power.

Standard: Designs electrical systems using the national electric code.

Standard: Estimates electrical materials, equipment and costs.

Standard: Installs lighting fixtures.

Standard: Installs switch boxes and outlet boxes.

Standard: Roughs in feeder and branch circuit cables.

Standard: Installs and services electrical controls and devices.

Standard: Installs and operates electric motors and controls.

Standard: Develops math, reading and writing skills as they relate to the agricultural machinery, equipment and tractor industry.

Standard: Explores the scope of and careers in the agricultural machinery, equipment and tractor industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to agricultural machinery and equipment.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the agricultural machinery, equipment and tractor industry.

Standard: Develops management skills relevant to the agricultural machinery, equipment and tractor industry.
### Course: Agricultural Mechanics Technology II

- **Standard**: Performs tractor maintenance.
- **Standard**: Explores the scope of and careers in the plant production industry.
- **Standard**: Explores the scope of and careers in the agricultural products and processing industry.
- **Standard**: Explores the scope of and careers in the natural resource industry.
- **Standard**: Explores the scope of and careers in the floriculture industry.
- **Standard**: Explores the scope of and careers in the floral design and management industry.
- **Standard**: Explores the scope of and careers in the nursery production and management industry.

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<td><strong>Standard</strong>: Explains the principles of internal combustion engines.</td>
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<td>201</td>
<td><strong>Standard</strong>: Performs seasonal/routine service for small engines.</td>
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<td>202</td>
<td><strong>Standard</strong>: Maintains the small engine fuel system.</td>
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<td>203</td>
<td><strong>Standard</strong>: Maintains charging and starting systems.</td>
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<tr>
<td>204</td>
<td><strong>Standard</strong>: Maintains the ignition system.</td>
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<td>205</td>
<td><strong>Standard</strong>: Overhauls the small engine.</td>
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<tr>
<td>206</td>
<td><strong>Standard</strong>: Maintains cutting devices.</td>
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<td><strong>Standard</strong>: Develops math, reading and writing skills as they relate to the metal fabrication industry.</td>
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<td>220</td>
<td><strong>Standard</strong>: Operates metal fabrication tools.</td>
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<tr>
<td>221</td>
<td><strong>Standard</strong>: Performs soldering operations.</td>
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<td>222</td>
<td><strong>Standard</strong>: Performs metal threading operations.</td>
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<td>223</td>
<td><strong>Standard</strong>: Operates the hydraulic iron worker safely and efficiently.</td>
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Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to concrete work.

Standard: Develops record-keeping skills.

Standard: Develops skills needed for employment in the concrete construction industry.

Standard: Develops management skills relevant to the concrete construction industry.

Standard: Estimates concrete construction and material costs.

Standard: Identifies the physical and chemical properties of concrete.

Standard: Prepares a concrete construction job.

Standard: Constructs concrete forms and reinforcement.

Standard: Mixes and pours concrete.

Standard: Finishes poured concrete surfaces.

Standard: Maintains concrete hand tools and power equipment.

Standard: Develops math, reading and writing skills as they relate to the agricultural building construction industry.

Standard: Demonstrates safety practices related to building construction.

Standard: Describes safety rules and first-aid procedures.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the agricultural building construction industry.

Standard: Uses wood working and other construction tools safely and efficiently.

Standard: Develops management skills relevant to the agricultural building construction industry.

Standard: Identifies the principles of building design and construction.

Standard: Prepares a building site.

Standard: Maintains and stores wood-working and other construction tools.

Standard: Installs rough framing.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates safety practices related to irrigation and plumbing.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the irrigation and plumbing industry.

Standard: Develops skills needed for employment in the irrigation and plumbing industry.

Standard: Develops management skills relevant to the irrigation and plumbing industry.

Standard: Designs irrigation and plumbing systems for agricultural applications.

Standard: Selects irrigation and plumbing materials and tools.

Standard: Estimates irrigation and plumbing materials cost.

Standard: Lays out irrigation and plumbing jobs.

Standard: Cuts and joins pipe.

Standard: Installs irrigation and plumbing systems.
Standard: Maintains and repairs irrigation and plumbing.

Standard: Develops math, reading and writing skills as they relate to the agricultural electrification industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates safety practices related to electrification.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the agricultural electrification industry.

Standard: Develops skills needed for employment in the agricultural electrification industry.

Standard: Develops management skills relevant to the agricultural electrification industry.

Standard: Identifies the principles and applications of electrical power.

Standard: Designs electrical systems using the national electric code.

Standard: Estimates electrical materials, equipment and costs.

Standard: Computes electrical service loads.

Standard: Calculates electrical measurements.

Standard: Installs lighting fixtures.

Standard: Installs electrical service entrance.

Standard: Installs switch boxes and outlet boxes.

Standard: Roughs in feeder and branch circuit cables.

Standard: Develops math, reading and writing skills as they relate to the agricultural machinery, equipment and tractor industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates safety practices related to agricultural machinery and equipment.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the agricultural machinery, equipment and tractor industry.

Standard: Develops skills needed for employment in the agricultural machinery, equipment and tractor industry.

Standard: Develops management skills relevant to the agricultural machinery, equipment and tractor industry.

