



## North Central State College

### MASTER SYLLABUS

2025-2026

- A. Academic Division: Health Sciences
- B. Discipline: Science
- C. Course Number and Title: BIOL1101 Nutrition
- D. Assistant Dean: Heidi Kreglow, PT
- E. Credit Hours: 2
- F. Prerequisites: None
- G. Last Course/Curriculum Revision Date: Fall 2024      Origin date: 03/10/2011
- H. Textbook(s) Title:

Open Education Resource (available for download or view)

*Introduction to Nutrition*

- Authors: Anonymous author (but based on the Zimmerman & Snow text)
- Copyright Year: 2025
- Edition: 1<sup>st</sup>
- ISBN:
- OER Link:

[https://med.libretexts.org/Bookshelves/Nutrition/An\\_Introduction\\_to\\_Nutrition\\_\(Zimmerman\)](https://med.libretexts.org/Bookshelves/Nutrition/An_Introduction_to_Nutrition_(Zimmerman))

- I. Workbook(s) and/or Lab Manual: None
- J. Course Description: This is an introductory course to the principles of nutrition and its relationship to health. Included are practical applications in daily life as well as nutritional assessments of individuals. Emphasis is on essential nutrients, their supply and function, as related to an individual's well-being. Health promotion and chronic disease are explored in relation to today's society. (TAG # OHL016)
- K. College-Wide Learning Outcomes

| College-Wide Learning Outcomes         | Assessments - - How it is met & When it is met |
|----------------------------------------|------------------------------------------------|
| Communication – Written                |                                                |
| Communication – Speech                 |                                                |
| Intercultural Knowledge and Competence |                                                |
| Critical Thinking                      |                                                |
| Information Literacy                   |                                                |
| Quantitative Literacy                  |                                                |

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

| Outcomes                                                                                                                                                           | Assessments – How it is met & When it is met                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. Explain the importance of nutrition in maintaining a state of wellness throughout the life cycle.                                                               | Class Assignments & Discussion (*), Exam Questions (*)<br>Midterm                     |
| 2. Identify the basic physiology, dietary requirements and food sources of carbohydrates, proteins, fats, vitamins and minerals. Also identify functions of water. | Class Assignments & Discussion (*), Oral Presentations, Exam Questions (*)<br>Midterm |
| 3. Explain how food intake has a significant relationship to health and the role of diet in health promotion, chronic diseases and disease prevention.             | Class Assignments, Projects & Discussion (*), Exam Questions (*)<br>End of term       |
| 4. Evaluate diet patterns and health risks associated with an excess or deficiency of nutrients.                                                                   | Class Assignments, Projects & Discussion (*), Exam Questions (*)<br>End of term       |
| 5. Discuss the influence of social, cultural, religious and psychological factors on food intake.                                                                  | Class Assignments & Discussion (*), Exam Questions (*)<br>End of term                 |

M. Recommended Grading Scale:

| NUMERIC | GRADE | POINTS | DEFINITION    |
|---------|-------|--------|---------------|
| 93–100  | A     | 4.00   | Superior      |
| 90–92   | A-    | 3.67   | Superior      |
| 87–89   | B+    | 3.33   | Above Average |
| 83–86   | B     | 3.00   | Above Average |
| 80–82   | B-    | 2.67   | Above Average |
| 77–79   | C+    | 2.33   | Average       |
| 73–76   | C     | 2.00   | Average       |
| 70–72   | C-    | 1.67   | Below Average |
| 67–69   | D+    | 1.33   | Below Average |
| 63–66   | D     | 1.00   | Below Average |
| 60–62   | D-    | 0.67   | Poor          |
| 00–59   | F     | 0.00   | Failure       |

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.\* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

- Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

**Important information regarding College Procedures and Policies can be found on the syllabus supplement located at**

**<https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf>**



North Central State College  
SYLLABUS ADDENDUM

**Academic Division:** Health Sciences **Discipline:** Science  
**Course Coordinator:** Dr. Janet Boeckman  
**Course Number:** BIOL 110- 920A; 921A; 924A **Course Title:** Nutrition  
**Semester / Session:** Fall 2026 **Start / End Date:** A = 08/17/2026 thru 10/09/2026

**Instructor Information**

**Name:** Dr. Patricia Ratliff **Credentials:** Doctorate of Science (DSc)  
in Health Promotion & Wellness  
**Phone Number:** 419-755-4805 (Health Science  
Division) **E-Mail Address:** [pratliff@ncstatecollege.edu](mailto:pratliff@ncstatecollege.edu)  
**Office Location:** Off Campus (26 Health  
Sciences – by appointment) **Office Hours:** By Appointment via Zoom

**I. Topical Timeline / Course Calendar (Subject to Change):**

| Weeks | Topics                                                         | Assignments                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Due Date                                                         |
|-------|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 1     | Introduction to class, Nutrition and Health                    | a. Readiness Checklist Assignment<br>b. What you “already know/want to know” Assignment<br>c. Discussion Board (DB) #1: Learning Objective: Explore the importance of Nutrition and states of wellness.<br>d. Quiz #1                                                                                                                                                                                                                                                           | Thurs<br>Thurs<br>Thurs/Sun<br>(Note: 2 due dates for DB)<br>Sun |
| 2     | Food Selection and Food Safety; Nutrition and Public Health    | a. Discussion Board (DB) #2: Learning Objective: Describe how religion, ethnicity, culture and other contributing influences may affect dietary choices and habits.<br>b. Quiz #2                                                                                                                                                                                                                                                                                               | Thurs/Sun<br><br>Sun                                             |
| 3     | Digestion, Absorption, and Metabolism of Food                  | a. One-Minute Check-In Assignment<br>b. Discussion Board (DB) #3: Learning Objective: Explain digestion and absorption of nutrients in the body.<br>c. Cross-Cultural Nutrition Interview Assignment - Objective: Conduct an interview with a person from a different religious, ethnic, or cultural background than your own. The purpose of this assignment is to explore how their background influences their dietary choices, health, and nutritional needs.<br>d. Quiz #3 | Thurs<br>Thurs/Sun<br><br>Sun<br><br>Sun                         |
| 4     | Carbohydrates, Lipids, Proteins, Vitamins, Minerals, and Water | a. Anonymous Mid-Term Class Evaluation<br>b. Discussion Board (DB) #4: Learning Objective: Describe macro & micro nutrients and their utilization in the body<br>c. Midterm Exam                                                                                                                                                                                                                                                                                                | Thurs<br>Thurs/Sun<br><br>FRIDAY                                 |

**Course Number:** BIOL 110- 920A; 921A; 924A  
**Semester / Session:** Fall 2026

**Course Title:** Nutrition  
**Start / End Date:** 08/17/2026 thru 10/09/2026

| Weeks | Topics                                                             | Assignments                                                                                                                                                                                                                                                                        | Due Date                            |
|-------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 5     | Nutrition Over the Lifespan: Childhood, Pregnancy, Adult Years     | a. Discussion Board (DB) #5: Learning Objective: Describe practical/economic approaches to shopping & food preparation with attention to nutrient-dense foods.<br>b. Quiz #4                                                                                                       | Thurs/Sun<br><br>Sun                |
| 6     | Practical and Economic Approaches to Shopping and Food Preparation | a. Recall-Summarize-Question-Connect-Comment Assignment<br>b. Discussion Board (DB) #6: Learning Objective: Describe nutritive needs during different phases of life.<br>c. Quiz #5                                                                                                | Thurs<br><br>Thurs/Sun<br><br>Sun   |
| 7     | The complexity of Obesity, Genetically Modified Foods (GMO)        | a. Discussion Board (DB) #7: Learning Objective: Discuss the significance of Genetically Modified Foods (GMOs).<br>b. Back Pack Project Assignment – Objective: This project is designed to challenge your problem-solving skills while considering real-world food access issues. | Thurs/Sun<br><br>Sun                |
| 8     | Fad Diets                                                          | a. Final TakeAway Reflection Assignment<br>b. Discussion Board (DB) #8: Learning Objective: Compare & contrast diet fads advertised in the media related to effectiveness & safety.<br>c. Final Exam                                                                               | Thurs<br>Thurs/FRIDAY<br><br>FRIDAY |

