NUTR 221N.02M: Basic Human Nutrition

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NUTR 221 – Basic Human Nutrition - Spring Semester, 2014

Section 1: NUTR 221N-01M 30059; Section 2: NUTR 221N-02M 31146
Both sections meet at the same time on Tuesday and Thursday for face-to-face lectures from 8:20 a.m. to 9:20 a.m. at the North Underground Lecture Hall 101

Instructors, Teaching Assistants:

Primary Instructor
Blakely Brown, PhD, RD
Department Health and Human Performance
207 McGill Hall
(406) 243-6524 or (406) 243-6695
blakely.brown@umontana.edu
Office hours for Professor Brown are most Wednesdays, 10:30 a.m. – 11:45 a.m., or by appointment.

Course Support Instructor
Hilary Palakovich, MS Candidate
Department Health and Human Performance
201 McGill Hall
(406) 498-2690
hilary.palakovich@umontana.edu
Office hours for Ms. Palakovich are by appointment.

Teaching Assistants
There are four Health and Human Performance (HHP) graduate teaching assistant students supporting the course this spring. All teaching assistants are available throughout the semester to answer your questions and meet with you on an individual basis to help you with the course material. Although you can contact any teaching assistant with your questions, you are encouraged to contact the teaching assistant that you have been assigned to, according to the course section you are registered for (Section 1 or Section 2) and your last name (see information below). Look on your Cyberbear account to find out which Section you are registered in.
The teaching assistant and his or her primary assigned students are:

Section 1:
• Michael Cramer is the teaching assistant for students in Section 1 with last name beginning A to Klapmeier. His email is cramertron@gmail.com or Michael.cramer@umontana.edu

• Sean Blumhardt is the teaching assistant for students in Section 1 with last name beginning Kreamer to Z. His email is sean.blumhardt@umontana.edu

Section 2:
• Karishma Chainani is the teaching assistant for students in Section 2 with last name beginning A-E. Her email is karishma.chainani@yahoo.com

• Amy Lommen is the teaching assistant for students in Section 2 with last name beginning F-Z. Her email is amy.lommen@umconnect.umt.edu or amy@blackfoot.net

Teaching Assistant Weekly Office Hour: Wednesday, 12 – 1 p.m., McGill Hall 236. All teaching assistants are available to meet with you on an individual basis. Please email your assigned teaching assistant to set up an individual meeting with them as needed. Please contact Professor Brown or Ms. Palakovich if you are having difficulty contacting your teaching assistant or setting up an appointment to meet with them.

Course Moodle Information:

To access this course visit Moodle online

You have registered for a blended section of NUTR 221. This blended course meets 70% of the time in person in a classroom AND 30% of the time online, blending these two formats.

TECHNOLOGY: All blended courses require that you have access to a reliable internet connection. If you don’t have a computer or internet at home, you can use campus computers. We will use Moodle course software for this course. You don’t need to have experience with Moodle for this course, but you should feel comfortable using a computer, the internet and Microsoft Word. Moodle is very user friendly. During the first week of class you will be required to complete the tutorial for Moodle, even if you have experience using this courseware. The instructions to complete the Moodle tutorial are described on the syllabus and our Moodle course site and at the Moodle tutorial site.
If you need further assistance with the course technology contact UMOnline Technical Support at 406.243.4999 or umonline-help@umontana.edu or the course support instructor, Hilary Palakovich at Hilary.palakovich@umontana.edu

**Required Textbook, Course FacPac and Dietary Analysis Code**

**Textbook:** *Understanding Nutrition, 13th ed.*, by Whitney and Rolfes is available at the UC Bookstore on campus. You are welcome to use older editions, but the older textbooks may or may not contain all of the information available in the most recent edition. Check with the instructor (Brown) or course support instructor (Palakovich).

**Course FacPac:** The Dietary and Physical Activity Assessment Project course FacPac is available at the UC Bookstore on campus. All students are required to complete the course project to receive a final grade for the class.

**Dietary Analysis Code:** This access code is needed to complete the dietary analysis project. If you purchased a new textbook, the code is located inside the front cover. For those that didn't purchase the new textbook that came with the access code, [click here to purchase the code.](#)

**MindTap (on-line materials) Access Code:** This code is needed to digitally access various materials and activities to complete the iLab assignments and enhance the information presented in lectures and in your textbook. Here is how you access this code:

1. Connect to [https://login.cengagebrain.com/](https://login.cengagebrain.com/)
2. If you already have an account, sign in. From your Dashboard, enter your access code XXXXXX in the box provided, and click the Register button, then confirm and continue. If you don't have an account, click the Create an Account button, and then follow the on-screen instructions.