Standard: Identifies types of and operates farm tractors and machinery.

Standard: Performs tractor maintenance.

Standard: Develops math, reading and writing skills as they relate to the soil and water conservation industry.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Demonstrates safety practices related to soil and water conservation.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the soil and water conservation industry.

Standard: Develops skills needed for employment in the soil and water conservation industry.

Standard: Develops management skills relevant in the soil and water conservation industry.

Standard: Surveys a land plot for soil and water conservation practices.

Standard: Implements soil and water conservation practices.

Standard: Implements drainage and irrigation practices.
Course: Agricultural Mechanics Technology III

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<td>Overhauls the small engine.</td>
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<td>Maintains cutting devices.</td>
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<td>211</td>
<td>Demonstrates safety practices related to metal working.</td>
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<td>Demonstrates safety practices related to building construction.</td>
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<td>Describes safety rules and first-aid procedures.</td>
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<td>Develops computer skills relevant to the agricultural building construction industry.</td>
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<td>252</td>
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<td>254</td>
<td>Identifies the principles of building design and construction.</td>
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<td>255</td>
<td>Selects a building site.</td>
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<td>256</td>
<td>Estimates building construction materials and costs.</td>
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<tr>
<td>257</td>
<td>Prepares a building site.</td>
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<tr>
<td>258</td>
<td>Maintains and stores wood-working and other construction tools.</td>
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<tr>
<td>259</td>
<td>Installs rough framing.</td>
</tr>
<tr>
<td>260</td>
<td>Installs building roof components.</td>
</tr>
<tr>
<td>261</td>
<td>Installs building exterior finishes.</td>
</tr>
<tr>
<td>278</td>
<td>Develops math, reading and writing skills as they relate to the agricultural electrification industry.</td>
</tr>
</tbody>
</table>
280  **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

283  **Standard:** Develops record-keeping skills.

284  **Standard:** Develops computer skills relevant to the agricultural electrification industry.

285  **Standard:** Develops skills needed for employment in the agricultural electrification industry.

287  **Standard:** Identifies the principles and applications of electrical power.

297  **Standard:** Installs and services electrical controls and devices.

298  **Standard:** Sizes and selects electric motors and controls.

299  **Standard:** Installs and operates electric motors and controls.

300  **Standard:** Tests, troubleshoots and maintains electrical motors and controls.

301  **Standard:** Develops math, reading and writing skills as they relate to the agricultural machinery, equipment and tractor industry.

305  **Standard:** Demonstrates safety practices related to agricultural machinery and equipment.

306  **Standard:** Develops record-keeping skills.

307  **Standard:** Develops computer skills relevant to the agricultural machinery, equipment and tractor industry.

308  **Standard:** Develops skills needed for employment in the agricultural machinery, equipment and tractor industry.

310  **Standard:** Services mechanical components of sprayers.

311  **Standard:** Identifies types of and operates farm tractors and machinery.

---

**Course:** Agriculture Animal Production and Management

325  **Standard:** Develops math, reading and writing skills as they relate to the animal production industry.

327  **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

328  **Standard:** Demonstrates skills in developing a supervised agricultural experience program.

332  **Standard:** Develops employability skills.

333  **Standard:** Develops management skills relevant to the animal production industry.

334  **Standard:** Determines the impact of government rules and regulations on the animal production industry.

335  **Standard:** Develops skills and abilities in selected practices of beef production.

336  **Standard:** Develops skills and abilities in selected practices of dairy production.

337  **Standard:** Develops skills and abilities in selected practices of equine production.

338  **Standard:** Develops skills and abilities in selected practices of swine production.

339  **Standard:** Develops skills and abilities in selected practices of sheep production.

340  **Standard:** Develops skills and abilities in selected practices of poultry production.

341  **Standard:** Develops skills in showing, fitting and selecting livestock.

342  **Standard:** Develops skills and abilities in selected practices of specialty animal production.

---

**Course:** Agriculture Crop Production and Management

343  **Standard:** Develops math, reading and writing skills as they relate to the plant production industry.

344  **Standard:** Explores the scope of and careers in the plant production industry.
345 **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

346 **Standard:** Demonstrates skills in developing a supervised agricultural experience program.

347 **Standard:** Demonstrates safety practices related to plant production and management.

348 **Standard:** Develops record-keeping skills.

349 **Standard:** Develops computer skills relevant to the plant production industry.

351 **Standard:** Develops management skills relevant to the plant production industry.

352 **Standard:** Identifies and describes the process of plant growth.

353 **Standard:** Determines the impact of government rules and regulations on plant production enterprises.

354 **Standard:** Determines the impact and process of crop improvement.

355 **Standard:** Develops skills and abilities in selected practices of pasture production.

356 **Standard:** Develops skills and abilities in selected practices of grain crop production.

357 **Standard:** Develops skills and abilities in selected practices of sugar crop production.

358 **Standard:** Develops skill and abilities in selected practices in forage crop production.

360 **Standard:** Develops skills and abilities in selected practices of oil crop production.

361 **Standard:** Develops skills and abilities in selected practices of fruit, nut and berry production.

