KINE4330/5800 Sport Nutrition & Metabolism

Th 6:30-9:20 pm
PEB Room 216

INSTRUCTOR:
Dr. McFarlin, Associate Professor
Office Hours by Appointment (113 PEB)
Brian.mcfarlin@unt.edu (x3165)

Prerequisites (recommended): Basic Biology, Biochemistry, or Equivalent

Text: None or Sports Nutrition

Course Description: An exploration of the biochemistry that underlies metabolic production of ATP during exercise. Basic sport nutrition considerations will also be discussed.

Course Objectives: This course in a hybrid lecture format (blends online with traditional lectures). The online material for this course will be available on Blackboard. Upon successful completion of this course, students will:

1. To understand how the study of bioenergetics underpins the metabolic cost of exercise
2. To understand the contribution of carbohydrate, lipids, and protein metabolism to exercise responses
3. To understand resting metabolic rate and the thermic effects of food as the relate to overall metabolism
4. To understand the importance of fluid and electrolyte balance during exercise
5. To understand how to effectively leverage nutrition principles to maximize exercise performance capacity
6. To understand how to improve the exercise training response using nutrition principles

Course Expectations:

1. Lecture Attendance:
   a. Students who attend class tend to earn higher grades, if you want to learn the most information, be in class on a regular basis.
2. If you have special learning needs, please inform me immediately.
3. Please respect others in class by leaving your cell phones/pagers, etc turned off. Phone calls are not to be taken at any time during class.
4. If at any point during the semester you are unhappy with your performance in this class, please contact me immediately.
5. Academic dishonesty will not be tolerated (i.e., copying, plagiarism, cheating) and will result in a failing grade for the semester.

Technical Skill Requirements: Downloading and uploading files, sending and receiving emails, and/or using Blackboard.

Netiquette: Because of how important communication is in the online environment, I will expect each of you to log in to the course at least 3 evenly spaced times a week. Please check the Announcements area first, since that is where I will put important information. Communication online is different than that of face to face classes. Try to use good "netiquette" when communicating with your classmates. Remember that your fellow students can't see your facial expression, hear you giggling, or notice your gestures. All of these elements add to our face to face communication every day without us really noticing it. So, please keep this in mind when you are commenting on others ideas, giving constructive criticism on a writing project, or just interacting with the class in general. I expect that everyone will treat the others in this class with the same respect that they would wish to be treated! However, I also have confidence from the start that this will happen. I have taught many classes, and I am usually the most surprised by how supportive of each other students can be. Realize that although you may never meet many of your classmates, you can still create lasting friendships in the online environment. You may also want to think about the fact that just because individuals take an online course, it doesn't mean that they are necessarily at a distance from each other. During your introductions, take a minute to let others know what town and state
you live in. You may find that you actually have a classmate that you can meet at the local coffee shop and continue a
conversation with. To learn more about online etiquette, visit the following Web site: http://www.albion.com/netiquette/corerules.html

ADA Statement: When possible, and in accordance with 504/ADA guidelines, we will attempt to provide reasonable
academic accommodations to students who request and require them. Please call the UNT Office of Disability
Accommodation (http://disability.unt.edu/about) for more details.

Academic Dishonesty Policy (copying, plagiarism, cheating) per UNT Policy 18.1.6: Students are expected to
conduct themselves in a manner consistent with the University’s status as an institution of higher education. In the class
setting, students shall follow their instructors’ directions and observe all academic standards and requirements published in
course syllabi and other course materials. A student is responsible for responding to an academic dishonesty report issued
by an instructor or other University authority. If a student fails to respond after proper attempt at notification, the University
may take appropriate academic actions in the absence of the student. Any student found to be in violation of the academic
dishonesty policy will be given a grade of zero for the assignment in question and reported to the UNT administration
through the reporting mechanism approved in UNT policy 18.1.6 (Office of Academic Integrity).

Evaluation: Final grades will be determined based on the total number of points that you accumulate during
the semester. Final letter grades will be determined via a traditional breakdown of points as follows: A
(>90%), B (89-80%), C (79-70%), D (69-60%), F (<60%).

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Article Review</td>
<td>50</td>
</tr>
<tr>
<td>Exam I</td>
<td>150</td>
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<tr>
<td>Exam II</td>
<td>250</td>
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<td><strong>Total</strong></td>
<td><strong>450</strong></td>
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Note: Students will not be allowed to take an Incomplete in this course due to poor planning on their part. If you find
you do have a legitimate reason for an Incomplete, please talk with me as soon as possible to discuss the situation and
to identify the documentation that will be required to support your request. Please consult the UNT catalog to review
conditions under which an incomplete may be granted.

