

**Department:**

Agriculture

**Course Description:**

This course will cover garden practices as they relate to food production. Fruit and vegetables will be raised in a college garden site. The course will specifically cover the principles of plant growth, garden planning, soil preparation, planting and tending crops, marketing, and processing garden produce.

**Course Competencies:**

Upon completion of the course, the student should be able to:

1. Explain and discuss the basics of soils, types of gardens, plant anatomy and care, pest control and potential pathologies, and garden tools.
2. Describe the basics of harvesting, marketing, processing, and storing garden produce.
3. Design and maintain a garden for home or community food production.
4. Select and cultivate produce for the correct growing season and conditions.
5. Maintain proper soil, water, nutrient, and pest and disease control conditions in a garden.
6. Market, process, and preserve produce for home or community use

**Course Content:**

Note: Specific areas and the order they are covered will vary based on time of year the class starts, appropriateness of gardening techniques and choice of plants for the location of the garden, and the specific expertise and interests of the instructor and students.

- A. Planning a Garden
  1. Traditional, raised beds, containers, etc.
  2. Space requirements
  3. Sunlight, drainage, slope, wind
  4. Choosing plant varieties
- B. Types of Gardens
  1. Gardens by seasons
  2. Organic
  3. Truck gardens
  4. Orchards
  5. Heritage
  6. Square foot, vertical, herb, indoor, container
- C. Seeds and Plants
  1. Planting dates and zones

2. Watering
3. Fertilizing
4. Planting depths
5. Starting seeds indoors
6. Transplanting
7. Hardening/dampening off
- D. Anatomy of a Plant
  1. Parts
  2. Reproduction
  3. Stages of growth
  4. Botanical classification
- E. Soils
  1. Texture
  2. Compaction
  3. Saturation
  4. Testing
  5. Amendments
- F. Gardening Tools
  1. Types
  2. Uses
  3. Cost
  4. Safety and storage
- G. Pest Control
  1. Integrated pest management
  2. Thresholds for damage
  3. Types of control
  4. Non-insect pest control
- H. Plant pathology
  1. Diseases
  2. Signs
  3. Types of control
  4. Environmental conditions
- I. Composting
  1. Materials
  2. Recipes
  3. Vermiculture
  4. Advantages and disadvantages
  5. Mulching
- J. Irrigation
  1. Types
  2. Times
  3. Rain collection
- K. Home Chemical Use

1. Chemical safety: use, and storage
2. When to use chemicals
3. Disposal
4. Alternatives
- L. Harvesting Produce
  1. When to harvest
  2. Methods
  3. Seed saving
- M. Processing and Storing
  1. Canning
  2. Freezing
  3. Fresh storage
  4. Processing
  5. Nutrition
- N. Marketing Produce
  1. Farmers markets
  2. Home produce sales
  3. Commercial kitchens
  4. Rules and guidelines
  5. Organic production certification

### Learning Assessments:

Course competencies will be assessed by use of quizzes, lab data and hour sheets, exams, paper, and paper presentation to class.

### Instructional Materials:

Research and extension publications, Kansas Gardening Guide, Internet Web sites, other material selected by instructor.

#### **Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition**

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" at this link:

<https://highlandcc.edu/pages/disability-services>.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.