I. COURSE DESCRIPTION
This course is designed to provide scientific evidence for the use of nutrient ingestion to
enhance sport performance and maintain optimal health. Special emphasis will be placed
on the chemical and biological changes caused by the ingestion of specific nutrients. In
this course the student will learn to utilize current nutrition research to enhance the
athlete’s energy systems within various categories of sport.

II. RATIONALE
This purpose of this course is to provide the physical educator, coach, or fitness expert the
knowledge necessary to improve athletic performance through a hands-on approach to
sport nutrition learning. This course will provide the guidance necessary for the graduate
student to conduct current research, create fluid and food meal plans, and evaluate meal
plans based on changes in athletic performance.

III. STATE ADOPTED PROFICIENCIES
1. LEARNER-CENTERED KNOWLEDGE: The teacher possesses and draws on a rich
knowledge base of content, pedagogy, and technology to provide relevant and meaningful
learning experiences for all students.
2. LEARNER-CENTERED INSTRUCTION: To create a learner-centered community, the
teacher collaboratively identifies needs; and plans, implements, and assesses instruction
using technology and other resources.
3. EQUITY IN EXCELLENCE FOR ALL LEARNERS: The teacher responds
appropriately to diverse groups of learners.
4. LEARNER-CENTERED COMMUNICATION: While acting as an advocate for all
students and the school, the teacher demonstrates effective professional and interpersonal
communication skills.
5. LEARNER-CENTERED PROFESSIONAL DEVELOPMENT: The teacher, as a
reflective practitioner dedicated to all students’ success, demonstrates a commitment to
learn, to improve the profession, and to maintain ethics and personal integrity.

IV. TExES COMPETENCIES
N/A
V. COURSE OBJECTIVES / LEARNING OUTCOMES

Given lectures, demonstrations, out-of-class readings, research project, Podcast discussions, and class discussions, the student will at the conclusion of this course be able to:

A. Describe the scientific process of carbohydrate, fat, and protein metabolism.
B. Differentiate between dietary recommendations for various athletes.
C. Identify and discuss nutritional factors related to common chronic pathologies of health and fitness.
D. Describe the function and regulation of fluids.
E. Identify and discuss ergogenic aids and supplements, and their role in sport performance.
F. Identify the importance of vitamins and minerals on metabolism.
G. Identify and discuss physiological and psychological factors involved in weight gain and weight loss, and the potential ramifications to athletic performance.
H. Demonstrate the ability to analyze nutrient content of individual foods, food groups, and meal plans.

VI. COURSE TOPICS

Orientation/introduction
Review of basic nutrition
Physiological changes from carbohydrates, fats, and proteins
Chemical processes that occur during digestion/absorption
Essential nutrients
Obesity, eating disorders, and weight management
Ergogenic aids and supplements
Nutrition regulation/legislation
Role of nutrition before, during, and after competition
Function of vitamins on performance

VII. INSTRUCTIONAL METHODS AND ACTIVITIES

Class Lectures and Discussions
Demonstrations
Individual and Group Activities
Meal Planning
Research Projects
Presentations
Computer Technology Interaction
Discussions

VIII. EVALUATION AND GRADE ASSIGNMENT

Evaluation: All written work may be subject to submission through www.turnitin.com as a means of determining original work.
Evaluation will be based on successful completion of the following activities:

1. 2 Tests @ 100 pts 200
2. Pre, During, Post Competition Meal Plans 100
3. Performance Enhancement Research Project 100
4. Performance Enhancement Project Presentation 50
5. Misc Assignments/Participation 200

**TOTAL POINTS = 650**

*Tests:* A midterm and non-comprehensive final will be given over lectures and assignments. Information concerning these exams will be given as early as possible.

*Meal Plans:* A detailed meal plan protocol will be assigned for a predetermined sport. The meals will need to include all fluid and solid nutrients that an athlete would consume to optimize performance for his/her competition. The meal plans will cover a 7 day protocol including the pre-, during-, and post-competition food/fluid composition, nutrient, and caloric breakdowns.

*Research Project:* Each student will conduct a research project that incorporates the application and utilization of nutrient ingestion on athletic performance. The project will include an abstract, review of at least 10 research articles, procedures, findings, and discussion. Specific details about the project will be covered early in the semester.

*Presentation:* Each student will provide a PowerPoint presentation, complete with speaker notes, of his/her research project findings to the class.

*Grading:*

- A – 89.50 – 100
- B – 79.50 – 89.49
- C – 69.50 – 79.49
- D – 59.50 – 69.49
- F – Below 59.49

**IX. COURSE SCHEDULE AND POLICIES**

*Tentative Course Outline:* Quizzes, applied assignments, and tests will be announced as early as possible. This course is taught as closely as possible to the text materials, but the interest of the class can change the timing of the materials without prior notice.

*Policies:* Late assignments and quizzes will NOT be accepted. In addition, quizzes and tests cannot be retaken other than for an excused absence.
X. TEXTBOOK

XI. BIBLIOGRAPHY


XII. GRADE APPEALS
As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

Academic Honesty
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, forgery, or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.)

Disciplinary action for academic misconduct is the responsibility of the faculty member assigned to the course. The faculty member is charged with assessing the gravity of any case of academic dishonesty, and with giving sanction to any student involved. Penalties that may be applied to individual cases of academic dishonesty include one or more of the following:

1. Written reprimand;
2. Requirement to re-do work in question;
3. Requirement to submit additional work;
4. Lowering of grade on work in question;
5. Assigning grade of “F” to work in question;
6. Assigning grade of “F” for course;
7. Recommendation for more severe punishment.

If the faculty member determines that assigning a grade of “F” to the course is the appropriate penalty and this disciplinary action occurs prior to the deadline for dropping courses, the student forfeits his/her right to drop the course in question.

The faculty member may file a record of cases of academic dishonesty, including a description of the disciplinary action taken, along with any materials involved, with his or her college dean and the Office of Student Affairs. The office of the academic dean of the college in which the offense took place will maintain records of all cases of academic dishonesty reported for a period of not more than two years.

Any student who has been penalized for academic dishonesty has the right to appeal the judgment or the penalty assessed (See XII above).

XIII. DISABILITIES ACCOMMODATIONS

Americans with Disabilities Act (ADA) - The 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 disability. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.