**Course Objectives**

As an outcome of this course in nutrition, and fulfillment of a general education requirement in the natural sciences, the student will be able to:

- identify the essential nutrients in the human diet
- describe the major functions of nutrients in the body
- determine physiological and biochemical changes that occur with deficiency or excess nutrient or supplement intake, including chronic disease risk, weight control and dieting, eating disorders and fad diets
- identify common and concentrated food sources of nutrients
- describe the physical and chemical changes that occur during digestion of food and absorption of nutrients
- identify changes in nutrient requirements throughout the life cycle
- define how diet and physical activity affects health outcomes for major diseases in humans
- design a sound program of eating through consumer health education practices
• understand the continuum from uncertainty to certainty in nutrition science
• distinguish between solid scientific certainties and scientific controversies and learn critical thinking techniques for enhancing person health and lifestyle
• describe how environment, culture, and community affect nutrient and food intake, determine nutrition and exercise disease prevention strategies

Course Format
The format of the course is question-answer, lecture, Moodle discussion, and ilab (interactive lab), and other on-line and interactive work via MindTap and Moodle. Lecture content will highlight and outline the scientific basis of nutrition as well as discussions of real-life applications and current controversies. It is critical that you read the chapter before class as the lectures will not cover the entire chapter. Exams will focus on material in the chapter, quizzes, ilabs and MindTap materials. It is highly encouraged that students re-familiarize themselves with the Chemistry and Science concepts outlined in Appendix A, B, C, D, E and F as we move through the course material.

Dietary and Physical Activity Assessment Project
This course project is required of all students registered for this course. This means that if you do not turn in all parts of the project, you will automatically fail the course (“F” or “NCR”). The Dietary and Physical Activity Assessment project asks you to evaluate the adequacy of your dietary intake and physical activity. This involves keeping track of your food intake and physical activity intake for three, 24-hour time periods (3 days), determine the nutrient and energy content of foods eaten and assess your dietary intake and physical activity relative to current recommendations. The assignment is worth 100 points and is required of all students. Detailed instructions for completing the project are located in the NUTR 221 Course FacPac, which you purchase at the UC Bookstore on campus.

The Dietary and Physical Activity Assessment Project Part A is due February 25, 2014 in class. The Final due date for all parts (Part A and Part B) of the project is due April 10, 2014 in class. Make a photocopy of Part A and Part B before turning it in. If your project is misplaced or lost during grading you are responsible for providing us with a copy of your project. Ten points will be subtracted for each day, regardless of weekends or UM holidays, that the project is turned in after the due date, REGARDLESS of the excuse! Dietary and Physical Activity projects will not be accepted after May 1, 2014.

Exam and Quiz Policy:
Two exams will be given during the semester. Make-ups for the exams are at the discretion of the instructor and it is highly UNLIKELY you will be able to reschedule either the midterm or final exam. If you are allowed a make-up exam you MUST provide proper documentation for the absence, (e.g. physicians slip, UM athletic or performing event, etc). An illness or family death DOES NOT automatically guarantee you will be allowed to take a make-up exam. Any make-up exam MUST BE TAKEN BEFORE the
regularly scheduled time. If a student must miss the FINAL EXAM because of illness, the instructor must be notified within 72 hours of the scheduled exam. To take the exam, the student must have a physician's verification of illness.
Course Assignments and Evaluation Procedures

Late work is not accepted for ilabs, on-line work, quizzes or exams. Students are responsible for material presented in lecture and the text. Points will be distributed as follows:

Moodle Tutorial: 10 points
Midterm Exam: 75 points
Final Exam (in-class): 100 points
Quizzes (5 on-line quizzes worth 20 points each): 100 points
Interactive labs (iLabs) (6 on-line iLabs worth 25 points each): 150 points
Dietary and Physical Activity Assessment Project: 100 points
On-Line Forums (3 @ 10 points each): 30 points
Total: 565 points

Assignment of Final Grades

Grades of A, B, C, D and F will be assigned on the basis of percentage of possible points earned (not a plus/minus grading system). The exact percentage of possible points required for each grade will be determined after all of the exams have been given, the dietary projects have been graded, and the marks for the entire class reviewed. There will be no rounding of percentages in the class, no exceptions! If there is a shift in curve, it might be a small lowering of the curve. In no case will the curve be raised. A “credit (CR)” will be equivalent to a D or better and a “no credit (NCR)” grade will be equivalent to an F. CR and NCR grades do not affect grade point average. However, if you are taking this course to meet a general education requirement, or you are an HHP major, you must take this course for a traditional letter grade. Students who do not complete the course or coursework and who have not signed a written completion agreement with the instructor will be assigned a “CR” or an “NCR” depending on how they are enrolled in the course.