362 **Standard:** Develops skills and abilities in selected practices of fiber crop production.

363 **Standard:** Develops skills and abilities in selected practices of specialty crop production.

364 **Standard:** Identifies and describes the process, principles and use of integrated pest management.

---

**Course:** Basic Agricultural Science and Technology

30 **Standard:** Develops skills in selected practices that relate to the environmental horticulture industry.

37 **Standard:** Develops math, reading and writing skills as they relate to the agribusiness industry.

41 **Standard:** Develops record-keeping skills.

42 **Standard:** Develops computer skills in agribusiness.

43 **Standard:** Develops skills needed for employment in the agribusiness industry.

50 **Standard:** Develops math, reading and writing skills as they relate to the agribusiness industry.

59 **Standard:** Conducts and interprets a feasibility study for starting an agribusiness in a selected area of agriculture.

64 **Standard:** Manages and protects financial resources.

81 **Standard:** Develops math, reading and writing skills as they relate to animal science.

83 **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

85 **Standard:** Demonstrates safety practices related to animal science and biotechnology.

86 **Standard:** Develops record-keeping skills.

88 **Standard:** Describes the scientific foundations of animal agriculture and biotechnology.

89 **Standard:** Explains the scientific foundations of large animal production and management.

90 **Standard:** Explains the scientific foundations of poultry science.

91 **Standard:** Explains the scientific foundations of dairy production processing and management.

92 **Standard:** Explains the scientific foundations of aquaculture production and management.
93  **Standard**: Explains the scientific foundations of alternative agriculture animal production and management.

94  **Standard**: Classifies agricultural animals.

95  **Standard**: Identifies consumer and environmental concerns in animal production and management.

96  **Standard**: Identifies and explains the issues of animal welfare.

97  **Standard**: Uses animal behavior to facilitate the safe, efficient and humane management and movement of animals.

98  **Standard**: Explains and applies the principles of animal genetics and bioengineering.

99  **Standard**: Selects agricultural animals on the basis of scientific and research data.

100  **Standard**: Describes and applies the underlying principles of animal reproduction to the management and production of agricultural animals.

101  **Standard**: Describes the underlying scientific principles of animal growth and development.

102  **Standard**: Applies the principles of animal nutrition to the production and management of animals.

103  **Standard**: Explains the application of the principles of meat science to the safe, efficient and economical delivery of meat products to the consumer.

104  **Standard**: Identifies and describes parasites that attack agricultural animals.

105  **Standard**: Identifies and characterizes diseases that attack agricultural animals.

106  **Standard**: Develops math, reading and writing skills as they relate to plant science and biotechnology.

107  **Standard**: Explores the scope of and careers in the plant science and biotechnology industry.

108  **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

109  **Standard**: Develops record-keeping skills.

110  **Standard**: Develops computer skills relevant to plant science and biotechnology.

111  **Standard**: Defines plant science and biotechnology skills needed in the industry.

112  **Standard**: Classifies plants according to the scientific classification system.

113  **Standard**: Describes the form and function of plant vegetative structures.

114  **Standard**: Identifies and describes the processes of plant cells.

115  **Standard**: Explains how plants use nutrients.

116  **Standard**: Characterizes the components of soils and how they relate to plant health and artificial growing media.

117  **Standard**: Identifies the processes of plant reproduction.

118  **Standard**: Identifies plant genetic structures and their functions.

119  **Standard**: Describes environmental factors that affect plant growth and their manipulation in the production of plants.

120  **Standard**: Explains the importance of plants to life, the economy and the environment.

121  **Standard**: Describes the economic and environmental impact of weeds.

122  **Standard**: Describes the economic impact of insects on the plant industry.

123  **Standard**: Identifies and characterizes pathological disorders of plants.

124  **Standard**: Diagrams and explains the use and functions of water in plants.

125  **Standard**: Identifies and describes components of commercial plant growth systems used in the plant industry.

126  **Standard**: Explains how plants affect the environment.

127  **Standard**: Develops math, reading and writing skills as they relate to food, science and safety.

128  **Standard**: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.
Standard: Explores the scope of and career opportunities in the food science and safety industry.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Illustrates how the food industry utilizes biotechnology in the safe, efficient and economical production of food products.

Standard: Develops math, reading and writing skills as they relate to environmental science.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Develops record-keeping skills.

Standard: Describes the relationships among humans, agriculture and the environment.

Standard: Explains how agriculture affects ecosystems.

Standard: Identifies the types and proper management of agricultural waste products.

Standard: Describes the use of agricultural chemicals and their effects on the environment.

Standard: Lists and describes management practices used in agriculture to protect air quality.

Standard: Develops math, reading and writing skills as they relate to forestry and natural resources.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Develops record-keeping skills.

Standard: Identifies and lists uses and characteristics of natural resources.

Standard: Describes the origin and composition of soils.

Standard: Prescribes measures that will reduce the chance of soil depletion and foster soil stewardship.

Standard: Develops math, reading and writing skills as they relate to physical science applications in the agricultural mechanization industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Develops record-keeping skills.

Standard: Illustrates the use, measurement and control of power systems in agriculture.

Standard: Compares and contrasts alternative energy sources for agricultural purposes.

