

# MASTERS OF BEEF ADVOCACY

## CURRICULUM ALIGNMENT TO OHIO EDUCATION STANDARDS

### ABOUT MASTERS OF BEEF ADVOCACY

The Masters of Beef Advocacy (MBA) program from the National Cattlemen's Beef Association, a contractor to the Beef Checkoff, is a valuable resource for Ohio FFA members and agricultural education students in and out of the classroom.

MBA is your go-to resource for training and resources to help your students be strong advocates for the beef community. This free, self-guided online course provides the tools and resources to become a beef advocate and answer tough questions about beef and raising cattle.

The checkoff-funded MBA course consists of five lessons in beef advocacy, including:

- **The Beef Community** - Context of raising beef from pasture to plate focusing on the community of people involved throughout the beef lifecycle.
- **Raising Cattle on Grass** - An introduction to the first step in the beef lifecycle and the many benefits of raising cattle on our country's vast grass pasture resources.
- **Life in the Feedyard** - A discussion on the role of feedyards, including animal care, nutrition and environmental stewardship, at this important step in the beef lifecycle.
- **From Cattle to Beef** - An in-depth look at the slaughter process and the humane handling and safety measures in place at today's beef processing facilities.
- **Beef. It's What's for Dinner.** - A primer on choosing and cooking the right cuts of beef and the important role of beef in a healthful diet.

The online lessons address environmental sustainability, beef nutrition, animal welfare and beef safety while taking advocates through the beef lifecycle, from pasture to plate. The course also offers historical context on the evolution of the U.S. beef industry from the time the first cattle were brought to North America to today.

Upon completion of five interactive online lessons, advocates (your students) will be equipped with the communication skills and information to be confident in sharing beef stories on social media and in your community to help others better understand how cattle are raised and how beef belongs as part of healthy, sustainable diets.

### HOW TO GET STARTED

Through this program, your students will be better equipped to tell the story of modern beef production in presentations to schools and other civic groups, through local media and in the "virtual" world of the internet. You can utilize this free curriculum in your classroom by requesting a classroom kit. Ohio agricultural educators should request a classroom kit online by visiting **[www.MastersofBeefAdvocacy.com](http://www.MastersofBeefAdvocacy.com)**.

Once you have received the kit via email, you may use this document to refer to each lesson's objectives and outcomes and how they align to Ohio's education standards.

# MASTERS OF BEEF ADVOCACY

## CURRICULUM ALIGNMENT TO OHIO EDUCATION STANDARDS

### LESSON #1 – THE BEEF COMMUNITY

#### OBJECTIVES/OUTCOMES

##### 1. Define the beef community

- 1.1.1. Identify the knowledge, skills and abilities necessary to succeed in careers. (010115)
- 1.10.1. Identify how the roles of sales, advertising and public relations contribute to a company's brand. (010115)
- 1.6.7. Identify the effect of supply and demand on products and services. (010115)
- 1.1.2. Identify the scope of career opportunities and the requirements for education, training, certification, licensure and experience. (010115)
- 1.1.6. Explain the importance of work ethic, accountability and responsibility and demonstrate associated behaviors in fulfilling personal, community and workplace roles. (010115)

##### 2. Identify common questions about beef from consumers

- 1.10.2. Determine the customer's needs and identify solutions. (010115)
- 1.10.3. Communicate features, benefits and warranties of a product or service to the customer. (010115)
- 1.10.6. Discuss the importance of correct pricing to support a product's or service's positioning in the marketing mix. (010115)
- 1.10.1. Identify how the roles of sales, advertising and public relations contribute to a company's brand. (010115)
- 1.1.7. Apply problem-solving and critical-thinking skills to work-related issues when making decisions and formulating solutions. (010915)