Credits and Workload Expectations

This is a semester-long, undergraduate course for the study of basic nutrition that also fulfills the general education science requirement. It is expected that students will spend two hours of out of class study time for every hour of face to face class time. We have 40 minutes out of class each week. This means it’s expected that you spend ~8 hours total each week on this class.

The University of Montana policy for academic misconduct:
All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. The Student Conduct Code, embodying the ideals of academic honesty, integrity, human rights and responsible citizenship, governs all student conduct at the University of Montana-Missoula. Student enrollment presupposes a commitment to the principles and policies embodied in this Code. The Student Conduct Code sets forth University jurisdiction, student rights, standards of academic and general student conduct, disciplinary sanctions for breach of the standards of student conduct and procedures to be followed in adjudicating charges of both academic and general misconduct. Copies of the Student Conduct Code can be obtained from the offices of the Vice President for Student Affairs, the Provost and Vice President for Academic Affairs, Residence Life, and Associated Students of The University of Montana-Missoula (ASUM). The Student Conduct Code also can be accessed from the internet. All incidences of academic misconduct in the class will automatically follow the steps outlined in this policy.

Beginning the sixteenth (16) instructional day of the semester or February 18, 2014 through the forty-fifth (45) instructional day or April 7, 2014 students use paper forms to drop, add and make changes of section, grading option, or credit. The drop/add form must be signed by the instructor of the course and the student's advisor. The signed drop/add form must be returned to the Registration Counter (or the Registrar's Office at Missoula College) no later than the forty-fifth instructional day. A $10.00 processing fee is charged for each drop/add form. Added courses and credits may result in additional fees. There are no refunds or reductions of fees for courses dropped and grades of W (withdrew) are recorded.

Beginning the forty-sixth (46) instructional day of the semester or April 8, 2014 through the last day of instruction before scheduled final examinations (May 9, 2014), students must petition to drop. The petition form must be signed by the instructor of the course and the student's advisor and the dean of the student's major. A $10.00 processing fee is charged for each petition. There are no refunds or reductions of fees for courses dropped, and the instructor assigns a grade of WP (withdrew/passing) if the student's course work has been passing or a WF (withdraw/failing) if the course work has been failing. These grades do not affect grade averages but they are recorded on students' transcripts.

Documented justification is required for dropping courses by petition. Some examples of documented circumstances that may merit approval are: accident or illness, family emergency, or other circumstances beyond the student's control. The opportunity to drop a course for the current term for such a course ends on the last day of instruction before scheduled final exams. Dropping a course taken in a previous term or altering grading option or audit status for such a course is not allowed. The only exceptions are for students who have received a grade of NF (never attended). Contact the Registration counter at (406) 243-6077 or your advisor if you have further questions.
### Weekly Topics, Dates and Lecture Material

| Week 1: Jan 28, 30 | Syllabus and introduction to course; Chapter 1 and Chapter 1 Highlight: Nutrition science, Dietary Reference Intakes, Nutrition assessment, Nutrition information and misinformation |
| Week 2: Feb 4, 6 | Explanation of Dietary and Physical Activity Course Project FacPac; Chapter 2: Planning a healthy diet, Food labels |
| Week 3: Feb 11, 13 | Chapter 3: Digestion |
| Week 4: Feb 18, 20 | Chapter 4: Carbohydrates; Chapter 18: Diabetes, and Metabolic Syndrome |
| Week 5: Feb 25, 27 | Chapter 5: Lipids; Chapter 18: Heart Disease |
| Week 6: March 4, 6 | Chapter 6: Protein |
| Week 7: March 11, 13 | Chapter 7 and Highlight: Metabolism, Alcohol |
| Week 8: March 18, 20 | Chapter 8 and Highlight: Energy Balance and Body Composition; Eating Disorders |
| Week 9: March 25, 27 | Chapter 9: Weight Management: Overweight, Obesity and Underweight |
| Week 10: April 8, 10 | Chapter 10 & 11: Vitamins |
| Week 11: April 15, 17 | Chapter 11 & 12: Vitamins; Minerals |
| Week 12: April 22, 24 | Chapter 13 & 14: Trace Minerals; Fitness |

