



## Hunan University NUTR32: Principles of Nutrition

**Professor:** To be announced

**Total contact hours:** 54 hours

**Credit:** 4

### *Course Description*

This course covers following topics: nutritive value of foods from the standpoint of newer scientific investigations; nutritional requirements for normal human beings; selection of an optimal diet for health; present-day problems in nutrition; recent trends in dietary habits. This course offers an understanding of basic nutrition based on the principles of chemistry and molecular biology. Students will learn how nutrition influences people's health and well-being, and they will have an opportunity to apply these principles to an assessment of their own diet practices.

### *Textbook Information*

Understanding Nutrition, 15th Edition, by Eleanor Noss Whitney, Sharon Rady Rolfes Publisher: Cengage Learning.

ISBN10: 1337392693.

### *Reference Reading*

Essentials of Human Nutrition authored by Jim Mann, A. Stewart Truswell, OUP Oxford

ISBN: 0199566348

### *Grading*

- |              |      |
|--------------|------|
| ● Attendance | 10 % |
| ● Quizzes    | 20%  |
| ● Discussion | 10%  |
| ● Midterm    | 25%  |
| ● Final Exam | 35%  |



A+ 96-100	A 90-95	A- 85-89
B+ 82-84	B 78-81	B- 75-77
C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	

## ***Course Schedule***

The course has 24 class sessions in total. All sessions are 2 hours and 15 minutes in length.  
Note: the course outline and required readings are subject to change.

### Class 1:

Introduction to the course

An Overview of Nutrition.

Highlight 1: Nutrition Information and Misinformation.

### Class 2:

Planning a Healthy Diet.

Highlight 2: Vegetarian Diets.

### Class 3:

Digestion, Absorption and Transport.

Highlight 3: Common Digestive Problems.

### Class 4:

The Carbohydrates: Sugars, Starches and Fibers.

Highlight 4: Carbs, kCalories and Controversies.

### Class 5:

The Carbohydrates: Sugars, Starches and Fibers. (Cont.)

Highlight 4: Carbs, kCalories and Controversies.

Discussion

### Class 6:

The Lipids: Triglycerides, Phospholipids and Sterols.

Highlight 5: High-Fat Foods -- Friend or Foe?

### Class 7:

Protein: Amino Acids.

Highlight 6: Nutritional Genomics.

Quiz 1

### Class 8:

Energy Metabolism.

Highlight 7: Alcohol in the Body.



Class 9:

Energy Balance and Body Composition.

Highlight 8: Eating Disorders.

Class 10:

Review and Midterm

Class 11:

Weight Management: Overweight, Obesity and Underweight.

Highlight 9: The Latest and Greatest Weight-Loss Diet -- Again.

Class 12:

The Water-Soluble Vitamins: B Vitamins and Vitamin C.

Highlight 10: Vitamin and Mineral Supplements.

Class 13:

The Fat-Soluble Vitamins, A, D, E and K.

Highlight 11: Antioxidant Nutrients in Disease Prevention.

Class 14:

Water and the Major Minerals.

Highlight 12: Osteoporosis and Calcium.

Class 15:

The Trace Minerals.

Highlight 13: Phytochemicals and Functional Foods.

Discussion

Class 16:

Fitness: Physical Activity, Nutrients and Body Adaptations.

Highlight 14: Supplements as Ergogenic Aids.

Class 17:

Life Cycle Nutrition: Pregnancy and Lactation.

Highlight 15: Fetal Alcohol Syndrome.

Class 18:

Life Cycle Nutrition: Pregnancy and Lactation. (Cont.)

Highlight 15: Fetal Alcohol Syndrome.

Quiz 2

Class 19:

Life Cycle Nutrition: Infancy, Childhood and Adolescence.

Highlight 16: Childhood Obesity and the Early Development of Chronic Diseases.



Class 20:

Life Cycle Nutrition: Adulthood and the Later Years.

Highlight 17: Nutrient-Drug Interactions.

Discussion

Class 21:

Diet and Health.

Highlight 18: Complementary and Alternative Medicine.

Class 22:

Consumer Concerns About Foods and Water.

Highlight 19: Food Biotechnology.

Class 23:

Hunger and the Global Environment.

Highlight 20: Environmentally Friendly Food Choices.

Class 24:

Final Exam

### ***Attending Policy***

Regular and prompt attendance is required. Under ordinary circumstances, you may miss two times without penalty. Each absence over this number will lower your course grade by a third of a letter and missing more than five classes may lead to a failing grade in the course. Arriving late and/or leaving before the end of the class period are equivalent to absences.

### ***Policy on "Late Withdrawals"***

In accordance with university policy, appeals for late withdrawal will be approved ONLY in case of medical emergency and similar crises.

### ***Academic Honesty***

Hunan University expects all students to do their own work. Instructors will fail assignments that show evidence of plagiarism or other forms of cheating, and will also report the student's name to the University administration. A student reported to the University for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

### ***General Expectations:***

Students are expected to:

- Attend all classes and be responsible for all materials covered in class and otherwise



assigned;

- Complete the day's required reading and assignments before class;
- Review the previous day's notes before class and make notes about questions you have about the previous class or the day's reading;
- Participate in class discussions and complete required written work on time;
- Refrain from texting, phoning or engaging in computer activities unrelated to class during the class period;
- While class participation is welcome, even required, you are expected to refrain from private conversations during the class period.

### ***Special Needs or Assistance***

Please contact the Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material. Our goal is to help you learn, not to penalize you for issues which mask your learning.