##### 3. Identify values held by the beef community

- 1.10.1. Identify how the roles of sales, advertising and public relations contribute to a company's brand. (010115)
- 1.6.7. Identify the effect of supply and demand on products and services. (010115)
- 1.8.7. Collect information and feedback to help assess the organization's strategic planning and policymaking processes. (010115)
- 1.1.6. Explain the importance of work ethic, accountability and responsibility and demonstrate associated behaviors in fulfilling personal, community and workplace roles. (010115)
- 1.10.5. Monitor customer expectations and determine product/service satisfaction by using measurement tools. (010920)

##### 4. Explain the stages of the beef lifecycle

- 1.2.5. Communicate information (e.g., directions, ideas, vision, workplace expectations) for an intended audience and purpose. (010115)
- 2.1.2. Determine the role of nutrients and the nutritional requirements of different animal life processes and species. (010125)
- 2.3.9. Evaluate and perform animal care procedures throughout the life of the animal. (010125)
- 2.3.1. Identify species-specific terminology based on gender and age. (010125)
- 2.3.2. Identify, classify, evaluate and select animal species or breeds for a desired outcome. (010125)

## **5. Understand differences in grass- and grain-finished beef**

- 1.6.8. Identify the features and benefits that make an organization's product or service competitive. (010115)
- 2.1.2. Determine the role of nutrients and the nutritional requirements of different animal life processes and species. (010125)
- 2.1.3. Analyze the nutritional content and quality of feeds. (010125)
- 2.1.1. Identify the traditional and alternative types, compositions, quality and compatibility of feeds, feed additives and feed byproducts. (010920)
- 2.1.5. Identify and describe biological and non-biological contaminants found in feedstuffs and their impacts on animals. (010920)
- 2.1.6. Determine feed efficiency and value in relation to the cost, quality and availability of feeds. (010920)
- 2.1.7. Formulate and prepare rations and diets for production, specialty markets and special diets. (010920)
- 2.1.8. Select and implement feeding and watering practices and systems, based on the animal population and purpose. (010920)

## **6. Explain judicious and responsible use of antibiotics**

- 7.7.2. Identify activities and biological agents that contribute to the risk of acquiring or preventing a specific disease. (010115)
- 1.3.1. Analyze how regulatory compliance (e.g., United States Department of Agriculture [USDA], Food and Drug Administration [FDA], United States Department of Interior [USDI], Ohio Livestock Care Standards, water quality standards, local water regulations, building codes) affects business operations and organizational performance. (010115)
- 2.5.3. Recognize the preventative measures or treatments needed to maintain animal health. (010125)
- 2.5.6. Describe the routes of administration for medications and the process of drug absorption, distribution, metabolism, withdrawal and excretion. (010920)
- 2.5.8. Simulate the administration of drug treatments and vaccines, following quality assurance guidelines, and monitor common adverse effects and potential problems associated with administration. (010920)

## **7. Utilize the "Two C's" in conversations about beef**

- 1.2.5. Communicate information (e.g., directions, ideas, vision, workplace expectations) for an intended audience and purpose. (010115)
- 1.2.1. Extract relevant, valid information from materials and cite sources of information. (010115)
- 1.2.2. Deliver formal and informal presentations. (010115)
- 1.2.3. Identify and use verbal, nonverbal and active listening skills to communicate effectively. (010115)

### **This lesson aligns best with:**

- **Livestock Selection, Nutrition and Management (010920)**
- **Business Management for Agricultural and Environmental Systems (010115)**