Standard: Defines electrical power and describes its uses in agriculture.

Standard: Illustrates the use of agricultural power and machinery controls to manipulate the environment for plant and animal production.

Standard: Describes the principles and practices of internal combustion engines in agriculture.

Standard: Develops math, reading and writing skills as they relate to the agricultural products and processing industry.

Standard: Demonstrates safety practices related to agricultural products processing.

Standard: Develops record-keeping skills.

Standard: Determines the impact of government rules and regulations on food products and processing enterprises.

Standard: Develops skills in agricultural processing and storage techniques.

Standard: Identifies equipment used in agricultural processing and storage.

Standard: Develops skills in fiber processing.
Standard: Identifies and selects horticultural supplies.

Standard: Controls pests of floriculture crops.

Course: Cooperative Agribusiness Sales and Marketing

60 Standard: Identifies the problems and scope of management in agribusiness.
65 Standard: Develops math, reading and writing skills as they relate to the agribusiness sales and service industry.
66 Standard: Explores the scope of and careers in the agribusiness sales and service industry.
67 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.
69 Standard: Demonstrates safety practices related to agribusiness sales and service.
70 Standard: Develops record-keeping skills.
71 Standard: Develops computer skills in agribusiness sales and service.
72 Standard: Develops skills needed for employment in the sales and service industry of agriculture.
73 Standard: Develops management skills in agribusiness sales and service.
74 Standard: Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.
75 Standard: Identifies the availability of agricultural jobs and the pay, working conditions and worker benefits of each.
76 Standard: Demonstrates proper sales techniques with customers in sales presentations on the telephone and face-to-face.
77 Standard: Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.
78 Standard: Completes sales tickets, writes checks and fills out shipping forms and other forms.
79 Standard: Competitively prices agricultural products and services.
80 Standard: Determines credit eligibility of customers.
430 Standard: Develops math, reading and writing skills as they relate to the floriculture industry.
442 Standard: Selects greenhouse growing media and applies fertilizers.

Course: Environmental Science

148 Standard: Develops math, reading and writing skills as they relate to environmental science.
149 Standard: Explores the scope of and careers in the environmental science industry.
150 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.
151 Standard: Demonstrates skills in developing a supervised agricultural experience program.
152 Standard: Demonstrates safety practices related to environmental science.
153 Standard: Develops record-keeping skills.
154 Standard: Develops computer skills relevant to environmental science.
155 Standard: Describes the relationships among humans, agriculture and the environment.
156 Standard: Explains how agriculture affects ecosystems.
157 Standard: Identifies the types and proper management of agricultural waste products.
158 Standard: Describes the use of agricultural chemicals and their effects on the environment.
159 **Standard:** Lists and describes management practices used in agriculture to protect soil and water resources.

160 **Standard:** Lists and describes management practices used in agriculture to protect air quality.

421 **Standard:** Gathers and analyzes field data for soil and water conservation plans.

423 **Standard:** Reads maps, aerial photographs and legal land descriptions.

**Course:** Floral Design and Management

450 **Standard:** Develops math, reading and writing skills as they relate to the floral design and management industry.

451 **Standard:** Explores the scope of and careers in the floral design and management industry.

452 **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

453 **Standard:** Demonstrates skills in developing a supervised agricultural experience program.

454 **Standard:** Demonstrates safety practices related to floral design and management.

455 **Standard:** Develops record-keeping skills.

457 **Standard:** Develops employability skills.

458 **Standard:** Develops management skills relevant to the floral design and management industry.

459 **Standard:** Identifies and describes plants, cut flowers, greens and other materials used in the florist industry.

460 **Standard:** Receives and stores floral perishable and hard good products.

461 **Standard:** Prepares and prices basic floral designs.

462 **Standard:** Prepares and prices flowers to wear.

463 **Standard:** Prepares and prices specialty designs.

464 **Standard:** Prepares and prices floral decorations for special occasions and purposes.

465 **Standard:** Markets floral products.

466 **Standard:** Prepares and prices sympathy flowers.

467 **Standard:** Prepares and prices plants for sale.

468 **Standard:** Develops math, reading and writing skills as they relate to the nursery production and management industry.

475 **Standard:** Develops skills needed for employment in nursery production and management.

476 **Standard:** Develops management skills relevant to the nursery production industry.

477 **Standard:** Identifies, selects and maintains nursery structures and equipment.

478 **Standard:** Identifies and selects nursery supplies.

479 **Standard:** Selects and schedules the production of nursery and turf crops.

480 **Standard:** Propagates nursery and turf crops through sexual and asexual methods.

481 **Standard:** Manages nursery growing media and soil fertility.

483 **Standard:** Manages turf and nursery crops.

484 **Standard:** Harvests and transports turf and nursery crops.

485 **Standard:** Develops salesmanship skills for telephone and face to face sales.
Course: Floriculture Production and Management

58 Standard: Develops basic knowledge in organizing an agricultural business.

60 Standard: Identifies the problems and scope of management in agribusiness.

61 Standard: Keeps and uses financial records to analyze and solve management problems.

74 Standard: Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.

76 Standard: Demonstrates proper sales techniques with customers in sales presentations on the telephone and face-to-face.