## II. Grading and Testing Guidelines:

### Final Grade Calculation

| Activity                                               | Qty | Points                                                                     | Percentage                                                 |
|--------------------------------------------------------|-----|----------------------------------------------------------------------------|------------------------------------------------------------|
| Readiness Checklist Assignment (wk 1)                  | 1   | Complete/Incomplete                                                        | These 6 assignments contribute toward 5% total in category |
| What you “already know/want to know” Assignment (wk 1) | 1   | Complete/Incomplete                                                        |                                                            |
| One-Minute Check-In Assignment (wk 3)                  | 1   | Complete/Incomplete                                                        |                                                            |
| Anonymous Midterm Class Eval (wk 4)                    | 1   | Complete/Incomplete                                                        |                                                            |
| Recall-Summarize-Question-Connect-Comment Asgmt (wk 6) | 1   | Complete/Incomplete                                                        |                                                            |
| Final TakeAway Reflection Assignment (wk 8)            | 1   | Complete/Incomplete<br>Each scored<br>1 pt = Complete<br>0 pt = Incomplete |                                                            |
| Discussion Board Assignments (weeks 1-8)               | 8   | 10 points each<br>(80 points total)                                        | 20%                                                        |
| Quizzes (weeks 1,2,3,5,6)                              | 5   | 10 points each<br>(50 points total)                                        | 10%                                                        |
| Cross-Cultural Nutrition Interview Assignment (wk 3)   | 1   | 25 points                                                                  | ½ of 45%<br>(22.5%)                                        |
| Back Pack Assignment (wk 7)                            | 1   | 25 points                                                                  | ½ of 45%<br>(22.5%)                                        |
| Midterm Exam (wk 4)                                    | 1   | 15 points                                                                  | 10%                                                        |
| Final Exam (wk 8)                                      | 1   | 15 points                                                                  | 10%                                                        |
| <b>Total:</b>                                          |     |                                                                            | <b>100%</b>                                                |