# MASTERS OF BEEF ADVOCACY

## CURRICULUM ALIGNMENT TO OHIO EDUCATION STANDARDS

### LESSON #2 – RAISING CATTLE ON GRASS

#### OBJECTIVES/OUTCOMES

##### 1. Explain why farmers and ranchers in the United States supplement cattle diets with grain

- 2.1.1. Identify the traditional and alternative types, compositions, quality and compatibility of feeds, feed additives and feed byproducts. (010920)
- 2.1.2. Determine the role of nutrients and the nutritional requirements of different animal life processes and species. (010920) (010915)
- 2.1.3. Analyze the nutritional content and quality of feeds. (010920)
- 2.1.5. Identify and describe biological and non-biological contaminants found in feedstuffs and their impacts on animals. (010920)
- 2.1.6. Determine feed efficiency and value in relation to the cost, quality and availability of feeds. (010920)
- 2.1.7. Formulate and prepare rations and diets for production, specialty markets and special diets. (010920)
- 2.1.8. Select and implement feeding and watering practices and systems, based on the animal population and purpose. (010920)
- 2.2.2. Identify the anatomical parts of the digestive system and describe their physiology. (010920)
- 2.3.2. Identify, classify, evaluate and select animal species or breeds for a desired outcome. (010920)
- 2.5.2. Apply concepts of body condition scoring to assess general health and nutrition status. (010920) (010915)

##### 2. Identify common animal care practices for beef on the farm or ranch

- 2.3.4. Apply concepts of pest control, sanitation and disinfection procedures for the animals' care and management. (010920) (010915)
- 2.3.5. Perform species-specific animal identification techniques (e.g., chipping, tagging, branding, notching, tattooing). (010920)
- 2.5.2. Apply concepts of body condition scoring to assess general health and nutrition status. (010920)
- 2.6.4. Determine the factors that influence estrus, gestation and parturition and employ appropriate management practices. (010920)
- 2.7.4. Identify social relationships involved in behavioral adjustment and adaptation (e.g., animal-to-animal and human-to-animal interaction) (010920) (010915)

##### 3. Understand the nutritional value of grass- and grain-finished beef

- 2.1.1. Identify the traditional and alternative types, compositions, quality and compatibility of feeds, feed additives and feed byproducts. (010920)
- 2.1.2. Determine the role of nutrients and the nutritional requirements of different animal life processes and species. (010920) (010915)
- 2.1.7. Formulate and prepare rations and diets for production, specialty markets and special diets. (010920) (010915)
- 2.1.8. Select and implement feeding and watering practices and systems, based on the animal population and purpose. (010920)
- 2.3.2. Identify, classify, evaluate and select animal species or breeds for a desired outcome. (010920)

#### **4. Explain efforts by the beef community to produce more sustainable beef**

- 2.7.4. Identify social relationships involved in behavioral adjustment and adaptation (e.g., animal-to-animal and human-to-animal interaction). (010920) (010915)
- 2.7.1. Understand social influences, public perception and regulations that are associated with animal welfare. (010920) (010915)
- 2.3.9. Evaluate and perform animal care procedures throughout the life of the animal. (010920) (010915)
- 2.3.10. Monitor and evaluate the quality of an animal's habitat and implement corrective methods as needed. (010920) (010915)

#### **5. Identify precautions farmers and ranchers take to guarantee safety for themselves and their cattle**

- 2.7.1. Understand social influences, public perception and regulations that are associated with animal welfare. (010920) (010915)
- 2.7.7. Handle, restrain and move animals, while ensuring the safety of the animals and their handlers. (010920) (010915)
- 2.7.4. Identify social relationships involved in behavioral adjustment and adaptation (e.g., animal-to-animal and human-to-animal interaction). (010920) (010915)
- 2.4.1. Identify general infectious and noninfectious causes of diseases and disorders. (010920) (010915)
- 2.4.2. Examine an animal to evaluate its general condition. (010920) (010915)
- 2.3.6. Use identification techniques for record keeping and traceability. (010920)
- 2.3.7. Estimate an operation's or environment's carrying capacity and its impact on animal health. (010920)
- 2.3.8. Identify and recognize predator-prey relationships and implement control measures. (010920)
- 2.3.9. Evaluate and perform animal care procedures throughout the life of the animal. (010920) (010915)
- 2.3.10. Monitor and evaluate the quality of an animal's habitat and implement corrective methods as needed. (010920) (010915)
- 2.3.11. Recognize common restraints and tack devices, including their use and adjustment. (010920)
- 2.3.4. Apply concepts of pest control, sanitation and disinfection procedures for the animals' care and management. (010920) (010915)

**This lesson aligns best with:**

- **Livestock Selection, Nutrition and Management (010920)**
- **Animal Health (010915)**

