

SOUTHERN MAINE COMMUNITY COLLEGE
Course Syllabus
NUTR 110
Normal Nutrition and Nutrition Lab

Instructor: Jennifer J. Francis, MPH, RD/LD

Office hours: By phone only, (413) 454-4385

Contact Hours: 45 (online)

4 Credits

Course Description

Prerequisites: ENG-080, ENG-090, and MAT-020

This course provides an introduction to the field of nutrition which includes the study of carbohydrates, fats, proteins and other essential nutrients. Students will also gain a workable knowledge of digestion, absorption, metabolism, life cycle nutrition, nutrition guidelines, and nutrition programs. The concepts covered in the lecture course are explored in greater detail during the lab time using a variety of activities including food experiments, anthropometric measurement, and nutrient analysis and enhanced problem sets.

NUTR 110 Course Objectives

Upon completion of this course, the students will be able to demonstrate the nature and functions of carbohydrates, proteins, fats, vitamins, minerals, and water. They will also be aware of the role these nutrients play in metabolism and energy balance, as well as digestion and absorption. They will also be able to discuss why specific nutrient recommendations are translated into guidelines, and what foods should be included in the diet to meet the guidelines. Students will be able to identify cultural and life cycle influences that affect nutritional status and food choices.

Topical Outline of Instruction

- Perspectives on nutrition; professionals who deal with nutrition;
- Digestion, Absorption, and Metabolism;
- Nutrition Programs and Guidelines;
- Food labels;
- Carbohydrates;
- Proteins;
- Fats (Lipids);
- Vitamins;
- Minerals;
- Water;
- Cultural influence on food choices and diet;
- Nutritional needs of pregnancy and infancy;
- Nutritional needs of childhood;
- Nutritional needs of adolescence;
- Nutritional needs of the elderly

Course Requirements

Homework; quizzes; tests, participation in the discussion board

Nutrition Lab Course Objectives:

After completing the course, the student will be able to:

1. Identify reliable sources of nutrition information;
2. Describe how the *Healthy People 2010* project is used to set goals for our national health and wellbeing, and to evaluate personal health choices based on Healthy People 2010 Objectives;
3. Distinguish between serving sizes and portion sizes, and describe how changing serving sizes in the American diet have affected the health of our nation.
4. Accurately record and analyze food intake;
5. Assess the adequacy of carbohydrates, proteins, fats, vitamins, minerals, and water in their diet;
6. Use a food label and nutrition facts panel to make wise food choices;
7. Evaluate media sources of information on current nutrition topics including low-carb diets, supplement use, fat replacers, vegetarian diets, genetically modified food, bovine growth hormone and food irradiation;

Topical Outline of Instruction:

- Critiquing popular nutrition information
- Healthy People 2010
- Food portions and diet planning
- Three day food record
- Food labels and merchandising
- Personal diet analysis project
- Evaluating carbohydrates in the diet
- Evaluating protein in the diet
- Evaluating fat in the diet
- Evaluating water, vitamins and minerals in the diet
- Consumer concerns about food

Course Requirements:

Activity reports, Personal Diet Analysis Project

Text, Tools, and/or Supplies

Understanding Normal and Clinical Nutrition, 10th edition, 2014;

Authors; Whitney, Cataldo and Rolfes;

Publishers: Cengage Learning;

Access to Diet Analysis Plus Software (available packaged with textbooks or in SMCC computer labs and Academic Achievement Center)

Note: Contact your instructor if you have any questions.

Student Evaluation and Grading

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| Homework | 25% |
| Discussion | 25% |
| Exams (midterm and final each worth 12.5%) | 25% |

Lab Evaluation and Grading:

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|--------------------------------|-----|
| Activity Reports | 15% |
| Personal Diet Analysis Project | 10% |

Course Grade:

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| A | 93 - 100 |
| A- | 90 - 92.9 |
| B+ | 87 - 89.9 |
| B | 83 - 86.9 |
| B- | 80 - 82.9 |
| C+ | 77 - 79.9 |
| C | 73 - 76.9 |
| C- | 70 - 72.9 |
| D+ | 67 - 69.9 |
| D | 63 - 66.9 |
| F | 0 - 62.9 |

Grades of I (Incomplete)

See student handbook for other academic policies.

