



Health and Human Performance

A&M-COMMERCE

HHPH 531.01W NUTRITION AND OPTIMAL PERFORMANCE COURSE SYLLABUS: Summer 2022

Instructor: Michael Oldham, PhD

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COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings:

Textbook(s) Required: Bernadot, D. (2020). *Advanced Sports Nutrition*. Human Kinetics (3rd Ed.) ISBN: 978-1492593096. Available online Or available at the TAMUC Bookstore

APA RESOURCE: Purdue Online Writing Lab:

<http://owl.english.purdue.edu/owl/resource/560/01/>

Course Description: This course is a study of nutrition as it relates to optimum performance and health. Nutrient needs, sources, functions, and interactions will be reviewed according to the latest scientific findings. Principles of body conditioning will be emphasized with attention to diet and lifestyle practices that promote health and decrease risks of nutrition-related diseases.

Student Learning Outcomes:

By the end of the course, the successful student should be able to:

1. Discuss Digestion, Absorption, and Assimilation of Nutrients
2. Utilize Sound Guidelines Relative to Both Exercise and Nutrition for Optimal Health and Physical Performance
3. Describe Energy and Energy Pathways in the Body and Discuss Implications of the Basic Nutrients on Health and Physical Performance
4. Assimilate and Discuss Optimal Nutrition for Sports and Exercise
5. Discuss Thermoregulation and Fluid Balance
6. Debate the Pros and Cons of Ergogenic Aids
7. Apply Principles Concerning Body Composition and Weight Control
8. Identify the Components of the Female Athlete Triad
9. Analyze a Food Diary and Make Recommendations

COURSE REQUIREMENTS

Instructional / Methods / Activities Assessments

We will discuss nutrients in relation to various athletes. Optimal nutrition and fluid balance will be the main focus, including a discussion on ergogenic aids. Activities include discussions of timely topics, application of dietary guidelines, and a research paper on a nutrition- and performance-related topic chosen by the student.

Assignment 1: Discussions (2 discussions at 100 points = 200 points)

Student Learning Outcomes #1, #2, #3, #4, #5, #6, #7, and #8

1. *Discuss Digestion, Absorption, and Assimilation of Nutrients*
2. *Utilize Sound Guidelines Relative to Both Exercise and Nutrition for Optimal Health and Physical Performance*
3. *Describe Energy and Energy Pathways in the Body and Discuss Implications of the Basic Nutrients on Health and Physical Performance*
4. *Assimilate and Discuss Optimal Nutrition for Sports and Exercise*
5. *Discuss Thermoregulation and Fluid Balance*
6. *Debate the Pros and Cons of Ergogenic Aids*
7. *Apply Principles Concerning Body Composition and Weight Control*
8. *Identify the Components of the Relative Energy Deficiency in Sports (RED-S)*

Four discussions will take place during the term. You should post a **minimum of 3 posts per discussion thread**: one initial post answering the question and two response posts to your fellow classmates that further the discussion. Be sure to cite your references in APA format. Each post should be a **minimum of 150 words for initial posts and 75 for response posts**.

Grade Earned	Discussion Rubric: Evaluation Criteria	Points Awarded
A	<ul style="list-style-type: none"> Participates with the required number of on-topic postings of required length (75-150 words minimum). Initial response plus at least two additional posts. (Initial post is AT LEAST two days before due date.) Consistently uses Standard American English with rare misspellings. Frequently attempts to motivate the group discussion by asking questions (related to initial discussion question) that further the discussion. Accurately cites accurate information in APA format Provides outside references (that support discussion material) as well as the book in APA format at the end of each post 	90-100% 45 - 50 points
B	<ul style="list-style-type: none"> Participates with the required number of on-topic postings of required length Postings reflect the reading and some outside source material but may not be accurately cited. Consistently uses Standard American English with rare misspellings Comments are logical and reflect critical thinking Provides outside references (that support discussion material) as well as the book in APA format at the end of each post 	80-89% 40 – 44.5 points
C	<ul style="list-style-type: none"> Participates with the required number of on-topic postings of required length Participates, but does not further the discussion by asking other questions related to discussion question. 	70-79% 35 - 39.5 points

	<ul style="list-style-type: none"> Minimal grammatical or spelling errors are noted in posts Opinions and ideas are stated clearly Provides references (that support discussion material) as well as the book at the end of most posts 	
D	<ul style="list-style-type: none"> Participates with the required number of on-topic postings Significant errors in spelling and/or grammar Occasionally posts off topic Posts do not meet length requirements Provides references that support discussion material 	60-69% 30 – 34.5 points
F	<ul style="list-style-type: none"> Does not meet the required number of posts Poor spelling and grammar appear in most posts Posts topics which do not relate to the discussion content Postings may have inaccurate information Did not provide references 	< 60% 0 – 29.5 points

Assignment 2: Exams (2 Exams @ 250 points each)