# **MASTERS OF BEEF ADVOCACY**

## *CURRICULUM ALIGNMENT TO OHIO EDUCATION STANDARDS*

### **LESSON #3 – LIFE IN THE FEEDYARD**

#### **OBJECTIVES/OUTCOMES**

##### **1. Identify common concerns and questions consumers have about feedyards**

- 1.10.2. Determine the customer's needs and identify solutions. (109020)
- 2.7.1. Understand social influences, public perception and regulations that are associated with animal welfare. (109020) (109015)
- 2.7.4. Identify social relationships involved in behavioral adjustment and adaptation (e.g., animal-to-animal and human-to-animal interaction). (109020) (109015)

##### **2. Summarize the history of feedyards in the United States**

- No standards align

##### **3. Explain the scientific and technological advancements used in feedyards**

- 7.7.4. Assess a facility's biosecurity, classify the level of risk and recommend improvements. (109020) (109015)
- 7.7.5. Implement biosecurity procedures to prevent cross-site contamination (e.g., proper use and disposal of personal protective equipment [PPE] from site to site, vehicle cleaning between farm and processing site). (109020) (109015)
- 7.7.6. Screen and test animals and plant products for infectious agents or contamination. (109020) (109015)
- 7.7.7. Select bio-containment practices (e.g., quarantine, eradicate, showering into facilities) to manage pests and diseases. (109020) (109015)

##### **4. Describe how feedyards ensure the welfare of cattle and contribute to sustainability in the beef industry**

- 2.7.4. Identify social relationships involved in behavioral adjustment and adaptation (e.g., animal-to-animal and human-to-animal interaction). (010920) (010915)
- 2.7.1. Understand social influences, public perception and regulations that are associated with animal welfare. (010920) (010915)
- 2.3.9. Evaluate and perform animal care procedures throughout the life of the animal. (010920) (010915)
- 2.3.10. Monitor and evaluate the quality of an animal's habitat and implement corrective methods as needed. (010920) (010915)

##### **5. Defend antibiotic and hormone use in a feedyard**

- 1.3.1. Analyze how regulatory compliance (e.g., United States Department of Agriculture [USDA], Food and Drug Administration [FDA], United States Department of Interior [USDI], Ohio Livestock Care Standards, water quality standards, local water regulations, building codes) affects business operations and organizational performance. (109020)
- 2.4.2. Examine an animal to evaluate its general condition.
- 2.5.6. Describe the routes of administration for medications and the process of drug absorption, distribution, metabolism, withdrawal and excretion. (109020)
- 2.5.8. Simulate the administration of drug treatments and vaccines, following quality assurance guidelines, and monitor common adverse effects and potential problems associated with administration. (109020)

## 6. Describe beef nutrition in a feedyard

- 2.1.1. Identify the traditional and alternative types, compositions, quality and compatibility of feeds, feed additives and feed byproducts. (109020)
- 2.1.2. Determine the role of nutrients and the nutritional requirements of different animal life processes and species. (109015) (109020)
- 2.1.3. Analyze the nutritional content and quality of feeds. (109020)
- 2.1.4. Identify and address major nutrient deficiency and toxicity symptoms. (109020) (109015)
- 2.1.5. Identify and describe biological and non-biological contaminants found in feedstuffs and their impacts on animals. (109020)
- 2.1.6. Determine feed efficiency and value in relation to the cost, quality and availability of feeds. (109020)
- 2.1.7. Formulate and prepare rations and diets for production, specialty markets and special diets.
- 2.1.8. Select and implement feeding and watering practices and systems, based on the animal population and purpose. (109020)
- 2.5.2. Apply concepts of body condition scoring to assess general health and nutrition status. (109020) (109015)