77 Standard: Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.

78 Standard: Completes sales tickets, writes checks and fills out shipping forms and other forms.

79 Standard: Competitively prices agricultural products and services.

80 Standard: Determines credit eligibility of customers.

106 Standard: Develops math, reading and writing skills as they relate to plant science and biotechnology.

112 Standard: Defines plant science and biotechnology skills needed in the industry.

123 Standard: Describes the economic and environmental impact of weeds.

124 Standard: Describes the economic impact of insects on the plant industry.

430 Standard: Develops math, reading and writing skills as they relate to the floriculture industry.

432 Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

434 Standard: Demonstrates safety practices related to floriculture.

435 Standard: Develops record-keeping skills.

439 Standard: Selects and maintains floriculture structures and equipment.

440 Standard: Identifies and selects horticultural supplies.

441 Standard: Selects and schedules floriculture crops.

442 Standard: Selects greenhouse growing media and applies fertilizers.

443 Standard: Propagates floriculture crops.

444 Standard: Plants and transplants floriculture crops.

445 Standard: Produces floriculture crops.

446 Standard: Controls pests of floriculture crops.

447 Standard: Prepares floriculture products for sale.

448 Standard: Markets floriculture crops.

449 Standard: Identifies and selects floriculture plants.

450 Standard: Develops math, reading and writing skills as they relate to the floral design and management industry.

458 Standard: Develops management skills relevant to the floral design and management industry.

459 Standard: Identifies and describes plants, cut flowers, greens and other materials used in the florist industry.

461 Standard: Prepares and prices basic floral designs.

464 Standard: Prepares and prices floral decorations for special occasions and purposes.

465 Standard: Markets floral products.
Course: Forest Science

58  **Standard:** Develops basic knowledge in organizing an agricultural business.

60  **Standard:** Identifies the problems and scope of management in agribusiness.

61  **Standard:** Keeps and uses financial records to analyze and solve management problems.

62  **Standard:** Develops and analyzes short- and long-range management plans for agribusiness's.

64  **Standard:** Manages and protects financial resources.

76  **Standard:** Demonstrates proper sales techniques with customers in sales presentations on the telephone and face-to-face.

77  **Standard:** Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.

78  **Standard:** Completes sales tickets, writes checks and fills out shipping forms and other forms.

79  **Standard:** Competitively prices agricultural products and services.

165 **Standard:** Demonstrates safety practices related to forestry and natural resources.

168 **Standard:** Identifies and lists uses and characteristics of natural resources.

169 **Standard:** Describes the origin and composition of soils.

170 **Standard:** Prescribes measures that will reduce the chance of soil depletion and foster soil stewardship.

171 **Standard:** Describes the importance of forestry to the environment and the economy.

172 **Standard:** Develops a plan for maintaining a healthy forest.

173 **Standard:** Lists and characterizes products made from forest resources.

174 **Standard:** Defines principles used in the management and conservation of wildlife.

380 **Standard:** Develops math, reading and writing skills as they relate to the forest production and management industry.

384 **Standard:** Demonstrates safety practices related to forest production and management.

385 **Standard:** Develops record-keeping skills.

386 **Standard:** Develops computer skills relevant to the forest production and management industry.

387 **Standard:** Develops skills needed for employment in the forestry production and management industry.

388 **Standard:** Develops management skills relevant to the forest production and management industry.

389 **Standard:** Identifies trees.

390 **Standard:** Evaluates sites for forestry production.

391 **Standard:** Prepares a site for reforestation.

392 **Standard:** Procures seeds and seedlings for reforestation.

398 **Standard:** Controls forest insects and diseases.

400 **Standard:** Determines the growth rate of trees.

401 **Standard:** Evaluates timber stands for thinning.

402 **Standard:** Reads maps of forest areas to be harvested.

403 **Standard:** Determines boundaries of forest areas to be harvested.

404 **Standard:** Cruises timber.

408 **Standard:** Identifies methods of harvesting, loading and transporting timber.
Course: Forestry

**Standard:** Develops competency in a specific employment area of the agribusiness industry.

**Standard:** Identifies the problems and scope of management in agribusiness.

**Standard:** Develops and analyzes short- and long-range management plans for agribusiness's.

**Standard:** Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.

**Standard:** Identifies the availability of agricultural jobs and the pay, working conditions and worker benefits of each.

**Standard:** Demonstrates proper sales techniques with customers in sales presentations on the telephone and face-to-face.

**Standard:** Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.

**Standard:** Completes sales tickets, writes checks and fills out shipping forms and other forms.

**Standard:** Competitively prices agricultural products and services.

**Standard:** Develops math, reading and writing skills as they relate to forestry and natural resources.

**Standard:** Explores the scope of and careers in the forestry and natural resources industry.

**Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

**Standard:** Demonstrates safety practices related to forestry and natural resources.

**Standard:** Develops record-keeping skills.

**Standard:** Develops computer skills relevant to natural resources.

**Standard:** Identifies and lists uses and characteristics of natural resources.

**Standard:** Describes the origin and composition of soils.

**Standard:** Prescribes measures that will reduce the chance of soil depletion and foster soil stewardship.

**Standard:** Describes the importance of forestry to the environment and the economy.

**Standard:** Develops a plan for maintaining a healthy forest.

**Standard:** Lists and characterizes products made from forest resources.

**Standard:** Defines principles used in the management and conservation of wildlife.

**Standard:** Demonstrates safety practices related to forest production and management.

**Standard:** Develops record-keeping skills.

**Standard:** Develops management skills relevant to the forest production and management industry.

**Standard:** Identifies trees.

**Standard:** Prepares a site for reforestation.

**Standard:** Procures seeds and seedlings for reforestation.

**Standard:** Establishes a forestry plot.

**Standard:** Prevents wildfires.
Standard: Controls wildfires.

Standard: Controls undesirable forest species.

