OAKLAND UNIVERSITY SCHOOL OF HEALTH SCIENCES HUMAN MOVEMENT SCIENCE

EXS 5040 – Nutrition, Weight Management and Exercise (2 Credits) Winter 2018 Semester

Instructor: Myung D. Choi, Ph.D. Department: Human Movement Science Class Time and Room: Thursday 6:30-8:17pm, HHB5045 Office Hours: Wed. 4:00-6:00pm or by appointment Office Location: HHB 3169 Email: Choi@oakland.edu Phone: 364-8685

ADMINISTRATIVE DETAILS

Course Description: This course emphasizes basic concepts in nutrition as applied to exercise, physical training, and health improvement. Topics are related to the importance of food nutrients in sustaining physical function during moderate to severe physical activity, the energy value of foods and the relationships between nutrition, fitness and health.

Recommended Text and Supporting Course Material: Sizer F. and E. Whitney. Nutrition Concepts and Controversies, 14th edition (2017) Wadsworth, Cengage Learning, Belmont, Ca. Additional required readings will be announced if needed.

Course Prerequisites: BIO 3232 or CHM 2010 and EXS 3010

Course Objectives:

After completion of this course students will:

- 1. Understand the role that a healthy diet and lifestyle can play in health promotion and disease prevention.
- 2. Identify the function and sources of major nutrients and understand the problems associated with deficiencies and/or excesses.
- 3. Understand the relationship between nutrition, exercise and weight management.
- 4. Demonstrate knowledge of behavior modification techniques for diet and lifestyle change.
- 5. Understand how to use nutrition for the enhancement of human performance.
- 6. Identify the principles of nutrition and exercise as they relate to diabetes, cardiovascular disease, and other prevalent disease states.
- 7. Demonstrate an understanding of the role of nutrition and exercise in bone health and eating disorders.
- 8. Understand how to integrate healthy lifestyle changes into a personal wellness plan.

Course Procedures: To meet the course objectives, the format for this class will be the presentation of theoretical, conceptual and analytical information on the application of human nutrition. Lectures and interactive discussion of the material typically form the basis of most classes. Every student will complete 1 dietary assessment project by collecting data on another person, then submitting a report detailing findings and discussing the relevance of these findings for optimal health. There will be a mid-term examination, a comprehensive final examination and a student presentation. Lecture material, class discussion, and required readings may all be included on exams.

GRADING & ACTIVITY DESCRIPTIONS

NOTE: Failure to pass any single component may result in failing the overall course. Final grades are based on an accumulation of 100% total:

	Percent	Due Dates
a) Dietary assessment assignment	20.0%	02/16
b) Exam 1	25.0%	
c) Exam 2 (final)	25.0%	04/19
d) Oral presentation	15.0%	04/05 & 04/12
e) Research paper	10.0%	04/12
f) Class attendance	5.0%	
Total	100.0%	

a) Diet Assessment Assignment - due Feb. 16 at 6:00 pm. You will identify another person who desires a change in their dietary behavior. You will meet with your client and do 3 days of 24-hour recall to collect diet records. Use the MyPlate Supertracker website

(<u>https://www.supertracker.usda.gov/default.aspx</u>), you will enter your client's dietary records. The website will automatically calculate the nutrient content of your client's diet records. You will submit (on Moodle) a copy of the 3 days of diet records, the nutrient/food analysis, and answer a series of questions. Detailed instructions will be posted on Moodle. *No late assignments accepted*.

b-c) Exams

Exams consist of multiple-choice questions, T or F, blanks and short answers (tentative), and will be based on lectures and readings. No study-guide provided. Each exam will be given in class. Exam questions will cover all the material presented and will emphasize basic facts, concepts and relationships, your understanding of these, and your ability to apply them to new situations including nutrition calculations. BRING SCANTRON FORMS (form no. 882-E), YOUR STUDENT G NUMBER, SHARPENED PENCILS, AND GOOD ERASERS TO THE EXAMS. Makeup exams will only be allowed under extreme circumstances. Extreme circumstances include grave personal illness, University sponsored activities that require your presence, or legal proceedings at which you must appear. WRITTEN DOCUMENTATION IS REQUIRED PRIOR TO THE EXAM for a make-up exam to be considered. If an absence is not pre-approved or supported by written documentation, student will receive a grade of zero on the exam. No make-up exams.

Exam Materials & Procedures

- Scantron (form no. 882-E): All students must use the red full-sheet scantron form for each exam. You may purchase them at the book store on campus, or sometimes the Kresge Library has them available to students for free (but not always, please plan ahead).
- Pencil: Bring a #2 pencil to class (the professor will not have extra available). Exams completed in ink will not be scored.
- ID number: You must also know your G# to enter on the scantron. Please memorize this number, or have it with you during the exam period.
- Students will not be allowed to keep exam questions, but can view these and associated answer keys during regularly scheduled office hours or by appointment. Students can get back their scantron form, and are advised to keep them as a record of their grade.

d) **Oral presentation:** Each student/group is required to synthesize information from <u>at least 4</u> original research journal articles relevant to your topic, and present the information in an oral presentation that lasts for 15-20 min (tentative). Further details are provided during the semester.

