

## OVERVIEW

With a specific focus on the important work that farmers do, students will learn about the careers available throughout food systems in the U.S., including scientific, technological, and agricultural fields.

## TIME

One 45-minute class

## OBJECTIVES

*In this lesson, students will:*

- Identify careers within food systems; and
- Categorize food system jobs.

## STANDARDS

### NGSS

ESS3.C: Human Impacts on Earth Systems

The sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources. (HS-ESS3-3)

MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

MS-LS4-5. Gather and synthesize information about technologies that have changed the way humans influence the inheritance of desired traits in organisms.

### CASEL FRAMEWORK

**SELF-AWARENESS:** The abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts. This includes capacities to recognize one's strengths and limitations with a well-grounded sense of confidence and purpose. Such as:

- Identifying one's emotions
- Experiencing self-efficacy
- Having a growth mindset
- Developing interests and a sense of purpose

### CDC NHES

1.8.1 Analyze the relationship between healthy behaviors and personal health.

1.8.3 Analyze how the environment affects personal health.

8.8.1 State a health-enhancing position on a topic and support it with accurate information.

8.8.2 Demonstrate how to influence and support others to make positive health choices.

8.8.4 Identify ways in which health messages and communication techniques can be altered for different audiences.

### MATERIALS

In addition to common classroom materials and an Internet connection, students will need:

- Food Systems Dream Job Table

### PREPARATION

1. Arrange the students into four groups.
2. Print or provide access to student materials.

# LESSON 3: HELP WANTED!



## INTRODUCTION

Tell students:

“Working as a farmer is something many people have considered and accomplished over the years. Farmers have many important skills and are the backbone of food systems. But food systems are also composed of many other kinds of workers who have many different talents and skills. No matter what your interests, there is a role for you in the food systems industry.”

## LESSON PROCEDURE

### Step 1

With your class, brainstorm a list of jobs of potential careers (not necessarily specific to agriculture). These may include everything from medicine, the arts, airline pilots, farmers, teachers, etc. Then, ask them to label each job as a “agricultural job” or “other industry job”. Accept all answers. Then, ask students to write down what their dream job is. Collect all responses to be used later in the lesson.

### Step 2

Show students [this video](#) about careers in Australian agriculture and food systems (from the NSW Department of Education).

Explain that as the video shows, careers in a food system are not necessarily limited to farming. In fact, many careers found in other fields are also found within the food system industry. Share these [USDA visuals and data](#) with the students. The data in these graphics show employment projections in *food system careers*.

See the *Food System Careers Graphics Handout*.

### Step 3

Explain that many food systems jobs will fall into one of four categories:

- Management & Business
- Science & Engineering
- Food & Biomaterials Production
- Education, Communication, & Government

### Step 4

Divide students into four groups. Assign each group one of the four categories of employment opportunities. Have each group generate a list of career possibilities within each category. Have students reference this [USDA/Purdue summary report](#) and Fuel Up to Play 60's [Who's Who in the Food System?](#) for some ideas.

### Step 5

Have each group present their findings of the types of positions that are available in each category.

### Step 6

Have students access the Food Systems Dream Job Table. Read each dream job students submitted to you in Step 1 and have students record each job on the table. Ask students to think about the ways in which the dream jobs might be applicable to the food systems industry. A few sample answers are provided.

See the *Food Systems Dream Job Table Activity*.

| DREAM JOB                 | APPLICATION IN FOOD SYSTEMS   | CATEGORY                       |
|---------------------------|---|--------------------------------|
| Large Animal Veterinarian | Work with cattle and dairy farmers to make sure livestock is healthy    | Food + Biomaterials Production |
| Environmental Scientist   | Ensure water and soil quality on farms                                  | Science + Engineering          |
| Geneticist                | Help to improve food access by working with the genetic code of produce | Science + Engineering          |
|                           |   |                                |
|                           |   |                                |



## Step 7

As a class, have students share their food systems dream job descriptions and identify the three most creative applications in the food system industry. For example, were any students able to think of a career path for a graphic designer in food systems? Could any students identify a job for an airline pilot?

## ASSESSMENT

Have students create an exciting and engaging job opening listing for any Food Systems career.