Standard: Conducts a prescribed burn.

Standard: Controls forest insects and diseases.

Standard: Measures standing timber.

Standard: Determines the growth rate of trees.

Standard: Evaluates timber stands for thinning.

Standard: Reads maps of forest areas to be harvested.

Standard: Develops math, reading and writing skills as they relate to the natural resource industry.

Course: General Horticulture

Standard: Develops math, reading and writing skills as they relate to plant science and biotechnology.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to plant science and biotechnology.

Standard: Identifies and describes the processes of plant cells.

Standard: Explains how plants use nutrients.

Standard: Characterizes the components of soils and how they relate to plant health and artificial growing media.

Standard: Identifies the processes of plant reproduction.

Standard: Describes environmental factors that affect plant growth and their manipulation in the production of plants.

Standard: Explains the importance of plants to life, the economy and the environment.

Standard: Diagrams and explains the use and functions of water in plants.

Standard: Identifies and describes components of commercial plant growth systems used in the plant industry.

Standard: Explains how plants affect the environment.

Standard: Demonstrates safety practices related to small engines.

Standard: Demonstrates safety practices related to agricultural machinery and equipment.

Standard: Demonstrates safety practices related to plant production and management.

Standard: Develops math, reading and writing skills as they relate to the floriculture industry.

Standard: Explores the scope of and careers in the floriculture industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the floriculture industry.

Standard: Develops skills needed for employment in the floriculture industry.

Standard: Develops management skills relevant to the floriculture industry.

Standard: Selects and maintains floriculture structures and equipment.

Standard: Identifies and selects horticultural supplies.

Standard: Selects and schedules floriculture crops.

Standard: Selects greenhouse growing media and applies fertilizers.
Course:  Introduction to Animal Science / Biotechnology

81  **Standard**: Develops math, reading and writing skills as they relate to animal science.
82  **Standard**: Explores the scope of and careers in the animal science and biotechnology industry.
84  **Standard**: Demonstrates skills in developing a supervised agricultural experience program.
86  **Standard**: Develops record-keeping skills.
87  **Standard**: Develops computer skills relevant to agriscience and biotechnology.
88  **Standard**: Describes the scientific foundations of animal agriculture and biotechnology.
89  **Standard**: Explains the scientific foundations of large animal production and management.
90  **Standard**: Explains the scientific foundations of poultry science.
91  **Standard**: Explains the scientific foundations of dairy production processing and management.
93  **Standard**: Explains the scientific foundations of alternative agriculture animal production and management.
94  **Standard**: Classifies agricultural animals.
95  **Standard**: Identifies consumer and environmental concerns in animal production and management.
96  **Standard**: Identifies and explains the issues of animal welfare.
97  **Standard**: Uses animal behavior to facilitate the safe, efficient and humane management and movement of animals.
98  **Standard**: Explains and applies the principles of animal genetics and bioengineering.
99  **Standard**: Selects agricultural animals on the basis of scientific and research data.
100 **Standard:** Describes and applies the underlying principles of animal reproduction to the management and production of agricultural animals.

101 **Standard:** Describes the underlying scientific principles of animal growth and development.

102 **Standard:** Applies the principles of animal nutrition to the production and management of animals.

103 **Standard:** Explains the application of the principles of meat science to the safe, efficient and economical delivery of meat products to the consumer.

104 **Standard:** Identifies and describes parasites that attack agricultural animals.

105 **Standard:** Identifies and characterizes diseases that attack agricultural animals.

**Course:** Landscape Design and Management

74 **Standard:** Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.

76 **Standard:** Demonstrates proper sales techniques with customers in sales presentations on the telephone and face-to-face.

77 **Standard:** Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.

78 **Standard:** Completes sales tickets, writes checks and fills out shipping forms and other forms.

79 **Standard:** Competitively prices agricultural products and services.

80 **Standard:** Determines credit eligibility of customers.

194 **Standard:** Demonstrates safety practices related to small engines.

305 **Standard:** Demonstrates safety practices related to agricultural machinery and equipment.

347 **Standard:** Demonstrates safety practices related to plant production and management.

468 **Standard:** Develops math, reading and writing skills as they relate to the nursery production and management industry.

472 **Standard:** Demonstrates safety practices related to nursery production and management.

477 **Standard:** Identifies, selects and maintains nursery structures and equipment.

479 **Standard:** Selects and schedules the production of nursery and turf crops.

481 **Standard:** Manages nursery growing media and soil fertility.