End-of-Course Evaluation

In order to gain access to final course grades, students must complete evaluations for all courses. Students can now evaluate their SMCC courses online and anonymously by going to **Academics** on the SMCC homepage and choosing **Course Evaluations**. This feature is typically available the last two weeks of every class (in most cases, this will be the last two weeks of the semester).

Disability Statement

Southern Maine Community College is an equal opportunity/affirmative action institution and employer. For more information, please call 207-741-5798.

If you have a disability condition and wish to request accommodations in order to have reasonable access to the programs and services offered by SMCC, you must register with the disability services coordinator, Mark Krogman, who can be reached at 741-5629 (TDD 207-741-5667). There will be some documentation for your teachers that be supplied before accommodations can be given. Further information about services for students with disabilities and the accommodation process is available upon request at this number.

SMCC Pay-for-Print Policy

Students on campus can print 100 pages per semester for free. If you print over 100 pages, you will be charged 10 cents per page to your Beacon Bucks account. Left over pages will roll over to the following semester but will zero out at the end of the academic year. A pilot project tracking public printing has shown that this amount of free printing meets the needs of the vast majority of students. The College's pay-for-print system monitors printing on all public printers (i.e., those in general access labs, library printers, the LAC, and technology labs). Each time you log in to the system, the print station displays the remaining print quota. Once the printing quota has been exceeded, users will be charged \$0.10 per page on their Beacon Bucks accounts. Color printouts will be charged at 11-page units. This means each color printout will count as 11 pages toward the quota and cost \$1.10. Students can add money to their cards using a credit card online.

NUTR 110 Online Course Schedule

(see Due Date Calendar for Specific Due Dates)

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| Wk1 | Lecture- Chapter 1: An Overview of Nutrition Discussion- Food Choices |
| Wk 2 | Lecture- Chapter 2: Planning a Healthy Diet Discussion- Dietary Guidelines for Americans Lab- Critiquing Nutrition Information on the Web |
| Wk 3 | Lecture- Chapter 3: Digestion, Absorption and Transport Discussion- GIHealth.com Lab- Exploring MyPryamid.gov |
| Wk 4 | Lecture- Chapter 4: The Carbohydrates Discussion- Splenda.com Lab- Understanding Food Labels |
| Wk 5 | Lecture- Chapter 5: The Lipids Discussion- American Heart Association Guidelines Lab- Healthy People 2010 and Hypothesis Statements |
| Wk 6 | Lecture- Chapter 6: Protein and Amino Acids No Discussion Lab- Three Day Food Record and Activity Record |
| Wk 7 | Lecture- Chapter 7: Metabolism Chapter 8: Energy Balance and Body Composition Discussion- Metabolic Supplements Lab- Diet Analysis Plus Workshop |
| Wk 8 | MIDTERM EXAM!!! |
| Wk 9 | Lecture- Chapter 9: Weight Management Discussion- Seeking Acceptance Lab- Family Health Tree and Personal Health History |
| Wk 10 | Lecture- Chapter 10: Water Soluble Vitamins Discussion- Folic Acid Lab- Evaluating Carbohydrate Intake and Body Weight |
| Wk 11 | Lecture- Chapter 11: Fat Soluble Vitamins |

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| | <p>Discussion- Antioxidants</p> <p>Lab- Evaluating Protein Intake</p> |
| Wk 12 | <p>Lecture- Chapter 12: Water and the Major Minerals Chapter 13: The Trace Minerals</p> <p>Discussion- Fortification Scavenger Hunt</p> <p>Lab- Evaluating Fat Intake and Heart Disease Risk</p> |
| Wk13 | <p>Lecture- Chapter 14: Pregnancy and Lactation No Discussion</p> <p>Lab- Evaluating Vitamin, Mineral, and Water Intake and Bone Health</p> |
| Wk14 | <p>Lecture- Chapter 15: Childhood and Adolescence</p> <p>Discussion- School Lunch Makeover</p> <p>Lab- Project Essay Response, PROJECTS DUE!!!</p> |
| Wk15 | <p>Lecture- Chapter 16: Adulthood and the Later Years</p> <p>Discussion- Living to 100</p> <p>Lab- Biotechnology Interview</p> |
| Wk16 | FINAL EXAM!!! |
| Important! | <p>Homework for each week is due on Friday by midnight.</p> <p>Homework received on Saturday or Sunday will receive half credit. Homework will not be accepted after Sunday night.</p> |