NUTRITION 125 **Spring 2007**

CONCEPTS OF NUTRITION SCIENCE

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Appointments are not intended to be an obstacle; rather this allows us to talk without interruptions. If I'm not in when you call, please leave your name, message and your phone number and I'll return your call or email me. I am in much of the day so you may also stop by and see if I'm available.

Textbook:
Whitney, Eleanor N. & Rolfes, Sharon R., Understanding Nutrition, 10th Ed., Wadsworth, 2005.
Also required is Diet Analysis Plus - Online (Version 8.0) **pin code access** that accompanies the textbook.

Course Website: https://www.csbsju.edu/nutrition/courses/NUTR125/
Included on the website are study questions for each chapter/topic, images and graphs from lectures, handouts and other resources, sample quiz/test questions, copies of most assignment forms, and additional laboratory resources. You will need to log in with your CSB/SJU password to have access. Note: log in may take a couple of minutes so be patient, it does work. Check it out.

Course Description:
This course introduces the basic concepts of nutrition. The content includes: the functions of the major nutrients (carbohydrates, lipids, proteins, vitamins and minerals) and food sources of each. The principles of diet evaluation, nutritional assessment, energy balance, weight control, nutrition and fitness, and how food choices can enhance health, athletic performance, and reduce the risk of chronic disease are emphasized. Selected topics in protein quality, vegetarian diets, eating disorders, and food safety are explored. This course is a Natural Science Core course and meets all core guidelines; it is also the first course required for nutrition majors. The laboratory for the course is required in conjunction with lecture for all students enrolled.

Objectives:
Upon completion of the course the student will be able to:
1. Identify the major nutrients and their functions in the body.
2. List the diet and health recommendations for the American diet and provide the rationale behind "healthy" food choices.
3. Recognize the nutrient composition of foods and major food sources of nutrients, and the role of food in promotion of a healthy lifestyle.
4. Explain how energy is obtained from carbohydrates, protein, fats and alcohol.
5. Explain how food is digested and nutrients absorbed.
6. Analyze diets for nutritional adequacy.
7. Measure, calculate, and interpret body composition data.
8. Evaluate and interpret information presented in the media, food advertisements, articles, food labels, etc. Discriminate between misinformation and valid data and accurate information. Apply nutrition knowledge to make informed consumer decisions regarding food and nutrition-related products.
8. Explain how our culture influences our nutritional status; e.g. the impact of lifestyle, media, processed and fast foods, and society's image of the "ideal" body and the problems of eating disorders and obesity.
9. Explain the role of nutrition in achieving health and fitness, as well as, reducing the incidence of certain diseases, such as cancer, heart disease and diabetes.
10. Identify practices associated with proper and improper handling of food. Identify specific food-borne pathogens, the diseases and symptoms they cause, and appropriate means to prevent spread of these infectious agents
11. Identify and apply scientific research methods and concepts.
12. Begin to work effectively as a team member of a laboratory group.

Evaluation (Grades):
The Nutrition Department uses a point system for grading. Grades are **not** determined by a curve but rather by the total points **you** earn. You can use the table below to keep track of your grades.

	Possible Points	Your Points
Final Exam (Comprehensive)	150	
Exam I	100	
Exam II	100	
Quiz 1 ***There are 6 quizzes given, the lowest score is**	25	
Quiz 2 **automatically dropped.**	25	
Quiz 3	25	
Quiz 4	25	
Quiz 5	25	
Quiz 6	[25]	
Assignment 1: Personal Diet Analysis (Individual)	30	
Assignment 2: Vegan for a Day (Individual)	25	
Case Studies: Fat Soluble Vitamins (In Class Group)	10	
Five Minute Mysteries: Vitamins (In Class Group)	25	
Five Minute Mysteries: Minerals (In Class Group)	25	
Lab Report 1: Sub Lab ***There are 6 lab reports assigned, the**	25	
Lab Report 2 Glucose: **lowest score is automatically dropped.**	25	
Lab Report 3 Cholesterol:	25	
Lab Report 4: : Fitness	25	
Lab Report 5: Body Composition	25	
Lab Report 7: Iron	[25]	
Lab 6: Fast Food Activity	10	
Lab Quiz I	25	
Lab Quiz II	25	
Lab Graphing Assignment	25	
Total Points:	**800**	