482 **Standard:** Plants and transplants nursery crops.

483 **Standard:** Manages turf and nursery crops.

486 **Standard:** Develops math, reading and writing skills as they relate to the landscape design and management industry.

487 **Standard:** Explores the scope of and careers in the landscape design and management industry.

488 **Standard:** Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

489 **Standard:** Demonstrates skills in developing a supervised agricultural experience program.

490 **Standard:** Demonstrates safety practices related to landscape operations.

491 **Standard:** Develops record-keeping skills.

492 **Standard:** Develops computer skills relevant to the landscape design and management industry.

493 **Standard:** Develops skills needed for employment in the landscape design and management industry.

494 **Standard:** Develops management skills relevant to the landscape industry.

495 **Standard:** Markets landscape design services.
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>496</td>
<td><strong>Standard:</strong> Designs residential and commercial landscapes.</td>
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<tr>
<td>497</td>
<td><strong>Standard:</strong> Establishes landscapes.</td>
</tr>
<tr>
<td>498</td>
<td><strong>Standard:</strong> Selects and maintains landscape equipment.</td>
</tr>
<tr>
<td>499</td>
<td><strong>Standard:</strong> Manages landscape soils, fertility and water.</td>
</tr>
<tr>
<td>500</td>
<td><strong>Standard:</strong> Manages plants in the landscape.</td>
</tr>
<tr>
<td>501</td>
<td><strong>Standard:</strong> Controls pests in the landscape.</td>
</tr>
<tr>
<td>502</td>
<td><strong>Standard:</strong> Identifies and selects plants for the landscape.</td>
</tr>
</tbody>
</table>

**Course: Natural Resources Conservation**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>148</td>
<td><strong>Standard:</strong> Develops math, reading and writing skills as they relate to environmental science.</td>
</tr>
<tr>
<td>149</td>
<td><strong>Standard:</strong> Explores the scope of and careers in the environmental science industry.</td>
</tr>
<tr>
<td>150</td>
<td><strong>Standard:</strong> Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.</td>
</tr>
<tr>
<td>151</td>
<td><strong>Standard:</strong> Demonstrates skills in developing a supervised agricultural experience program.</td>
</tr>
<tr>
<td>154</td>
<td><strong>Standard:</strong> Develops computer skills relevant to environmental science.</td>
</tr>
<tr>
<td>155</td>
<td><strong>Standard:</strong> Describes the relationships among humans, agriculture and the environment.</td>
</tr>
<tr>
<td>156</td>
<td><strong>Standard:</strong> Explains how agriculture affects ecosystems.</td>
</tr>
<tr>
<td>157</td>
<td><strong>Standard:</strong> Identifies the types and proper management of agricultural waste products.</td>
</tr>
<tr>
<td>158</td>
<td><strong>Standard:</strong> Describes the use of agricultural chemicals and their effects on the environment.</td>
</tr>
<tr>
<td>159</td>
<td><strong>Standard:</strong> Lists and describes management practices used in agriculture to protect soil and water resources.</td>
</tr>
<tr>
<td>160</td>
<td><strong>Standard:</strong> Lists and describes management practices used in agriculture to protect air quality.</td>
</tr>
<tr>
<td>161</td>
<td><strong>Standard:</strong> Develops math, reading and writing skills as they relate to forestry and natural resources.</td>
</tr>
<tr>
<td>162</td>
<td><strong>Standard:</strong> Explores the scope of and careers in the forestry and natural resources industry.</td>
</tr>
<tr>
<td>166</td>
<td><strong>Standard:</strong> Develops record-keeping skills.</td>
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<tr>
<td>167</td>
<td><strong>Standard:</strong> Develops computer skills relevant to natural resources.</td>
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<tr>
<td>168</td>
<td><strong>Standard:</strong> Identifies and lists uses and characteristics of natural resources.</td>
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<td>169</td>
<td><strong>Standard:</strong> Describes the origin and composition of soils.</td>
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<td>170</td>
<td><strong>Standard:</strong> Prescribes measures that will reduce the chance of soil depletion and foster soil stewardship.</td>
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<tr>
<td>171</td>
<td><strong>Standard:</strong> Describes the importance of forestry to the environment and the economy.</td>
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<td>172</td>
<td><strong>Standard:</strong> Develops a plan for maintaining a healthy forest.</td>
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<td>173</td>
<td><strong>Standard:</strong> Lists and characterizes products made from forest resources.</td>
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<tr>
<td>174</td>
<td><strong>Standard:</strong> Defines principles and characterizes products made from forest conservation.</td>
</tr>
<tr>
<td>175</td>
<td><strong>Standard:</strong> Develops math, reading and writing skills as they relate to physical science applications in the agricultural mechanization industry.</td>
</tr>
<tr>
<td>182</td>
<td><strong>Standard:</strong> Illustrates the use, measurement and control of power systems in agriculture.</td>
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<tr>
<td>183</td>
<td><strong>Standard:</strong> Compares and contrasts alternative energy sources for agricultural purposes.</td>
</tr>
<tr>
<td>184</td>
<td><strong>Standard:</strong> Defines electrical power and describes its uses in agriculture.</td>
</tr>
<tr>
<td>380</td>
<td><strong>Standard:</strong> Develops math, reading and writing skills as they relate to the forest production and management industry.</td>
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</tbody>
</table>
Standard: Demonstrates skills in developing a supervised agricultural experience program.