Students should list:

- **Job title**
- **Description of the job**
- **Job responsibilities**
- **Educational requirements**
- **Required skills**
- **Experience requirements**
- **Anything else they think is important to include**

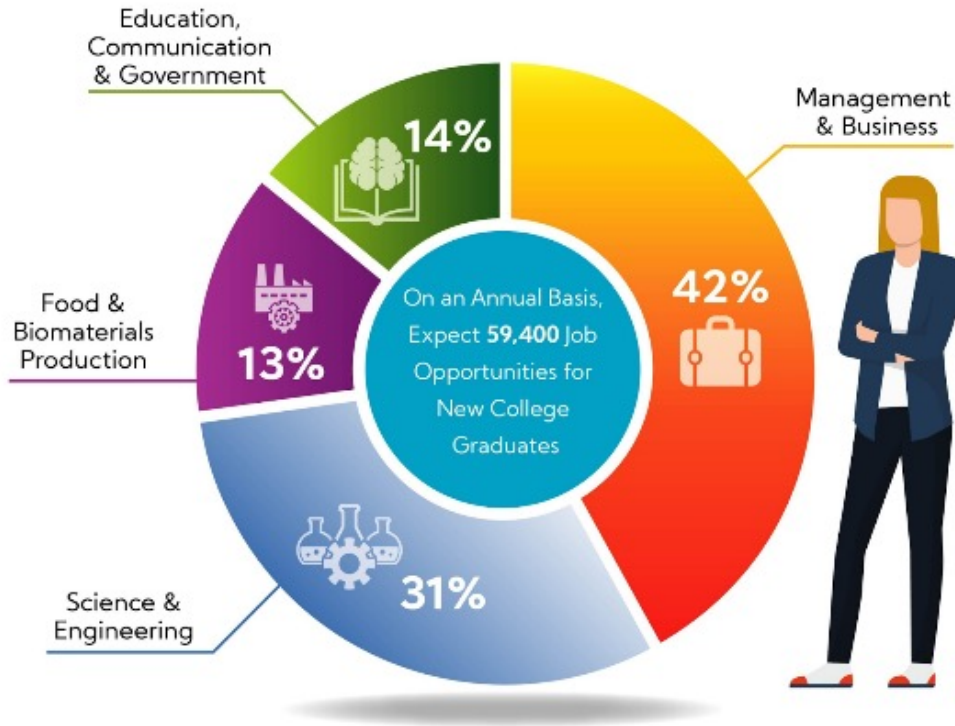
## REFLECTION

What food service careers might you be interested in? What are your personal qualities that would make you a good candidate for that job?

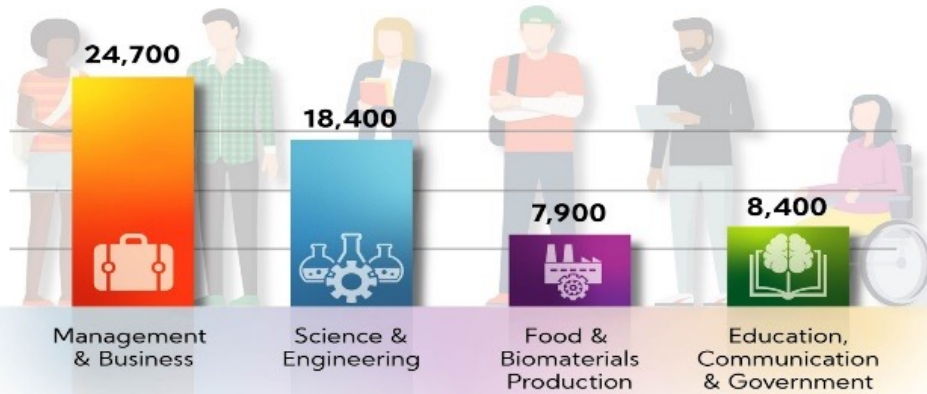
## EXTENSIONS

The food system is incredibly important to our health. Which careers within the food system industry have the biggest impact on personal and public health?

## FOOD SYSTEM CAREERS GRAPHIC



On an Annual Basis, Expect 59,400 Job Opportunities for New College Graduates





## FOOD SYSTEMS DREAM JOB TABLE ACTIVITY

| DREAM JOB | APPLICATION IN FOOD SYSTEMS | CATEGORY |
|-----------|-----------------------------|----------|
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