## 7. Explain how feedyards produce safe beef products

- 1.3.1. Analyze how regulatory compliance (e.g., United States Department of Agriculture [USDA], Food and Drug Administration [FDA], United States Department of Interior [USDI], Ohio Livestock Care Standards, water quality standards, local water regulations, building codes) affects business operations and organizational performance. (109020)
- 1.3.2. Follow protocols and practices necessary to maintain a clean, safe and healthy work environment. (109020)
- 1.12.6. Identify procedures for the handling, storage and disposal of hazardous materials. (109020)
- 1.12.7. Select, use, store, maintain and dispose of personal protective equipment (PPE), appropriate to job tasks, conditions and materials. (109020)
- 1.12.9. Identify, inspect and use safety equipment appropriate for the task. (109020)
- 1.12.17. Identify symptoms of exposure to health-threatening environments (e.g., temperature; chemical noise, vibration, harshness [NVH] hazards). (109020)

This lesson aligns best with:

- [Livestock Selection, Nutrition and Management \(010920\)](#)
- [Animal Health \(010915\)](#)



# MASTERS OF BEEF ADVOCACY

## CURRICULUM ALIGNMENT TO OHIO EDUCATION STANDARDS

### LESSON #4 – FROM CATTLE TO BEEF

#### OBJECTIVES/OUTCOMES

##### 1. Identify concerns and questions consumers have about meatpacking

- 1.10.1. Identify how the roles of sales, advertising and public relations contribute to a company's brand. (011020)
- 1.10.2. Determine the customer's needs and identify solutions. (011020) (010920)
- 7.7.3. Identify sources of biological and chemical tampering points. (011020)
- 7.7.4. Assess a facility's biosecurity, classify the level of risk and recommend improvements. (011020)

##### 2. Explain legislation enacted for meat safety and humane slaughter

- 1.12.1. Use Occupational Safety and Health Administration (OSHA) defined procedures for identifying employer and employee responsibilities, working in confined spaces, managing worker safety programs, using ground fault circuit interrupters (GFCIs), maintaining clearance and boundaries and labeling. (011020)
- 1.12.2. Interpret safety signs and symbols. (011020)
- 1.12.6. Identify procedures for the handling, storage and disposal of hazardous materials. (011020) (010920)
- 1.12.7. Select, use, store, maintain and dispose of personal protective equipment (PPE), appropriate to job tasks, conditions and materials. (011020) (010920)
- 1.12.8. Identify safety hazards and take corrective measures. (011020)
- 1.12.9. Identify, inspect and use safety equipment appropriate for the task. (011020) (010920)
- 1.12.10. Follow established procedures for the administration of first aid and contact emergency medical personnel when necessary. (011020)

##### 3. Discuss steps taken to ensure humane treatment of animals at slaughter

- 7.3.2. Perform humane harvesting techniques, including stunning, shackling and bleeding. (011020)
- 7.3.6. Differentiate the degrees of marbling and describe its role in the quality grading of meat. (011020) (010920)

##### 4. Describe how slaughter facilities play a role in reducing fat in cuts of beef

- 7.3.1. Describe the benefits of an antemortem inspection, in relation to food safety. (011020)
- 7.3.2. Perform humane harvesting techniques, including stunning, shackling and bleeding. (011020)
- 7.3.3. Remove and inspect offal postmortem for signs of disease or contamination. (011020)
- 7.3.4. Prepare a carcass for chilling and inspection through species-specific techniques (e.g., splitting, washing, weighing). (011020)
- 7.3.5. Describe the role of post mortem metabolism in converting muscle to meat. (011020)
- 7.3.6. Differentiate the degrees of marbling and describe its role in the quality grading of meat. (011020)
- 7.3.7. Calculate the maturity of an animal using skeletal ossification and lean maturity ratings.
- 7.3.8. Issue yield grades using the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass. (011020)
- 7.3.9. Calculate carcass value using a grid-based marketing system. (011020)
- 7.3.10. Fabricate carcasses into species-specific wholesale and retail cuts. (011020)