Student Learning Outcomes #1, #2, #3, #4, #5, #6, #7, #8, and #9

- 1. Discuss Digestion, Absorption, and Assimilation of Nutrients***
- 2. Utilize Sound Guidelines Relative to Both Exercise and Nutrition for Optimal Health and Physical Performance***
- 3. Describe Energy and Energy Pathways in the Body and Discuss Implications of the Basic Nutrients on Health and Physical Performance***
- 4. Assimilate and Discuss Optimal Nutrition for Sports and Exercise***
- 5. Discuss Thermoregulation and Fluid Balance***
- 6. Debate the Pros and Cons of Ergogenic Aids***
- 7. Apply Principles Concerning Body Composition and Weight Control***
- 8. Identify the Components of the Relative Energy Deficiency in Sports (RED-S)***
- 9. Analyze a Food Diary and Make Recommendations***

A **mid-term and final exam** will be administered throughout the semester, covering all information covered in home assignments, web discussions, and the book. Both of these tests are ESSAY tests. Supporting documentation **MUST** be provided with all answers.

Grade Earned	Mid-Term and Final Exam Evaluation Criteria	Points Awarded
A	<ul style="list-style-type: none"> Answers questions with detail, substance, and higher-order thinking. Provides references in APA format at the end of each question. Consistently uses Standard American English with rare misspellings. 	90-100% 225 – 250 points
B	<ul style="list-style-type: none"> Answers questions with minimum detail, substance, and higher-order thinking. Provides references in APA format at the end of each question. Consistently uses Standard American English with rare misspellings. 	80-89% 200 – 224.9 points
C	<ul style="list-style-type: none"> Answers most questions with detail, substance, and higher-order thinking. Provides references at the end of each question. Consistently uses Standard American English with rare misspellings. 	70-79% 175 – 199.9 points
D	<ul style="list-style-type: none"> Answers some questions with detail, substance, and higher-order thinking. Provides references at the end of each question. Consistently uses Standard American English with rare misspellings. 	60-69% 150 – 174.9 points
F	<ul style="list-style-type: none"> Does not answer questions with detail, substance, and higher-order thinking. May or may not provide references in APA format at the end of each question. Consistently uses Standard American English with rare misspellings. 	<60% 0 – 149.9 points

Assignment 3: Research Paper (1 Paper 300 points)

Student Learning Outcomes #2 and #4

2. ***Utilize Sound Guidelines Relative to Both Exercise and Nutrition for Optimal Health and Physical Performance***
4. ***Assimilate and Discuss Optimal Nutrition for Sports and Exercise***

Students will submit **one research paper** covering a nutrition and performance topic approved by the instructor. Possible topics are as follows:

- Supplements and Performance
- Vitamins and Performance
- Minerals and Performance
- Antioxidants and Performance
- The Role of Protein in Performance
- The Role of Fat in Performance
- The Role of Carbohydrates in Performance
- The Role of the Glycemic Index, Electrolytes, and Hydration on Performance
- Effects of Nutrition on Respiration and Cardiac Output during Exercise
- Effects of Anabolic Steroids on Short-Term Versus Long-Term Performance
- Effects of Caffeine, Alcohol, and Sodium Intake on Exercise Performance
- Effects of Nutrition and Exercise and on Body Composition and Sport Performance
- Effect of Eating Disorders on Exercise Performance

(This list is not all-inclusive. If you have other topics in which you are interested, please share them with the instructor. Please do some preliminary research on your topic to make sure that you can find enough information for this paper.)

Guidelines for this paper are as follows:

5-8 pages (actual writing not including the cover page, references, etc.) APA 7th edition format – 12 pt, Times New Roman font, one-inch margins, double-spaced; all references in APA 7th edition format; APA 7th edition referencing

throughout paper. At least 6 references (at least 4 of them current (last 5 years), professional, refereed journal articles)

NOTE: Each student should have a separate topic. (If you have a topic in mind, please let me know ASAP.)

WATCH OUT FOR PLAGIARISM!!! IF YOU USE A DIRECT QUOTE, IT MUST BE PUT INTO QUOTATIONS WITH THE REFERENCE IMMEDIATELY AFTER!!!

