

***FST/FPE 401/501 Nutrition, Metabolism and Health
Spring 2015 Course Syllabus***

Instructors

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Class Info:

Time: 10:00 am-11:15 am

Day: Tuesday and Thursday

Location: **Life Sciences**

OFFICE HOURS: Tuesday & Thursday after 11:30-2:30 or by appointment
class

Course Description: Study of the structures, types, properties, and metabolism of carbohydrates, lipids and proteins. Discussion of the biological roles of vitamins and minerals. Application and integration of metabolic knowledge with health promotion and chronic disease. 3-0-3

Prerequisite: College level basic biology OR chemistry OR biochemistry OR physiology class. Students are required to have mastered the fundamental science/chemistry/biology concepts as well as writing proficiency.

Course Objectives:

1. To acquire knowledge and understand the biochemical functions of macro and micro nutrients.
2. To learn the digestion and absorption of nutrients in the human living system.
3. To learn and understand metabolic processes, pathways and utilization of nutrients at the cellular level.
4. To examine the principles underlying relationship between nutrition and disease in the human living system.
5. To use a computerized nutritional analysis program to critically analyze the nutrient adequacy & composition of your own diet.
6. To demonstrate knowledge of the peer review process in formulating a critical analysis of a nutrient related health outcome using methodologies of scientific inquiry.
7. To acquire knowledge and experience in communicating science in individual and group setting through written and/or oral modalities.

Course Requirements:

1. **Required:** Ellie Whitney/ Sharon Rady Rolfes Understanding Nutrition
2. There will be two exams and 5 quizzes. (course objectives 1, 2, 3, 4, 6).
3. Two written assignments (instructions provided in class and on student information Board) (Objectives 5-7):
4. A group project will be included if class set up allows. If not possible, an alternative hands-on activity will be added (objective 6, 7).

HONOR CODE. Students are expected to uphold the IIT standard of conduct for students relating to academic dishonesty. Students assume full responsibility for the content and integrity of the academic work they submit. The guiding principle of academic integrity shall be that a student's submitted work, examinations, and assignments **must be that student's own work**. **Uncited work, Plagiarism, Copying answers or using written work from another student will result in ZERO and report to academic integrity office as appropriate.**

CLASS ASSIGNMENTS LATE POLICY

Assignments must be turned in on the due date as indicated on the Syllabus (online submission through blackboard or in –class). Late assignments will incur a penalty of 10% off for per day late. Only one make up exam and quiz will be allowed per semester with a compelling reason (serious medical reasons with valid documentation). The makeup exam, quiz or assignment must be completed upon return to campus.

ACCOMMODATIONS

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources. The Center for Disability Resources (CDR) is located in Life Sciences Room 252, telephone 312 567.5744 or disabilities@iit.edu.

ONLINE STUDENTS

All classes will be video-taped. You can view the video-taped lectures on blackboard through IITV. An email will inform you when the lecture is available for viewing (usually within 24 h of lecture). Online students are welcome to join in-class lectures as their schedule allows. Exams outside of the classroom will need to be organized through Charles Scott, IIT distance learning coordinator/director. Please contact him early to make arrangements for exams. Quizzes will be online.

Grading Scale and Points Assignment for TOTAL 500 points

A = 90 - 100%	B = 80 – 89%	C = 70 - 79%	D = 60 - 69%	F < 60%
EXAM I	100	Diet Analysis Project.....	75	
Quizzes.....	50	Literature Review Project	50	
EXAM (FINAL)	150	Research Project Presentation	50	
		Peer Review	25	

Graduate students taking the 501 section of this class will have 1 additional / graduate level assignment to receive full credit for course. Please see instructor for more information.

Graduate students (those taking 501 credit): The additional project will include practicing skills important for graduate level learning. It will involve writing!!

The assignment will be given early in the semester and you can turn it in anytime during the semester as long as it is before the FINAL exam.

