COURSE INFORMATION:
Food and Health (11:400:104) Spring Semester
Lecture - 3 credits, 80 min session, twice a week, total of 28 sessions (exams included)
Location: Loree 022
Class website (http://foodsci.rutgers.edu/fs104/)

CONTACT INFORMATION:
Instructor: Loredana Quadro
Office Location: Room 419, Food Science Building, 65 Dudley Road, New Brunswick, NJ 08901
Office Hours: Thursday 2:30 -4:30 pm
Phone: 848-9325491
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COURSE MATERIALS:
iProfile 3.0 - Diet Analysis Program (Wiley Publishing)

COURSE DESCRIPTION:
Food and Health (11:400:104) is a 3-credit course about "personal" nutrition and its relationship to health by way of food, food components and nutraceuticals. This course will enable you to take a critical look at what you eat and give you a new perspective on how food affects you and your body. You will gain a basic understanding about the biochemistry of food and learn that food components (i.e. macromolecules) are similar to those that constitute our body. You will learn how malnutrition (under- and over-nutrition and/or simply an unbalanced or inappropriate diet) affects health. The major chronic diseases influenced by diet will be discussed. Finally, you will take a closer look at your personal dietary intake and have the chance to learn how to improve your dietary habit, if necessary.

LEARNING OBJECTIVES:
At the conclusion of this course, students will be able to:
1. Understand and apply basic principles and concepts in the physical or biological sciences (SAS NS-e)
2. Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis (SAS NS-f)

ASSIGNMENTS/RESPONSIBILITIES & ASSESSMENT:
The learning assessment will be conducted based on 4 Exams and a Diet Analysis Project.

biochemistry of food will be assessed through Exam 1, 2 and the Diet Analysis Project. Exam 3, 4 and the Diet Analysis Project will evaluate your comprehension of the effects of diet on the major chronic diseases. Overall, the
Exams and the Diet Analysis Project will assess your comprehensive understanding of nutritional concepts and your ability to address nutritional problems to achieve the health of your body.

Each exam will consist of 50 questions shared between multiple choices, matching and true and false. Each question will be worth 1 point, for a maximum of 50 points (in case all 50 questions will be correct). Each exam is worth 17.5% of your final grade. Each exam is mandatory (if you miss one, you will not pass the class). Please contact Dr. Quadro ASAP should any problem or conflict arise for the exam dates. Each exam will be held during the class period in Loree 022.

The Diet Analysis Project is for you to have the opportunity to evaluate and improve your own diet by comparing your personal nutrient intake to Dietary Reference Intakes (DRI’s) for nutrients, and to dietary guidelines, which set limits for diet components such as saturated fat, cholesterol, and sodium. You will be using iProfile, accessible through WileyPlus, to analyze your diet. The assignment consists of 3 parts:

I. Analysis of your normal diet.
   A. Collection of data
   B. Processing data using iProfile
   C. Interpreting the results from your profile reports

II. Completion of a diet questionnaire- available on course website as of Feb 20th

III. Submission of food records, required iProfile reports, and questionnaire.

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All the exams and the Diet Analysis Project are mandatory and necessary to pass this course.

OTHER INFORMATION:
Students will be responsible for adhering to the academic integrity policies found at http://academicintegrity.rutgers.edu.

It is important that students have the tools to succeed in this course. Please see the instructor *as soon as possible* with any difficulties or questions regarding the course materials. In addition, the Office of Student Affairs is available at http://studentaffairs.rutgers.edu for any other needs or concerns.

COURSE SCHEDULE:
Lecture 1. Course Introduction
Lecture 2. Carbs: Sugars, Starches, the Dentist, and Atkins
Lecture 3. Fats: the Good and Bad
Lecture 4. Proteins: Enzymes, Hormones, and Body Building
Lecture 5. Vitamins: Fat Soluble A, D, E, K
Lecture 6. Vitamins: Water Soluble B’s and C
Lecture 7. Exam 1
Lecture 8. Minerals and Water
Lecture 9. Energy, Calories and Dietary Guidelines
Lecture 10. Diet Analysis Instructions
Lecture 11. Physiology of digestion
Lecture 12. Microorganisms in food
Lecture 13. Nutrition and Lifecycle I
Lecture 14. Nutrition and Lifecycle II
Lecture 15. Exam 2
Lecture 16. Under and Over-nutrition
Lecture 17. Nutrition & Fitness
Lecture 18. Diabetes
Lecture 19. Food and skin health
Lecture 20. Nutrition and cancer
Lecture 21. Exam 3
Lecture 22. Food and your heart
Lecture 23. Nutrient-drug interaction
Lecture 24. Nutrigenomics
Lecture 25. Food allergies
Lecture 26. Labels
Lecture 27. In-class movie
Lecture 28. Exam 4