Grade Earned	Research Paper: Evaluation Criteria	Points Awarded
A	<ul style="list-style-type: none"> • Topic was approved by instructor. • Paper is a minimum of 5 pages in APA format (actual writing; excluding cover page, references, headings, tables, figures, etc.) • Quality of research paper is excellent. Topic covered thoroughly and substantively using the most updated research available. • Clearly, concisely written. Logical intuitive progression of ideas & supporting information. • Consistently uses Standard American English with rare misspellings. • Accurately cites information in APA format throughout paper using in-text citations. • Paper has no plagiarism. • Reference page is included with a minimum of 6 current, professional, refereed journal articles. 	90-100% 270 – 300 points
B	<ul style="list-style-type: none"> • Topic was approved by instructor. • Paper is a minimum of 5 pages in APA format (actual writing; excluding cover page, references, headings, tables, figures, etc.) • Quality of research paper is good. Topic covered somewhat thoroughly and substantively using updated research. • Clearly, concisely written. Logical intuitive progression of ideas & supporting information. • Consistently uses Standard American English with rare misspellings. • Accurately cites information in APA format throughout paper using in-text citations. • Paper has no plagiarism. • Reference page is included with a minimum of 6 current, professional, refereed journal articles. 	80-89% 240 – 269.9 points
C	<ul style="list-style-type: none"> • Topic was approved by instructor. • Paper is a minimum of 4 pages in APA format (actual writing; excluding cover page, references, headings, tables, figures, etc.) • Quality of research paper is acceptable. Topic covered using research. • Mostly clearly and concisely written. • Consistently uses Standard American English with rare misspellings. • Mostly accurately cites information in APA format throughout paper using in-text citations. • Paper has little or no plagiarism. • Reference page is included with a minimum of 4 current, professional, refereed journal articles. 	70-79% 210 – 239.9 points
D	<ul style="list-style-type: none"> • Paper is a minimum of 4 pages in APA format (actual writing; excluding cover page, references, headings, tables, figures, etc.) • Quality of research paper is poor. Topic not covered thoroughly and substantively. • Not clearly, concisely written. 	60-69% 180 – 209.9 points

	<ul style="list-style-type: none"> Consistently uses Standard American English. Attempts to cite information in APA format throughout paper using in-text citations. Paper has little or no plagiarism. Reference page is included with a minimum of 2 current, professional, refereed journal articles. 	
F	<ul style="list-style-type: none"> Paper is not a minimum of 5 pages in APA format (actual writing; excluding cover page, references, headings, tables, figures, etc.) Quality of research paper is very poor. Topic not covered thoroughly and substantively. Not clearly and concisely written. Does not consistently use Standard American English. May have several misspellings. Information not accurately cited in APA format throughout paper using in-text citations. Paper may have plagiarism. Reference page may or may not be included. 	<p><60%</p> <p>0 – 179.9 points</p>

Grading

Assignment 1: Discussions	200 points
Assignment 2: Exams	500 points
Assignment 3: Research Paper	300 points
TOTAL	1000 POINTS (100%)

Grade Scale:

900 - 1000 = A

800 - 899 = B

700 - 799 = C

600 - 699 = D

0 - 599 = F

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.
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Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest

Device	Operating System	Browser	Supported Browser Version(s)
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site http://www.java.com/en/download/manual.jsp](http://www.java.com/en/download/manual.jsp)
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.
JavaScript is enabled.
Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - [Adobe Reader https://get.adobe.com/reader/](https://get.adobe.com/reader/)
 - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer/](https://get.adobe.com/flashplayer/)
 - [Adobe Shockwave Player https://get.adobe.com/shockwave/](https://get.adobe.com/shockwave/)
 - [Apple Quick Time http://www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)

- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.
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ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

[Need Help?](#)

[Student Support](#)

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the [or click on the words "click here"](#) to submit an issue via email.



System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

[Interaction with Instructor Statement](#)

I will return your grades within one week of assignment submission in most circumstances. Please email me if you have a question or are unable to view your grades at michael.oldham@tamuc.edu

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Late Assignments

Late assignments will lose one letter grade (10%) per day late. The measurement of days ends at 11:59pm the following day of class. A new day begins at Midnight (12 am) at continues to 11:59 pm.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette http://www.albion.com/netiquette/corerules.html](http://www.albion.com/netiquette/corerules.html)

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Counseling:

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Module and DATE (Week)	CHAPTER S to read and review	Topics to Cover	Assignments Due***
Module 1 6/6 - 6/9	1 – 4	<p>CLASS ORGANIZATION</p> <p>Part I: Nutrition Sources for Athletes – Chapters 1-4</p> <p>Energy Nutrients Vitamins and Minerals Fluids and Electrolytes Ergogenic Aids</p>	Discussion 1 Due 6/12 by 11:59pm CT
Module 6/13 - 6/16	5 & 6	<p>Part II Continued: Nutrition Aspects of Optimal Perf. –Chapters 5 - 6</p> <p>Athlete GI Function and Energy Delivery Nutrient and Fluid Timing</p>	
Mid-Term 6/19	1 – 6	Mid-Term Exam: Chapters 1 – 6: Take exam by Sunday, June 19th by 11:59 p.m.	
Module 3 6/20 – 6/23	7 – 10	<p>Part III: Factors Affecting Nutrition Needs – Chapters 7 - 10</p> <p>Factors Affecting Nutritional Needs: Travel, Altitude, Gender, Age, and Body Composition</p>	Discussion 2 Due 6/26 by 11:59pm CT
Module 4 6/27 – 6/30	11 – 13	<p>Part IV: Nutrition Strategies and Plans – Chapters 11 - 13</p> <p>The Power Athlete, Endurance Athlete, and Combined Athlete</p>	
7/4 – 7/7	7 – 13	<p>Research Paper Due by July 6th, by midnight</p> <p>Final Exam: (Take by Thursday, July 8, midnight)</p>	