- Six quizzes are scheduled during the semester. The lowest quiz score will be dropped and the top five quiz scores added to your grade.
- **There is no make-up for a missed quiz; if you miss a quiz, for any reason, it counts as the quiz being dropped.**
- Six lab reports are assigned during the semester. The lowest lab report score will be dropped and the top five lab report scores added to your grade.
- **If you are absent from lab when data collection occurs, this lab report counts as the lab report being dropped.** For example, if you miss lab the day fitness data collection occurs, the fitness lab report, due the next lab cycle, will be the lab report score dropped from your grade.

Grading:

Course Grade	Percentage	Total Points
A	**92 -100**	**> 736**
AB	**88 - 91**	**704-735**
B	**82 - 87**	**656-703**
BC	**78 - 81**	**624-654**
C	**72 - 77**	**576-623**
CD	**68 - 71**	**544-575**
D	**62 - 67**	**496-543**
F	**< 62**	**<495**

Policies:

Attendance

- The Nutrition Department follows the Attendance Policy stated in the college catalog. "*Students are required to attend all class meetings of courses for which they are registered. It is the student's responsibility to contact an instructor (preferably in advance) of a necessary absence. A student absent from class for any reason assumes the responsibility for making up work which has been missed. An instructor may fail a student if the instructor determines that unwarranted absences have earned the student a grade of "F", based on grading standards and attendance requirements defined in the course syllabus*."

- Students are permitted **two lecture absences** without any penalty. Any additional absences [beyond these 2] will result a **deduction of 10 points for each absence** from lecture.
- Students are permitted **one lab absence** without penalty [i.e. illness, family emergency, athletic competition, personal reasons]. Any additional absences [beyond this 1] will result in a **deduction of 20 points for each absence** from lab**.**

- Students may choose to *opt-out* of a lab for personal reasons without penalty. If, after reading through the lab manual the student feels that he or she would not be comfortable participating in a particular lab, he or she can choose to opt-out. The student should inform their lab instructor of their decision prior to their scheduled lab day/time. This lab will count as the lab report score being dropped.

- Class time will be spent on the most important concepts and most difficult topics.
- Class time provides an opportunity to examine applications or illustrations that are **not** in the book, so it is difficult to make up for missed classes. In addition, there will be in-class activities, which will be collected and graded. There is no make-up for missed in-class assignments.
- If you must miss class, it is your responsibility to obtain the notes and missed information from a classmate.

- **All reading assignments should be completed prior to lecture.**
- Be prepared to ask questions if you do not understand reading material.
- Please read over each assignment before completing it. If you have any questions or the need for clarification regarding the directions, please ask the instructor **prior to the due date**.
- If you have a question that has not been addressed in class, **please ask**.

Assignments:

- Instructions and forms needed for **Assignment 1: Personal Diet Analysis** and **Assignment 2: Vegan for a Day** are located on the course website on the Assignment page.
  https://www.csbsju.edu/nutrition/courses/NUTR125/assignments.htm
  They are in PDF format and easy to download and print in Adobe Acrobat.
  Contact the instructor if you have trouble accessing the assignment information.
- Remember that there may be as significant log-in time
- Assignments are designed to provide practice applying information.
- **All out-of-class assignments must be turned in by 5:00 p.m. on the due date to receive a grade, late assignments will not be accepted.**
- Assignments that consist of more than one page MUST be **stapled.**
- Assignments will be collected and kept by the department for documentation of grades.
- Please label your assignments using **both your first and last names**.

Study questions (on the website and at the end of each chapter in your textbook) are provided to assist you in focusing on the important material.

Review sessions are gladly provided any time a group of students requests one. Feel free to see me individually, as well.

Laboratory information and procedures are detailed in the laboratory notebook provided each student at the first laboratory meeting.

The Nutrition Department keeps all quizzes, exams, and laboratory reports for documentation of grades. Quizzes and laboratory experiments will be reviewed the following class or lab; additional time to review exams, etc. can be arranged with the instructor. If you wish to keep a copy your lab reports, make a copy before submitting it for a grade.

If you have **questions or concerns** about the course, please call or email me and we can arrange an appointment if desired. Sooner, rather than later, is always better.