Outline for In-class Lectures: An outline of the slides to be presented during the in-class lectures will be
available for download in a PDF format on Blackboard within 24-h of the lecture date. It will be your responsibility
to download and print a copy before class. Additional information from the in-class lectures may be provided at
the discretion of the instructor on a class-by-class basis.

Lecture Audio Recordings: The instructor will record all lecture audio and make it available on Blackboard for
download within 7-d after the given class lecture date.

Article Review: Undergraduate students will need to select a minimum of 2 related, nutrition-focused articles
that cover a similar topic. You will need to then prepare a 1-page (single-spaced, 12 point Arial font, 1” margins)
synopsis of the key knowledge obtained from reading the study. Graduate students will be expected to select 4
related, nutrition-focused articles and prepare a 3-page summary (single-spaced, 12 point Arial font, 1” margins).
You will need to clear your topic in advance with Dr. McFarlin before proceeding. Once you have selected your
topic, please post your topic on the Blackboard Discussion Board. You will submit your final article review via
Blackboard and Turn-it-in.com to check your review for originality. It is very important for you to learn the skill
of summarizing previous work without copying it.

Examinations: During this course, you will take two examinations. Each exam will consist of combination of
different subjectively graded questions (i.e. short answer, essay, etc.). You will take your exams using the
Lockdown Browser on Blackboard in a TBD location and allowed the full class time. Once you complete a
question, save the answer, and advance to the next question you will not be allowed to revisit a previous
question. When time expires, your exam will be automatically submitted. Your exam grades will be returned via
Blackboard and if you desire to review your exam responses with Dr. McFarlin, visit him during his office hours.
Please be in class to take examinations. If you are late or do not show up, NO make-up exam will be offered.

How do I get answers to my Questions? Dr. McFarlin’s goal to help you achieve success in this class and master the complex information that we will be discussing. If you are concerned about your performance in this course, it is your responsibility to contact Dr. McFarlin immediately and express your concerns.

Tentative Order of Topics:

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<thead>
<tr>
<th>Topic</th>
<th>Online</th>
<th>In-Class*</th>
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<tbody>
<tr>
<td>Syllabus</td>
<td>8/31/17</td>
<td>8/31/17</td>
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<tr>
<td>Nutrition for Exercise &amp; Health</td>
<td>9/14/15</td>
<td>9/7/17</td>
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<tr>
<td>Nutrition Expanded</td>
<td>9/28/17</td>
<td>9/21/17</td>
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<tr>
<td>Basis of CHO Metabolism / Bioenergetics</td>
<td>9/14/15</td>
<td>9/21/17</td>
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<tr>
<td>CHO Metabolism</td>
<td>9/7/17</td>
<td>9/14/15</td>
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<tr>
<td>CHO Expanded</td>
<td>9/21/17</td>
<td>9/28/17</td>
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<tr>
<td>Lipid Metabolism</td>
<td>10/5/17</td>
<td>10/7/17</td>
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<tr>
<td>Protein Metabolism</td>
<td>10/12/17</td>
<td>10/12/17</td>
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<tr>
<td>Exam I</td>
<td>10/19/17</td>
<td>10/19/17</td>
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<tr>
<td>CHO Considerations for Exercise</td>
<td>10/26/17</td>
<td>10/26/17</td>
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<tr>
<td>Lipid and Protein Considerations for Exercise</td>
<td>11/2/17</td>
<td>11/2/17</td>
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<tr>
<td>Work on Article Review</td>
<td>11/9/17</td>
<td>11/9/17</td>
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<tr>
<td>Nutritional Strategies for Optimal Aerobic Performance</td>
<td>11/16/17</td>
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<tr>
<td>Nutritional Strategies for Competitive Strength, Endurance, and Power Athletes</td>
<td>11/30/17</td>
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<td>Exercise, Thermoregulation, and Fluid Balance</td>
<td>12/7/17</td>
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<td>Exam II</td>
<td>12/14/17</td>
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Note: The following information is designed to help the class run smoothly. The instructor reserves the right to make additions and adjustments as necessary. Some of the writings, lectures, films, or presentations in this course may include material that conflicts with the core beliefs of some students. Please review the syllabus carefully to see if the course is one that you are committed to taking. If you have a concern, please discuss it with me at your earliest convenience.