## **5. Identify the quality grades of beef**

- 7.3.6. Differentiate the degrees of marbling and describe its role in the quality grading of meat. (011020) (010920)
- 7.3.7. Calculate the maturity of an animal using skeletal ossification and lean maturity ratings. (011020) (010920)
- 7.3.8. Issue yield grades using the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass. (011020) (010920)
- 7.3.9. Calculate carcass value using a grid-based marketing system. (011020)
- 7.3.10. Fabricate carcasses into species-specific wholesale and retail cuts. (011020)

## **6. Explain how slaughter facilities contribute to sustainability in the industry**

- 6.7.1. Collect, analyze and treat solid waste materials (e.g., mortalities, manure, garbage). (011020)
- 6.7.3. Determine an acceptable site for solid waste disposal. (011020)
- 6.7.5. Describe and monitor solid waste disposal procedures (e.g., landfill, compost). (011020)
- 6.7.6. Describe and implement solid waste management methods (e.g., composting, incineration, recycling, burial). (011020) (010920)
- 6.7.10. Determine type and volume of solid waste generated by an operation or facility. (011020)

## **7. Describe how processors prevent contamination and provide meat that is safe for consumption**

- 7.4.1. Describe the process used in thermal and non-thermal preservation, control the variables and apply processing methods (e.g., retorting, high pressure, ultra-high temperature [UHT], high temperature short time [HTST], chilling, freezing). (011020)
- 7.4.2. Describe the process of dehydration and concentration, control the variables that affect the quality of dried foods and apply the methods. (011020)
- 7.4.3. Describe the functions and types of packaging operations, equipment and materials and use them to manufacture food products (e.g., metal, glass, paper, plastic, film, laminates, edible coatings). (011020)
- 7.4.4. Compare and contrast reduced oxygen packaging (ROP) processes (e.g., controlled and modified atmosphere packaging, desiccants) and use them to manufacture food products. (011020)
- 7.6.1. Identify, isolate, and monitor food product allergens. (011020)
- 7.6.2. Establish and implement procedures for preoperational inspection and cleaning. (011020)
- 7.6.3. Identify the sources and types of food-borne illness and pathogens and prevent their entrance into the food supply. (011020)
- 7.6.4. Develop and implement a pest control system. (011020)
- 7.6.5. Conduct a good manufacturing practice (GMP) audit, review the findings and implement corrective actions. (011020)
- 7.6.6. Identify and monitor hazards and critical control points and apply hazard analysis and critical control point (HAACP) corrective action procedures. (011020)
- 7.6.7. Determine critical safety parameters using government regulations for handling and storage. (011020)
- 7.6.8. Identify the key activities of a recall program. (011020)
- 7.6.9. Identify the government agencies involved in the production and regulation of food products. (011020)

### **This lesson aligns best with:**

- **Meat Science and Technology (011020)**
- **Livestock Selection, Nutrition and Management (010920)**

# MASTERS OF BEEF ADVOCACY

## CURRICULUM ALIGNMENT TO OHIO EDUCATION STANDARDS

### LESSON #5 – BEEF. IT’S WHAT’S FOR DINNER

#### OBJECTIVES/OUTCOMES

##### 1. Identify barriers for consumers to choosing beef as a nutritional source

- 1.10.2. Determine the customer's needs and identify solutions. (109020)
- 2.7.1. Understand social influences, public perception and regulations that are associated with animal welfare. (109020) (109015)
- 2.7.4. Identify social relationships involved in behavioral adjustment and adaptation (e.g., animal-to-animal and human-to-animal interaction). (109020) (109015)

##### 2. Discuss the history of the “Beef. It’s What’s for Dinner” advertising campaign

- 1.2.1. Extract relevant, valid information from materials and cite sources of information. (010115) (010915) (010920)
- 1.2.2. Deliver formal and informal presentations. (010115) (010915) (010920)
- 1.2.3. Identify and use verbal, nonverbal and active listening skills to communicate effectively. (010115)
- 1.2.5. Communicate information (e.g., directions, ideas, vision, workplace expectations) for an intended audience and purpose. (010115) (010915)
- 1.2.6. Use proper grammar and expression in all aspects of communication. (010115) (010915)
- 1.6.8. Identify the features and benefits that make an organization's product or service competitive. (010115) (011020)