Tentative Class Schedule Spring 2007

DATE:	TOPICS AND ASSIGNMENTS	READINGS
Jan 15/16	Introduction	
Jan 17/18	Nutrients and Nourishment **Bring 3 food labels from different types of food to the <u>next</u> class.**	Ch. 1
Jan 19/22	Nutrition Guidelines and Assessment **Bring 3 food labels from different types of food to class.** ***LAB 1: Orientation to Lab/Submarine Lab (Part 1)***	Ch. 2
Jan 23/24	Digestion and Absorption **Assignment 1 – Part 1 Due: Diet Analysis Plus Program**	Ch. 3
Jan 25/26	Digestion and Absorption *****Quiz 1*****	
Jan 29/30	Carbohydrates: Sugars **Assignment 1- Part 2 Due: My Pyramid** ***LAB 2: Submarine Lab (Part 2)***	Ch. 4

Jan 31/Feb 1	Carbohydrates: Fiber	
Feb 2/5	Carbohydrates: Alternative Sweeteners **Assignment 1 - Part 3 Due: Comparison and Conclusion**	
Feb 6/7	Lipids ***LAB 3: Glucose Lab (Part 1)***	Ch. 5
Feb 8/9	Lipids *****Quiz 2*****	
Feb 12/13	Lipids	
Feb 14/15	Protein ***LAB 4: Glucose Lab (Part 2)*** ▪ ***Remember to Fast Prior to Lab*** ▪ ***Drink Water to Maintain Good Hydration***	Ch. 6
Feb 16/19	Protein **Assignment 2 Due: Vegan for a Day**	
Feb 20/21	*****EXAM I*****	
Feb 22/23	Metabolism Fueling Exercise ***LAB 5: Cholesterol Lab*** • ***Remember to Fast Prior to Lab*** • ***Drink Water to Maintain Good Hydration***	Ch. 7
	SPRING BREAK	
Mar 5/6	Metabolism	
Mar 7/8	Metabolism *****Quiz 3*****	
Mar 9/12	Alcohol Metabolism ***LAB 6: Vegetarian Lab*** ******Lab Quiz I*****	
Mar 13/15	Fitness & Sports Nutrition	Ch. 14
Mar 16/19	Fitness & Sports Nutrition // Energy Balance, Body Composition, and Weight Management *****Quiz 4*****	Ch. 8 / Ch. 9
Mar 20/21	Energy Balance, Body Composition, and Weight Management ***LAB 7: Fitness Lab*** ▪ ***Wear Appropriate Clothing and Indoor Track Shoes*** ▪ ***Meet at the Haehn Campus Center (HCC)***	
Mar 22/23	Energy Balance, Body Composition, and Weight Management	
Mar 26/27	Energy Balance, Body Composition, and Weight Management	
Mar 28/29	*****EXAM II***** ***LAB 8: Body Composition Lab*** ▪ *Wear Appropriate Clothing*	

Mar 30/Apr 2	Water-Soluble Vitamins	Ch. 10
Apr 3/4	**Five Minute Mysteries** Water-Soluble Vitamins	
	EASTER	
Apr 10/11	Water-Soluble Vitamins *****Quiz 5***** ***LAB 9: Fast Foods Activity***	
Apr 12/13	Fat-Soluble Vitamins	Ch. 11
Apr 16/17	Fat-Soluble Vitamins **Case Studies**	
Apr 18/19	Water and Major Minerals ***Lab 10: Iron Status Lab***	Ch. 12
Apr 20/23	Major Minerals	
Apr 24/25	Trace Minerals	Ch. 13
Apr 26/27	Minerals **Five Minute Mysteries** ***LAB 11: Wrap Up*** ******Lab Quiz II******	
Apr 30/May 1	Trace Minerals *****Quiz 6*****	
May 2/3	Food Safety	Ch. 19
May 4/7	Review ***NO LAB THIS CYCLE***	

FINAL – Nutrition 125 is a multi-section course and a common final exam for all lecture sections is given. The final exam schedule printed in the course registration bulletin is *not* necessarily the schedule that will be followed. The day and time for the final exam will be announced when that information is available from the registrar. Students are encouraged to refrain from making any travel plans until the schedule is announced.