

# FOOD TECHNOLOGY-FTEC (FTEC)

---

## Courses

### FTEC 110 Food-From Farm to Table Credits: 3 (2-0-1)

**Course Description:** Commercial food processing, related to preservation and enhancing of food quality, safety, and value.

**Prerequisite:** None.

**Registration Information:** Must register for lecture and recitation. Sections may be offered: Face-to-Face, Mixed Face-to-Face, or Online.

**Terms Offered:** Fall, Spring, Summer.

**Grade Modes:** S/U within Student Option, Trad within Student Option.

**Special Course Fee:** No.

### FTEC 115 Cultural Aspects of Fermented Foods (GT-SS3) Credits: 3 (3-0-0)

**Course Description:** Exploration of the relationships between culture, fermentation, science, and nutrition.

**Prerequisite:** None.

**Restriction:** Must be a: Undergraduate.

**Registration Information:** Credit not allowed for both FTEC 115 and FTEC 180A1.

**Terms Offered:** Fall, Spring, Summer.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**Additional Information:** 1C, Human Behavior, Culture, or Social Frameworks (GT-SS3).

### FTEC 155 Introduction to Food Science (GT-SC2) Credits: 3 (3-0-0)

**Course Description:** Basic principles of food science, including the science involved in food production, how that science is used in the modern industry, and how that science can be used to maximize the diversity and nutrition of food in personal consumption.

**Prerequisite:** None.

**Restriction:** Must be a: Undergraduate.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**Additional Information:** Biological & Physical Sciences 3A, Natural & Physical Sciences w/o lab (GT-SC2).

### FTEC 205 Beer Styles and Tasting Credits: 2 (0-0-2)

**Course Description:** Evaluation of modern and historical beer styles from around the western hemisphere, with industry expert led sessions.

**Prerequisite:** None.

**Registration Information:** Written consent of instructor. All students must be at least 21 years old at the beginning of the semester, as verified by instructor. Credit not allowed for both FTEC 205 and FTEC 280A2.

**Terms Offered:** Fall, Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** Yes.

### FTEC 210 Science of Food Fermentation Credits: 3 (2-2-0)

**Course Description:** Science, history, culture, gastronomy, safety, health, and nutrition aspects of fermented foods and beverages.

**Prerequisite:** (BZ 111 and BZ 110 or LIFE 102) and (CHEM 107 or CHEM 111) and (FSHN 150).

**Registration Information:** Must register for lecture and laboratory.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** Yes.

### FTEC 292 Careers in Fermentation and Food Science Credit: 1 (0-0-1)

**Course Description:** Multidisciplinary, science-based study in fermentation and food science. Explore career options and skill development through panel discussions by alumni and industry partners.

**Prerequisite:** None.

**Restriction:** Must be a: Undergraduate.

**Registration Information:** Sections may be offered: Online.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

### FTEC 350 Fermentation Microbiology Credits: 3 (3-0-0)

**Course Description:** Integration of fermentation science, microbiology, and chemistry.

**Prerequisite:** BC 351, may be taken concurrently and MIP 300.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

### FTEC 351 Fermentation Microbiology Laboratory Credits: 2 (0-4-0)

**Course Description:** Introduction to fermentation microbiological practices with relevance to production, quality control, and food safety in the food and beverage industry.

**Prerequisite:** FTEC 350, may be taken concurrently.

**Restriction:** Must be a: Undergraduate.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** Yes.

### FTEC 360 Brewing Processes Credits: 4 (3-0-1)

**Course Description:** Influence of raw material selection, malting, mashing, boiling, and fermentation on quality of beverages.

**Prerequisite:** CHEM 241 or CHEM 245 or CHEM 341 or CHEM 345.

**Restrictions:** Must not be a: Freshman. Must be a: Undergraduate.

**Registration Information:** Sophomore standing. Must register for lecture and recitation. Required field trips.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

### FTEC 375 Introduction to Fermentation Unit Operations Credits: 4 (3-0-1)

**Course Description:** Principles related to processes and equipment design in fermented food and beverage industries. Survey of unit operations.

**Prerequisite:** (FTEC 360) and (PH 121 or PH 141).

**Registration Information:** Must register for lecture and recitation. Required field trips. Credit not allowed for both FTEC 375 and FTEC 480A2.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

### FTEC 400 Food Safety Credits: 3 (3-0-0)

**Course Description:** Safety of human food emphasizing safe production, processing, marketing, preparation, consumption, and regulations.

**Prerequisite:** CHEM 107 or CHEM 111.

**Term Offered:** Fall.

**Grade Modes:** S/U within Student Option, Trad within Student Option.

**Special Course Fee:** No.

**FTEC 422 Brewing Science I Credits: 5 (3-3-1)**

**Course Description:** Application of scientific and technical aspects of malting, brewing, fermenting, finishing, packaging, and sensory evaluation of beer.

**Prerequisite:** FTEC 360.

**Restriction:** Must not be a: Freshman.

**Registration Information:** Must register for lecture, lab, and recitation.

Required field trips. 21 years of age.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** Yes.