### Weekly Assignments

| Week 1: Jan 28, 30 | Complete on-line Moodle tutorial. Take the Moodle on-line tutorial by Sunday, Feb 2 at 11:55 p.m. Join the Moodle introduction forum to introduce yourself to your assigned TA and other students in that group. |
| Week 2: Feb 4, 6 | Complete iLab 1. iLab 1 opens Tuesday, Feb 4 at 12:00 a.m. and closes Sunday Feb 9 at 11:59 p.m. Access iLab 1 instructions on our Moodle course site. |
| Week 3: Feb 11, 13 | Take Quiz 1. Quiz 1 opens Thursday, Feb 13 at 12:00 a.m. and closes Sunday, Feb. 16 at 11:59 p.m. Access the quiz on our Moodle course site. |
| Week 4: Feb 18, 20 | Complete iLab 2. iLab 1 opens Tuesday, Feb 18 at 12:00 a.m. and closes Sunday Feb 23 at 11:59 p.m. Access iLab 2 instructions on our Moodle course site. |
| Week 5: Feb 25, 27 | Dietary and Physical Activity Assessment Project Part A due in class, Feb 25. See instructions in the syllabus for completing Part A. Take Quiz 2. Quiz 2 opens Thursday, Feb 27 at 12:00 a.m. and closes Sunday, March 2 at 11:59 p.m. Access the quiz on our course Moodle site. |
| Week 6: March 4, 6 | Complete iLab 3. iLab 3 opens Tuesday, March 4 at 12:00 a.m. and closes Sunday March 9 at 11:59 p.m. Access iLab 3 instructions on our Moodle course site. |
| Week 7: March 11, 13 | Take the Midterm Exam. Details on taking the midterm exam will be announced in class. |
| Week 8: March 18, 20 | Complete iLab 4. iLab 4 opens Tuesday, March 18 at 12:00 a.m. and closes Sunday March 23 at 11:59 p.m. Access iLab 4 instructions on our Moodle course site. Moodle Interactive Forum Topic – To be announced. |
| Week 9: March 25, 27 | Take Quiz 3. Quiz 3 opens Thursday, March 27 at 12:00 a.m. and closes Sunday, March 30 at 11:59 p.m. Access the quiz on our course Moodle site. |
| Week 10: April 8, 10 | Dietary and Physical Activity Assessment Project Part B (and A) due in class, April 10. See instructions in the syllabus for completing and turning in the project. Complete iLab 5. iLab 5 opens Tuesday, April 8 at 12:00 a.m. and closes Sunday April 13 at 11:59 p.m. Access iLab 5 instructions on our Moodle course site. |
| Week 11: April 15, 17 | Take Quiz 4. Quiz 4 opens Thursday, April 17 at 12:00 a.m. and closes Sunday, April 20 at 11:59 p.m. Access the quiz on our course Moodle site. |
| Week 12: April 22, 24 | Complete iLab 6. iLab 6 opens Tuesday, April 22 at 12:00 a.m. and closes Sunday April 27 at 11:59 p.m. |
Access iLab 6 instructions on our Moodle course site.

| Week 13: April 29, May 1 Chapter 15 & 16: Lifecycle Nutrition | Take Quiz 5. Quiz 5 opens Thursday, May 1 at 12:00 a.m. and closes Sunday, May 4 at 11:59 p.m. Access the quiz on our course Moodle site. Moodle Interactive Forum Topic – To be announced. |
| Week 14: May 6, 8 Chapter 16 & 17: Lifecycle Nutrition | |
| Week 15: Final Exam: May 14, 2014 from 8 – 10 a.m. | The Final exam will be taken in-class. The exam is closed book. Both sections will meet on May 14, from 8 – 10 a.m. to take the final exam. |

Helpful Resources for the Course

Periodicals:
- Journal of the Academy of Nutrition and Dietetics
- Journal of Nutrition
- Journal of Nutrition Education & Behaviour.
- Nutrition Reviews

Understanding Nutrition Internet References: (see references at the end of each book chapter)
- www.bellinstitute.com (General Mills website)
- Academy of Nutrition and Dietetics: http://www.eatright.org
- USDA MyPlate http://www.choosemyplate.gov/
- www.nutrition.gov USDA website.
- www.health.gov/dietaryguidelines Dietary Guidelines for Americans
- American Heart Association www.americanheart.org
- American Cancer Society www.aicr.org
- American Diabetes Association www.diabetes.org
- Center for Celiac Research: www.glutenfreely.com

Important Reminders:
- Staying organized is key to success in this course.
- Ask questions and discuss your concerns early. The course moves very quickly. Don't get behind!!!
- It is imperative to check the announcements section daily or every other day as changes, additions, due dates, syllabus changes, etc., will be posted here.
- This syllabus is to be used as a rough guide. Changes and updates are often made to the syllabus based on various items that come up along the semester.
Coming to class and checking the announcements section in Moodle is the best way to stay updated on these changes.

- Please refer to your TAs for questions via email or before and after class before contacting the instructors unless you feel strongly that it is only something the instructors can handle.