

**MURRAY STATE UNIVERSITY**

**DEPARTMENT: NUTRITION, DIETETICS, AND FOOD MANAGEMENT**

**COURSE PREFIX: NTN      COURSE NUMBER: 321      CREDIT HOURS: 3**

**I. TITLE:** Principles of Food Science and Preparation

**II. COURSE DESCRIPTION AND PREREQUISITE(S):**

Emphasis on understanding and applying the basic physical and chemical properties of foods. Development of skills in recipe interpretation, cooking methods, food safety, and sanitation. Lecture, two hours; laboratory, three hours.

**Prerequisite(s):** None

**III. COURSE OBJECTIVES:**

The student will be able to

- A. demonstrate basic food preparation skills;
- B. evaluate food quality and acceptability through sensory methods;
- C. be knowledgeable of functions of ingredients in food;
- D. understand physical and chemical changes that occur in food during preparation and storage;
- E. demonstrate understanding of food safety and sanitation issues; be aware of the meanings of organic, local, natural, and sustainable as they relate to food;
- F. be knowledgeable of government regulations relating to food;
- G. understand relationship of cultural and ethnic issues to food choices; and
- H. develop effective and appropriate work habits and competence in food preparation.

**IV. CONTENT OUTLINE:**

- A. Food Choices and Availability
- B. Food Regulations and Standards
- C. Methods of Heat Transfer
- D. Food Science Principles
- E. Preparation, Storage, and Composition of Various Food Groups

**V. INSTRUCTIONAL ACTIVITIES:**

- A. Lecture and Discussion
- B. Demonstrations
- C. Laboratory Activities: Food Preparation
- D. Audio Visual Materials
- E. Computer Assignments and quizzes

**VI. FIELD, CLINICAL, AND/OR LABORATORY EXPERIENCES:**

Laboratory experiences are a very important part of this class and contribute 1/3 of the grade.

#### VII. TEXT(S) AND RESOURCES:

A. Brown, Amy (2011). Understanding Food: Principles and Preparation. 4th edition. Wadsworth CENGAGE Learning.

B. Walter, Janelle M. and Beathard, Karen.(2011). Lab Manual for Understanding Food, Principles and Preparation. Wadsworth CENGAGE Learning.

C. Laboratory equipment; food used in laboratory activities, various web sites and commercial materials will also be used.

#### VIII. EVALUATION AND GRADING PROCEDURES:

**Grading Scale: 90%-100%=A; 80%-89%=B; 70-79%=C; 60%-69%=D; < 60%=E**

Exams (3 exams at 100 pts each)	300 points
Final Exam	150 points
Laboratory Grade	390 points
<u>Food Safety Quizzes</u>	<u>20 points</u>
<b>TOTAL POINTS POSSIBLE:</b>	<b>860 points</b>

Each Laboratory Grade (13 in total) will be comprised of the following:

- 10 pts: Participation as a team member in the lab group, including performance in following directions, quality of foods produced, cooperation within your group, and clean-up of your space.
- 10 pts: Thoughtful evaluation of foods; accuracy in completion of tables and questions in lab book and class discussion.
- 10 pts: Pre lab quizzes **must be completed before coming to each lab session**. The quizzes will be online and listed in Canvas under each week's module. Lab quizzes will be made unavailable at midnight on the day before lab days. Please read your lab assignment and use your lab book and textbook to answer the pre-lab quizzes.

Lab books and written evaluation of the products made in lab will be **due, in my office, by noon on the day after the completion of the lab**. Lab books will not be graded if they are not received by the deadline unless arrangements have been made with the instructor. Missed labs cannot be made up.

Other learning activities may also be given with points assigned.

#### IX. ATTENDANCE POLICY:

Students are expected to conduct themselves in class in a manner that would be acceptable in the professional workplace. Professional ethics also includes a high level of respect to peers and the instructor. The student is responsible for notifying and discussing all absence or tardiness with the instructor at a time other than class. Zero points will be given if a student is

absent from class or lab, even if the absence is excused. Three (3) or more unexcused absences will result in failure of the course. Students are expected to adhere to the MSU Attendance Policy outlined in the current MSU *Bulletin*.