### 1. Week #1 Overview:

- Readiness Checklist Assignment

- b. What you “already know/want to know” Assignment
- c. Overview Learning Resources
  - Read Chapter 1: Nutrition and You – In this chapter, we provide an overview of nutrition as an evidence based science and explore the concepts of health, wellness, and disease. We also provide an introduction to the different types of nutrients, health factors, personal health assessment, and the concept of sustainable food systems.
  - Read Chapter 2: Achieving a Healthy Diet - In this chapter, we explore the tools you can use to achieve a healthy diet, as well as important nutrition concepts like balance and moderation.
- d. Discussion Board #1: Learning Objective: Explore the importance of Nutrition and states of wellness.
- e. Quiz #1
- 2. Week #2 Overview:**
  - a. Overview Learning Resources
    - Read Chapter 3: Nutrition and the Human Body– Because we know that you may not have a background in biology, we start with a tour through the human body, from the single cell to the full organism, we set up for a discussion about the processes of digestion and absorption, followed by explorations of the other organ systems. After that, we discuss the concept of energy and calories. We also discuss some disorders and diseases related to nutritional health.
    - Read Chapter 4: Carbohydrates - In this Chapter we explore the many types of carbohydrates, including their functions. We also take a look at diabetes and at sugar substitutes.
  - b. Discussion Board #2: Learning Objective: Describe how religion, ethnicity, culture and other contributing influences may affect dietary choices and habits.
  - c. Quiz #2
- 3. Week #3 Overview:**
  - a. One-Minute Check-In Assignment
  - b. Overview Learning Resources
    - Read Chapter 5: Lipids - In this chapter, we look at the types, structure, and roles of lipids, and we explain the different types of cholesterol in the blood. We also explore topics of interest such as omega-3 and omega-6 fatty acids and trans fats.
    - Read Chapter 6: Proteins - In this chapter, we cover the structure and roles of protein, and explore the consequences of getting too little or too much protein in your diet. Tips for getting the right amount and quality of protein, as well as a look at special populations, such as the elderly and athletes, are also covered.
  - c. Discussion Board #3: Learning Objective: Explain digestion and absorption of nutrients in the body.
  - d. Cross-Cultural Nutrition Interview Assignment - Objective: Conduct an interview with a person from a different religious, ethnic, or cultural background than your own. The purpose of this assignment is to explore how their background influences their dietary choices, health, and nutritional needs.
  - e. Quiz #3
- 4. Week #4 Overview:**
  - a. Anonymous Mid-Term Class Evaluation
  - b. Overview Learning Resources
    - Read Chapter 7: Lipids Nutrients Important to Fluid and Electrolyte Balance - In Chapter 7, we look at the nutrients important to fluid and electrolyte balance, including water, sodium, chloride, and potassium. We also look at sports drinks, caffeinated beverages, and alcohol.
    - Read Chapter 8: Nutrients Important as Antioxidants - In Chapter 8, nutrients important as antioxidants are explored, starting with an explanation of what oxidation and antioxidants are, then looking at vitamins E, C, and A, selenium, and phytochemicals.
  - c. Discussion Board #4: Learning Objective: Describe macro & micro nutrients and their utilization in the body
  - d. Midterm Exam
- 5. Week #5 Overview:**
  - a. Overview Learning Resources
    - Read Chapter 9: Nutrients Important for Bone Health - In this chapter, we delve into nutrients important for bone health. First, we explore the structure and function of bones, and then calcium, vitamin D, phosphorus, magnesium, fluoride, and vitamin K. A look at osteoporosis and at supplements rounds out this chapter.
    - Read Chapter 10: Nutrients Important for Metabolism and Blood Function- In this chapter 10, we look at the nutrients important in energy metabolism and blood health, by first looking at blood and at metabolism, and then discussing the B vitamins, vitamin K, magnesium, iron, zinc, and other micronutrients. We also explore iron-deficient anemia and iron toxicity.