COURSE SCHEDULE:

DATE	LECTURE TOPIC	READING & ASSIGNMENTS
1/13-1/15	Overview of Course & The Science of Nutrition	Chapter 1
	DRIs/ Scientific Inquiry/ Finding Credible Nutr. Info.	Chapter 1
1/20	Planning a Healthy Diet	Chapter 2
1/20	DIET ANALYSIS Assignment	ASSIGN
1/20-1/22	Digestion and Absorption	Chapter 3
1/23-1/26	QUIZ 1 ONLINE	(open book/notes Ch 1-3)
1/27-1/29	Carbohydrates & Metabolism (including glycogen metab)	Chapter 4 & 7
2/5	DIET ANALYSIS PAPER DUE	DUE DATE
	IN-CLASS SECTION - PRINT and TURN-IN in CLASS	
	ONLINE – PDF and BLACKBOARD	
	Peer Review component (To be discussed)	
2/3-2/5	Lipids and Metabolism	Chapter 5 & 7
2/6-2/9	QUIZ 2 ONLINE	(open book/notes Ch 4,5,7)
2/10	LITERATURE REVIEW Assignment	ASSIGN
2/10-2/12	Lipids cont. and alcohol metabolism	Chapter 7
2/17-2/19	Protein	Chapter 6
2/20-2/23	QUIZ 3 ONLINE	(open book/notes Ch 7,6)
2/24	LITERATURE REVIEW DUE	DUE DATE
	IN-CLASS SECTION - PRINT and TURN-IN in CLASS	
	ONLINE – PDF and BLACKBOARD	
2/24	Energy Balance	Chapter 8
2/26	Energy Balance, Weight Management	Chapter 9
3/3	Review for Midterm	
3/5	MIDTERM (EXAM 1 – Chapter 1-9)	EXAM #1
3/10-3/12	Vitamins	Chapter 10 & 11
3/12	PEER REVIEW DUE	DUE DATE
----- SPRING BREAK – starting 3/16-3/20 -----		
3/24	Vitamins (review and complete)	Chapter 10 & 11
3/26	RESEARCH PROJECT PRESENTATION assignment	
	Due date to be discussed	
3/26	start Water and Minerals	
3/31-4/2	Water and Minerals	Chapter 12 & 13
4/3-4/6	QUIZ 4 ONLINE	(open book/notes Ch 10-13)
4/7-4/9	Intro to Phytonutrients, Start Diet and Health	Chapter 18
4/14-4/16	Diet and Health/ Disease	
4/17-4/20	QUIZ 5 ONLINE	(open book/notes) 4/21-
4/23	Diet and Health, Life cycle considerations	
4/28	Diet and Health, Special topics	
4/30	CLASS WRAP-UP, FINALS REVIEW	
FINAL EXAM:	TBA	EXAM #2

*Please note: Every attempt will be made to adhere to the course schedule; however, lectures may overlap & vary slightly as time permits.

A couple notes – PLEASE READ:

Please be reminded of the late policy on turning in projects: 10% deducted from score for each day the project is overdue. This means that if the paper is due on February 6th and you turn in on February 8th, 20% will be deducted from score. Exceptions: 1) You have a medical issue that is documented and you provide this to us; 2) You have a schedule conflict that you know of before the due date and you have talked to us to manage the situation so all work out (think/plan ahead/talk to us!)

ALL students: Writing clearly and concisely is an essential skill for a college undergraduate and graduate student. All assignments will be closely monitored for writing skills including but not limited to language, grammar and structure. If an assignment is considered unreadable the paper will be returned ungraded with comments to fix. Be sure to take your time on writing assignments: plan, get a proof reader, make corrections, BEFORE turning in. If a paper is returned - The student has one week to seek assistance from IIT writing center, discuss further with professors and re-write the paper for a grade (with a mandatory 20% penalty). The original paper and grading sheet are to be submitted with the re-write. There will also be an opportunity for students who score less than 80% on an EXAM to retake the exam within one week. The highest grade will be included in grade book, BUT, student cannot receive a score higher than 80% if even on the retake they/you score higher (to be fair to all other students). Professors will explain more about this in class.