**FTEC 430 Sensory Evaluation of Food Products Credits: 2 (1-2-0)**

**Course Description:** Application of sensory evaluation techniques to the study of foods.

**Prerequisite:** FSHN 301 or FTEC 210.

**Registration Information:** Must register for lecture and laboratory.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 440 Packaging Technology Credits: 2 (2-0-0)**

**Course Description:** Science, technology, and management of packaging.

**Prerequisite:** FTEC 360.

**Registration Information:** Required field trips.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 447 Food Chemistry Credits: 3 (3-0-0)**

**Course Description:** Chemistry of food constituents as related to food quality and stability.

**Prerequisite:** CHEM 241 or CHEM 245 or CHEM 341 or CHEM 345.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 460 Brewing Science II Credits: 5 (3-3-1)**

**Course Description:** Assessment, quantification, and control of all aspects of commercial beer production from malting through packaging and dispensing.

**Prerequisite:** FTEC 422.

**Restriction:** Must not be a: Freshman.

**Registration Information:** Must register for lecture, lab, and recitation.

Required field trips. 21 years of age.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** Yes.

**FTEC 465 Food Production Operations Credits: 3 (3-0-0)**

**Course Description:** Production, operation, and management techniques used in the food industry at company, local and international levels.

**Prerequisite:** FTEC 210.

**Registration Information:** Required field trips.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 478 Phytochemicals and Probiotics for Health Credits: 2 (2-0-0)**

**Course Description:** Examination of phytochemistry and probiotic organisms important in human health.

**Prerequisite:** BC 351.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 487 Internship Credits: Var[1-15] (0-0-0)**

**Course Description:**

**Prerequisite:** None.

**Terms Offered:** Fall, Spring, Summer.

**Grade Mode:** Instructor Option.

**Special Course Fee:** No.

**FTEC 492 Senior Seminar Fermentation and Food Science Credits: 2 (0-0-2)**

**Course Description:** Capstone seminar in fermentation science and food science.

**Prerequisite:** FTEC 300 to 499 - at least 9 credits.

**Restriction:** Must be a: Undergraduate.

**Registration Information:** Senior standing.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 495 Independent Study Credits: Var[1-18] (0-0-0)**

**Course Description:**

**Prerequisite:** None.

**Terms Offered:** Fall, Spring, Summer.

**Grade Mode:** Instructor Option.

**Special Course Fee:** No.

**FTEC 496A Group Study Fermentation Science: Current Issues Credit: 1 (0-0-1)**

**Course Description:** Explore emerging health issues associated with fermented foods and beverages.

**Prerequisite:** FSHN 350 or FTEC 360.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 496B Group Study Fermentation Science: Functional Foods in Health Credit: 1 (0-0-1)**

**Course Description:** Functional foods may be used to maintain overall good health and to prevent, manage, and/or treat disease. Apply nutrition science and fermentation science to learn how foods or food components are functional, their bioavailability, and the physiological effects related to human health.

**Prerequisite:** FSHN 350 or FTEC 360.

**Term Offered:** Fall.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 570 Food Product Development Credits: 2 (2-0-0)**

**Course Description:** Food product concepts, feasibility, and evaluation.

**Prerequisite:** ANEQ 447 or FTEC 447.

**Term Offered:** Fall (even years).

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 572 Food Biotechnology Credits: 2 (2-0-0)**

**Course Description:** Interrelationships among microorganisms, food processing methods, advances in biotechnology and food quality, spoilage, shelf-life and safety.

**Prerequisite:** MIP 334.

**Term Offered:** Spring (odd years).

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 574 Current Issues in Food Safety Credits: 2 (2-0-0)**

**Course Description:** Current food safety issues from field to table; microbiological, consumer, processing, and agricultural issues.

**Prerequisite:** None.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 576 Cereal Science Credits: 2 (2-0-0)**

**Course Description:** Chemistry and functionality of cereal grain components and their importance in human nutrition.

**Prerequisite:** ANEQ 447 or FTEC 447.

**Term Offered:** Fall (odd years).

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 578 Phytochemicals and Probiotics for Health Credits: 3 (2-0-1)**

**Also Offered As:** HORT 578.

**Course Description:** Examination of phytochemicals and probiotic organisms important in human health.

**Prerequisite:** BC 351.

**Registration Information:** Senior standing. Must register for lecture and recitation. Credit not allowed for both FTEC 578 and HORT 578.

**Term Offered:** Spring.

**Grade Mode:** Traditional.

**Special Course Fee:** No.

**FTEC 698 Research Credits: Var[1-18] (0-0-0)**

**Course Description:**

**Prerequisite:** None.

**Restriction:** Must be a: Graduate, Professional.

**Terms Offered:** Fall, Spring, Summer.

**Grade Mode:** Instructor Option.

**Special Course Fee:** No.

**FTEC 699 Thesis Credits: Var[1-18] (0-0-0)**

**Course Description:**

**Prerequisite:** None.

**Restriction:** Must be a: Graduate, Professional.

**Terms Offered:** Fall, Spring, Summer.

**Grade Mode:** Instructor Option.

**Special Course Fee:** No.

**FTEC 799 Dissertation Credits: Var[1-18] (0-0-0)**

**Course Description:**

**Prerequisite:** None.

**Restriction:** Must be a: Graduate, Professional.

**Terms Offered:** Fall, Spring, Summer.

**Grade Mode:** Instructor Option.

**Special Course Fee:** No.