e) **Research Paper:** Students will find two original research articles. These research articles must use two different behavior change theories/strategies to modify a specific eating behavior, which is the same one that will be addressed in the dietary assessment assignment. Students will then write a 5 page research paper addressing strengths and limitations of the research articles and the two behavior change theories/strategies. Further details are provided if needed. *No late assignments accepted*.

f) Class Attendance

The professor will take attendance for each class. Class attendance will be calculated as below. Three absences will cause a **50% deduction.** Four absences will cause an **80% deduction.** If students miss **FIVE** and more than 5 class meetings, they will be asked to drop the course and/or will receive an F grade (0.0/4.0) for the entire course. Two tardy arrivals and/or leaving class early will count as one absence. You are considered tardy if you arrive five minutes after class starts. Attendance during any student-led class presentation or guest lecture is mandatory. *Five (5) percent will be subtracted from the student's final grade for each day missed during these specific classes.*

- **Professional Conduct:** The faculty of the School of Health Sciences believes that the conduct of a student registered or taking courses in the School should be consistent with that of a professional person. Courtesy, honesty, and respect should be shown by students toward faculty members, guest lecturers, administrative support staff, and fellow students. Similarly, students should expect faculty to treat them fairly, showing respect for their ideas and opinions and striving to help them achieve maximum benefits from their experience in the School.
- Academic Conduct Policy: Cheating on examinations, plagiarism, falsifying reports/records, and unauthorized collaboration, access, or modifying of computer programs is considered serious breaches of academic conduct. The Oakland University policy on academic conduct will be strictly followed with no exceptions. See catalog under Academic Policies and Procedures.
- **Special Considerations:** Students with disabilities who may require special considerations should make an appointment with campus Disability Support Services. Students should also bring their needs to the attention of the instructor as soon as possible.
- **Expectations of Students:** Regular class attendance and active participation in class discussions is important. Students are expected to arrive for class on time and refrain from disturbing the flow of the class through conversation or distracting behavior. Students are encouraged to exchange ideas and to integrate personal experiences in class sessions. All communication devices (pagers and cell phones) are to be turned off before entering the classroom.
- Incomplete Grade ("I" grade): Students who, for reasons beyond their control (illness, bereavement, accident) are unable to complete the course work by the end of the semester may request an "Incomplete" grade from the professor. The student and the professor must complete the form, "Request for an Incomplete Grade," available from the professor or the Dean's office. The "I" grade must be approved at least one day before the final examination. It is the Professor's decision whether to allow an "Incomplete" grade. An Incomplete grade must be converted to a numerical grade within the first 8 weeks of the next Fall or Winter semester for which the student registers. Procedures for completing the work in the course are spelled out on the "Request for an Incomplete Grade" form.

Class Policies

I encourage students to be active participants during lecture. I welcome questions from the class, and if you don't understand something--please ask. I encourage respectful interaction and promote an enjoyable, engaging learning environment.

- 1. **No** <u>cell phones</u> and any personal <u>computers</u> in class: please turn them off and have them out of sight. This no-use policy includes texting and cell phone calculator functions. You should have a traditional calculator available for class or exams or plan to do calculations by hand.
- 2. No ipods, head phones, ear buds, etc. should be on, used, or worn during class.
- 3. Please keep hoods off during class, and baseball caps (or any brimmed hat) should be turned backwards or taken off for tests.
- 4. **No** studying for other courses, working on assignments for other courses, or "resting your eyes" during class.

*Students found texting/twittering/instant messaging, listening to or using an ipod, or sleeping in class will be asked to leave and will **receive a 5% deduction in their final grade in the class**.

2.9 2.8 2.7
2.7
2.6
2.5
70%
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GRADING SCALE

Students must receive a 71% or a 2.5 to pass this course.

COURSE SCHEDULE (tentative)

Week	Topics/Readings	Assignments/Tests Due
1	Introduction to course Behavior change theory & strategies	
2	Chapter 1 – Food choices and human health Moodle – Nutrition assessment methods	
3	Chapter 3 – The remarkable body (gastrointestinal tract & digestion)	
4	Chapter 4 part 1 – The carbohydrates: sugar, starch, glycogen, fiber, diabetes	
5	Chapter 4 part 2 – The carbohydrates: sugar, starch, glycogen, fiber, diabetes	
6	Chapter 5 – The lipids: fats, oils, phospholipids, and sterols	Dietary Assessment
7	EXAM 1 (tentative; exact date will be announced in class)	
8	NO CLASS – SPRING BREAK	
9	Chapter 6 – The proteins and amino acids	
10	Chapters 7 & 8 – Vitamins, Minerals, Water	
11	Chapter 9 – Energy balance and healthy body weight	
12	Chapter 10 – Nutrients, physical activity, and the body's responses	
13	Chapter 11 – Cardiovascular disease and hypertension	
14	Presentations	
15	Presentations	Research paper due
16	FINAL EXAM on April 19 (7:00-10:00PM)	

The instructor reserves the right to make adjustments to this schedule as necessary.