Standard: Develops management skills relevant to the forest production and management industry.

Standard: Identifies trees.

Standard: Evaluates sites for forestry production.

Standard: Procures seeds and seedlings for reforestation.

Standard: Prevents wildfires.

Standard: Controls wildfires.

Standard: Controls undesirable forest species.

Standard: Conducts a prescribed burn.

Standard: Controls forest insects and diseases.

Standard: Measures standing timber.

Standard: Determines the growth rate of trees.

Standard: Develops math, reading and writing skills as they relate to the natural resource industry.

Standard: Explores the scope of and careers in the natural resource industry.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the natural resource industry.

Standard: Develops skills needed for employment in the natural resource industry.

Standard: Develops management skills relevant to the natural resource industry.

Standard: Gathers and analyzes field data for soil and water conservation plans.

Standard: Plans and implements routine conservation practices.

Standard: Reads maps, aerial photographs and legal land descriptions.

Standard: Identifies fish, wildlife and plants.

Standard: Manages fish, wildlife and vegetation.

Standard: Develops skills in wildlife management, forestry, outdoor recreation and air quality.

Standard: Explains concepts in natural resources conservation.

Course: Nursery/Turf Production and Management

Standard: Identifies the physical, personal and educational requirements for employment in agribusiness sales and service.

Standard: Demonstrates proper sales techniques with customers in sales presentations on the telephone and face-to-face.

Standard: Demonstrates understanding of how to close a sale, reasons potential customers resist buying and how to overcome purchase obstacles.

Standard: Completes sales tickets, writes checks and fills out shipping forms and other forms.

Standard: Competitively prices agricultural products and services.

Standard: Determines credit eligibility of customers.

Standard: Demonstrates safety practices related to small engines.

Standard: Demonstrates safety practices related to agricultural machinery and equipment.

Standard: Demonstrates safety practices related to plant production and management.
Standard: Develops math, reading and writing skills as they relate to the nursery production and management industry.

Standard: Explores the scope of and careers in the nursery production and management industry.

Standard: Develops leadership, communication, citizenship and competitive skills through co-curricular student organization activities.

Standard: Demonstrates safety practices related to nursery production and management.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to the nursery production and management industry.

Standard: Develops skills needed for employment in nursery production and management.

Standard: Develops management skills relevant to the nursery production industry.

Standard: Identifies, selects and maintains nursery structures and equipment.

Standard: Identifies and selects nursery supplies.

Standard: Selects and schedules the production of nursery and turf crops.

Standard: Propagates nursery and turf crops through sexual and asexual methods.

Standard: Manages nursery growing media and soil fertility.

Standard: Plants and transplants nursery crops.

Standard: Manages turf and nursery crops.

Standard: Harvests and transports turf and nursery crops.

Standard: Develops salesmanship skills for telephone and face to face sales.

Standard: Demonstrates safety practices related to landscape operations.

Course: Physical Science Applications in Agriculture

Standard: Develops math, reading and writing skills as they relate to physical science applications in the agricultural mechanization industry.

Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to physical science applications in agriculture.

Standard: Illustrates the use, measurement and control of power systems in agriculture.

Standard: Defines electrical power and describes its uses in agriculture.

Standard: Illustrates the use of agricultural power and machinery controls to manipulate the environment for plant and animal production.

Standard: Identifies the properties of various metals and methods of joining.

Standard: Describes the principles and practices of internal combustion engines in agriculture.

Standard: Evaluates agricultural structures and techniques of construction for various applications.

Standard: Outlines machine theory and its application in agricultural production and processing.

Course: Plant Science Biotechnology

Standard: Develops math, reading and writing skills as they relate to plant science and biotechnology.

Standard: Explores the scope of and careers in the plant science and biotechnology industry.
Standard: Develops record-keeping skills.

Standard: Develops computer skills relevant to plant science and biotechnology.

Standard: Defines plant science and biotechnology skills needed in the industry.

Standard: Classifies plants according to the scientific classification system.

Standard: Describes the form and function of plant vegetative structures.

Standard: Identifies and describes the processes of plant cells.

Standard: Describes how industry manipulates science and technology to produce superior ornamental and food plants.

Standard: Explains how plants use nutrients.

Standard: Characterizes the components of soils and how they relate to plant health and artificial growing media.

Standard: Identifies the processes of plant reproduction.

Standard: Identifies plant genetic structures and their functions.

Standard: Describes environmental factors that affect plant growth and their manipulation in the production of plants.

Standard: Explains the importance of plants to life, the economy and the environment.

Standard: Describes the economic and environmental impact of weeds.

Standard: Describes the economic impact of insects on the plant industry.

Standard: Identifies and characterizes pathological disorders of plants.

Standard: Diagrams and explains the use and functions of water in plants.

Standard: Identifies and describes components of commercial plant growth systems used in the plant industry.

Standard: Explains how plants affect the environment.

Standard: Demonstrates safety practices related to floriculture.