- Read Chapter 11: Energy Balance and Body Weight - In this chapter, we take a look at the obesity epidemic and eating disorders—the extremes of energy imbalance—and we look at evidence-based recommendations for maintaining a healthy weight. You will learn how to assess body weight and fatness and learn that it is not only society and environment that play a role in body weight and fatness, but also physiology, genetics, and behavior—and that all of them interact. We will also discuss the health risks of being underweight and overweight, learn evidence-based solutions to maintain body weight at the individual level, and assess the current state of affairs of combating the obesity epidemic in the United States.
- b. Discussion Board #5: Learning Objective: Describe practical/economic approaches to shopping & food preparation with attention to nutrient-dense foods.
- c. Quiz #4
- 6. **Week #6 Overview:**
  - a. Recall-Summarize-Question-Connect-Comment Assignment
  - b. Overview Learning Resources
    - Read Chapter 12: From Pregnancy to the Toddler Years - This chapter is the first of two that exploring nutrition through the life cycle and it looks at pregnancy through the toddler years. Topics include pregnancy, breastfeeding, introducing solid foods, and nutrition during the toddler years. In this chapter and the next, we will explore how the dietary decisions we make affect our health and wellness throughout the life cycle. We begin by examining the developmental changes that occur during pregnancy, infancy, and the toddler years, and how nutritional choices affect those changes. From pregnancy through the toddler years, children are entirely dependent on parents or caregivers for nutrients. Parents also help to establish a child's eating habits and attitudes toward food. So, adults must be mindful of the choices they make and how those choices influence a young child's development, health, and overall well-being.
    - Read Chapter 13: From Childhood to the Elderly Years - In this chapter, we explore the tools you can use to achieve a healthy diet, as well as important nutrition concepts like balance and moderation. In this Chapter. we continue to explore nutrition through the life cycle, this time looking at childhood to the elderly years.
  - c. Discussion Board #6: Learning Objective: Describe nutritive needs during different phases of life.
  - d. Quiz #5
- 7. **Week #7 Overview:**
  - a. Overview Learning Resources
    - Read Chapter 14: Food Politics and Perspectives - In this chapter, food politics, sustainability, the food industry, food security, and diets from around the world are explored.
    - Read Chapter 15: Achieving Optimal Health - Wellness and Nutrition - In Chapter 15, we look at a number of topics of interest to students: diet trends, food supplements and food replacements, fitness, chronic diseases, and food safety. Also included in this chapter are tips for living a sustainable lifestyle, and information about careers in nutrition.
  - b. Discussion Board #7: Learning Objective: Discuss the significance of Genetically Modified Foods (GMOs).
  - c. Back Pack Project Assignment – Objective: This project is designed to challenge your problem-solving skills while considering real-world food access issues.
- 8. **Week #8 Overview:**
  - a. Final TakeAway Reflection Assignment
  - b. Overview Learning Resources
    - Review Learning Resources for Final Exam
  - c. Discussion Board #8: Learning Objective: Compare & contrast diet fads advertised in the media related to effectiveness & safety.
  - d. Final Exam

### III. **Examination Policy:**

#### 1. **Excused Absences for Examinations**

The following are acceptable reasons for which a student may be excused from taking an examination as scheduled, with appropriate documentation:

- a. Hospitalization (documented verification required)
- b. Death in the immediate family (documented verification required)
- c. Personal illness or illness of an immediate family member (doctor's excuse required)

#### 2. **Student Responsibility for Missed Examinations**

A student who misses an examination for any reason must contact the instructor **within 2 days** of the missed exam. Failure to do so will result in a **zero** for the examination.

- a. Students who receive an **excused absence** are required to reschedule and complete the examination. Failure to complete the rescheduled exam will result in a zero.
- b. The rescheduled exam date and time will be determined on a **case-by-case basis** in coordination between the student and the instructor.

**3. Unscheduled (Pop) Quizzes**

No makeup opportunities will be provided for missed **unscheduled quizzes** (e.g., pop quizzes).

**4. Examination Scheduling and Submission**

Examinations are administered according to the course calendar. Exams are posted on **Canvas** and must be submitted by the scheduled due date and time (e.g., 11:59 PM) listed on the Tentative Course Calendar.

**There is no grace period for late exam submissions.**

**5. Academic Honesty**

Students are expected to adhere to academic honesty standards during examinations. Exams must be completed **independently**, without the use of notes, textbooks, or other unauthorized materials.

Refer to the **Academic Misconduct** section of the Syllabus Supplement for additional information.

**6. Time Limits and Accommodations**

Exams and quizzes are timed. Extended time will be provided only for students who submit official documentation from the **Coordinator of Disability Services**.

**IV. Class Attendance and Homework Make-Up Policy:**

**1. Course Format and Participation**

This is a fully online course with **no mandatory class meetings**. Active participation in the asynchronous learning environment is required to successfully meet course objectives. All course outcomes are achieved through a combination of learning activities and formative assessments, including guided reading assignments, textbook activities (Open Educational Resources—OER), internet- and text-based videos, discussion boards, and related instructional materials.

**2. Enrollment Verification and Attendance**

Failure to submit required assignments or demonstrate verified participation within the **first week of the course** may result in an **administrative drop**. To remain enrolled, students must demonstrate ongoing participation, such as weekly access to the Learning Management System (Canvas), completion of assigned coursework, and engagement in course activities. The instructor will monitor student activity in Canvas, including logins, assignment and quiz completion, and discussion board participation.