**Students are expected to be in class on time.**

- Students are expected to put away cell phones during class discussions and lecture. No texting, etc. will be allowed in class. It is distracting to you and to me!
- Make-up exams will be given only for university excused absences or other unavoidable absences as approved by the instructor and at a time to be determined by the instructor.
- Attendance for lectures and labs is expected. Labs cannot be made up and absence from labs will be reflected in the lab grade.

**X. ACADEMIC HONESTY POLICY:**

Murray State University takes seriously its moral and educational obligation to maintain high standards of academic honesty and ethical behavior. Instructors are expected to evaluate students' academic achievements accurately, as well as ascertain that work submitted by students is authentic and the result of their own efforts, and consistent with established academic standards. Students are obligated to respect and abide by the basic standards of personal and professional integrity.

**Violations of Academic Honesty include:**

**Cheating** - Intentionally using or attempting to use unauthorized information such as books, notes, study aids, or other electronic, online, or digital devices in any academic exercise; as well as unauthorized communication of information by any means to or from others during any academic exercise.

**Fabrication and Falsification** - Intentional alteration or invention of any information or citation in an academic exercise. Falsification involves changing information whereas fabrication involves inventing or counterfeiting information.

**Multiple Submission** - The submission of substantial portions of the same academic work, including oral reports, for credit more than once without authorization from the instructor.

**Plagiarism** - Intentionally or knowingly representing the words, ideas, creative work, or data of someone else as one's own in any academic exercise, without due and proper acknowledgement.

Instructors should outline their expectations that may go beyond the scope of this policy at the beginning of each course and identify such expectations and restrictions in the course syllabus. When an instructor receives evidence, either directly or indirectly, of academic dishonesty, he or she should investigate the instance. The faculty member should then take appropriate disciplinary action.

Disciplinary action may include, but is not limited to the following:

- 1) Requiring the student(s) to repeat the exercise or do additional related exercise(s).
- 2) Lowering the grade or failing the student(s) on the particular exercise(s) involved.
- 3) Lowering the grade or failing the student(s) in the course.

**If the disciplinary action results in the awarding of a grade of E in the course, the student(s) may not drop the course.**

Faculty reserve the right to invalidate any exercise or other evaluative measures if substantial evidence exists that the integrity of the exercise has been compromised. Faculty also reserve the right to document in the course syllabi further academic honesty policy elements related to the individual disciplines.

A student may appeal the decision of the faculty member with the department chair in writing within five working days. Note: If, at any point in this process, the student alleges that actions have taken place that may be in violation of the Murray State University Non-Discrimination Statement, this process must be suspended and the matter be directed to the Office of Institutional Diversity, Equity and Access. Any appeal will be forwarded to the appropriate university committee as determined by the Provost.

## **XI. NON-DISCRIMINATION POLICY AND STUDENTS WITH DISABILITIES:**

### Policy Statement

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact the Executive Director of Institutional Diversity, Equity and Access, 103 Wells Hall. 270-809-3155 (voice), 270-809-3361 (TDD).

### Students with Disabilities

Students requiring special assistance due to a disability should visit the Office of Student Disability Services immediately for assistance with accommodations. For more information, students should contact the Office of Student Disability Services, 423 Wells Hall, Murray, KY 42071. 270-809-2018 (voice), 270-809-5889 (TDD).

## **XII. This course addresses the following Core Knowledge requirements for accreditation by the Accreditation Council for Education in Nutrition and Dietetics:**

KRD 3.2 The curriculum must include the role of environment, food, nutrition and lifestyle choices in health promotion and disease prevention.

KRD 4.2 The curriculum must include content related to quality management of food and nutrition services.

KRD 4.3 The curriculum must include the fundamentals of public policy, including the legislative and regulatory basis of dietetics practice.

KRD 5.1 The food and food systems foundation of the dietetics profession must be evident in the curriculum. Course content must include the principles of food science and food systems, techniques of food preparation and application to the development, modification and evaluation of recipes, menus and food products acceptable to diverse groups.