##### 3. Identify essential nutrients provided by beef and explain the 10/10/10 rule

- 7.3.6. Differentiate the degrees of marbling and describe its role in the quality grading of meat. (011020) (010920)
- 7.1.5. Describe the composition, structure and sources of sugars, complex carbohydrates, lipids, vitamins, minerals and proteins (i.e., functional ingredients) and their nutritional contributions to dietary needs. (011020)
- 7.1.6. Relate the functions and physical properties of simple and complex carbohydrates, lipids, vitamins, minerals and proteins (i.e., functional ingredients) to the manufacturing of food products. (011020)

##### 4. Describe steps consumers should take to ensure safe beef purchase, preparation and consumption

- 7.6.1. Identify, isolate, and monitor food product allergens. (011020)
- 7.6.2. Establish and implement procedures for preoperational inspection and cleaning. (011020)
- 7.6.3. Identify the sources and types of food-borne illness and pathogens and prevent their entrance into the food supply. (011020)
- 7.6.4. Develop and implement a pest control system. (011020)
- 7.6.5. Conduct a good manufacturing practice (GMP) audit, review the findings and implement corrective actions. (011020)
- 7.6.6. Identify and monitor hazards and critical control points and apply hazard analysis and critical control point (HAACP) corrective action procedures. (011020)
- 7.6.7. Determine critical safety parameters using government regulations for handling and storage. (011020)
- 7.6.8. Identify the key activities (e.g., recall exercise, regulatory notification) of a recall program.

- (011020)
- 7.6.9. Identify the government agencies involved in the production and regulation of food products. (011020)
- 1.10.2. Determine the customer's needs and identify solutions. (010115) (010920)
- 1.10.3. Communicate features, benefits and warranties of a product or service to the customer. (010115) (010920)
- 1.10.6. Discuss the importance of correct pricing to support a product's or service's positioning in the marketing mix. (010115)
- 1.10.1. Identify how the roles of sales, advertising and public relations contribute to a company's brand. (010115)
- 1.1.7. Apply problem-solving and critical-thinking skills to work-related issues when making decisions and formulating solutions. (010915)

## **5. Identify and compare quality grades of beef**

- 7.3.6. Differentiate the degrees of marbling and describe its role in the quality grading of meat. (011020) (010920)
- 7.3.7. Calculate the maturity of an animal using skeletal ossification and lean maturity ratings. (011020) (010920)
- 7.3.8. Issue yield grades using the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass. (011020) (010920)
- 7.3.9. Calculate carcass value using a grid-based marketing system. (011020)
- 7.3.10. Fabricate carcasses into species-specific wholesale and retail cuts. (011020)

## **6. Discuss various cuts of beef and ideal preparation for each cut**

- 7.3.8. Issue yield grades using the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass. (011020) (010920)
- 7.3.10. Fabricate carcasses into species-specific wholesale and retail cuts. (011020)
- 7.6.1. Identify, isolate, and monitor food product allergens. (011020)
- 7.6.2. Establish and implement procedures for preoperational inspection and cleaning. (011020)
- 7.6.3. Identify the sources and types of food-borne illness and pathogens and prevent their entrance into the food supply. (011020)
- 7.6.4. Develop and implement a pest control system. (011020)
- 7.6.5. Conduct a good manufacturing practice (GMP) audit, review the findings and implement corrective actions. (011020)
- 7.6.6. Identify and monitor hazards and critical control points and apply hazard analysis and critical control point (HAACP) corrective action procedures. (011020)
- 7.6.7. Determine critical safety parameters using government regulations for handling and storage. (011020)
- 7.6.8. Identify the key activities (e.g., recall exercise, regulatory notification) of a recall program. (011020)
- 7.6.9. Identify the government agencies involved in the production and regulation of food products. (011020)

## **This lesson aligns best with:**

- **Livestock Selection, Nutrition and Management (010920)**
- **Animal Health (010915)**
- **Meat Science and Technology (011020)**