**3. Assessment of Course Outcomes**

Achievement of course learning outcomes is evaluated through topic quizzes, a midterm exam, a final exam, a Cross-Cultural Interview paper, and the Back Pack assignment.

**4. Student Responsibility and Communication**

Students are responsible for contacting the instructor to seek clarification or request modifications (when appropriate on an individual basis) regarding attendance, homework, and course assignments prior to the scheduled due date and time. Early and proactive communication is required. No makeup opportunities will be provided once an assignment's due date and time have passed, unless prior arrangements have been approved.

**5. Homework Assignments & Topic Quizzes—refer to Tentative Class Schedule for assignments**

- Assignment and quizzes will be posted within the Topic Modules on Canvas. The student is responsible for requesting clarification of assignments.
- Assignments are submitted on Canvas by the time (e.g. 5:00PM or 11:59 PM) on the published due date. Occasionally the posted due date may change due to Holiday or School calendar, so be sure to check for updates.
- Assignments are available on Canvas, so there is no need to make-up homework.

**6. Homework Assignments & Topic Quizzes**

Refer to the Tentative Class Schedule for specific assignments and due dates.

- Assignments and quizzes are posted within the **Topic Modules** on Canvas. Students are responsible for reviewing instructions carefully and requesting clarification as needed.
- All assignments must be submitted through **Canvas** by the posted due date and time (e.g., 5:00 PM or 11:59 PM). Due dates may occasionally change due to holidays or adjustments to the school calendar, so students should regularly check Canvas for updates.
- Because assignments are available online in Canvas, **make-up homework is not provided**.

**7. Interview Paper and Back Pack Assignment**

Detailed assignment guidelines, expectations, and grading criteria for the Interview Paper and Back Pack Assignment are provided in the **Assignments** section of Canvas.

**8. Late Assignment Policy** Late assignments will be handled as follows:

- Up to **10% of the possible points** will be deducted for assignments submitted late but **within 24 hours of the posted due date/time** (e.g., due at 11:59 PM the day following the due date). After the initial 24-hour period, **an additional 10% deduction per day** may be applied until the assignment is submitted. Assignments not submitted within **two weeks** of the posted due date will receive a **zero** unless special arrangements have been made with the instructor.
- Failure to complete assignments and quizzes will **negatively impact your overall course grade**.
- If you anticipate difficulty meeting a deadline, **early communication is strongly encouraged**. Extensions may be granted on a **case-by-case basis** at the instructor's discretion. Unless prior arrangements are made, assignments submitted more than **two weeks after the posted deadline** will receive a **zero**.
- **Note:** Technical issues or malfunctions are **not automatically accepted** as an excuse for late work. Part of success in an online course—and as a professional—is planning ahead and being prepared.

**9. General Turnaround Time for Graded Work**

- Grades and feedback (when warranted) will be posted within **7 days** of the assignment due date.
- If grading will extend beyond the 7-day timeframe, a notification will be posted in **Canvas** to keep students informed.

**V. Classroom Expectations:**

**1. Course Environment and Expectations**

This is an online course, and the Canvas Learning Management System (LMS) serves as our classroom. Students are expected to complete all assigned learning activities, including reading assignments, textbook activities, homework assignments, topic quizzes, discussion board activities, and exams.

**2. Discussion Board Etiquette and Professionalism**

Discussions may include ethical or sensitive topics that can lead to a variety of perspectives. Students are expected to remain open-minded and respectful of differing viewpoints. Discourteous or disrespectful behavior in discussion board posts will not be tolerated. All discussion posts should be written using correct grammar, spelling, and complete sentences.

**3. Student Conduct Policy**

Refer to the Syllabus Supplement for additional information regarding student expectations and conduct, including the Code of Student Conduct.