

Department of Athletic Training and Exercise Physiology EXPH 3003 Strength and Conditioning – Theory and Application **Spring 2022**

Instructor: Michael W. Olson, Ph.D.

Office: 215 Ligon Coliseum

E-mail: michael.olson@msutexas.edu

Office Phone: 397-4053

Office Hours: M/W 9:00-10:00am; T/Th 9:00-10:30am

Course Location: Ligon Coliseum 223 and Wellness Center Weight Room

Course meeting days: Monday, Wednesday, Friday

Course time: 12:00-12:50pm

Important Dates:

First Day of Class Monday, January 10

Martin Luther King, Jr., Monday, January 17 (no class)

Holiday Observed

Spring Break March 12-20 Last Day to Withdraw Monday, March 21 Easter Holiday April 14-17 (no class)

EXERCISE PROJECT:

Background information Friday January 28

for project due

Exercise Prescription Friday February 18

General Plan due

Exercise Prescription Friday April 15

plan due

EXAMS:

Exam I Wednesday, February 16 (in class) Exam II Wednesday, March 30 (in class)

Wednesday, May 4 from 3:30-5:30pm Final Exam

Prerequisites:

Successful completion (with a grade of C or above) in EXPH 1993 or 2993 and EXPH 2503.

Required Readings:

Essentials of Strength Training and Conditioning, 4th edition, Haff and Triplett, eds., ISBN: 9781492501626

Attendance

Attendance at class is **compulsory** if you intend on performing well in this course. Attendance will be taken for each class period. If you are not feeling well, I encourage you to stay away from the classroom. Lectures will not be recorded so it is your responsibility to get notes from fellow classmates. Remember, if you plan on doing well in this, or any other course, you need to study outside of class three (3) hours for each credit hour of a course. Since this is a 3-creidt hour course, you should be studying outside of class for 9 hours during the week and staying current with the materials presented.

While in the classroom, social distancing will be practiced. Wearing masks is not mandatory/required while in the classroom and the building

Study Hours and Tutoring Assistance

There will be few study hall sessions prior to each EXAM by GA.

**If you attend the study hall, you will get one point from the scheduled EXAM.

Student Handbook

Refer to: Student Handbook-2018-19

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given or work submitted previously by a student in another course). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

Other Required Materials

- Closed-toe shoes (indoor soccer shoes, Converse Chuck Taylors, athletic shoes, lifting shoes).
- Large notebook (spiral or otherwise) for taking notes on how to coach and perform the lifts)
- Appropriate clothing to exercise in (athletic shorts, shirts, sweatpants, sweatshirts)

Class Description:

A comprehensive theory and practice course designed to prepare the student to function as a sports/exercise science practitioner with individuals and small groups in commercial, educational, high performance, and clinical environments. A secondary objective of the course is preparation for successful completion of professional allied health certification exams. The course includes a combination of science-based theoretical lectures addressing the exercise programming of individuals, practical exercise leadership experience with individuals and small groups, and regular student participation in a variety of physical activity modalities according to ACSM/NSCA/ASEP/USOC recommendations.

Objectives:

At the completion of this course, students should be able to:

1. Demonstrate and understand the factors used in establishing an exercise training program

- 2. Have an understanding of the basis of providing instruction and feedback in order to properly teach physical skill
- 3. Understand how to apply the concept of energy-systems to different types of training (aerobic/anaerobic)
- 4. Understand how to assess the performances and factors affecting performances in individuals who are exercising for fitness/recreation and/or sport
- 5. Gain an understanding of how to interpret theoretical information (e.g. research) for the enhancement of human performance and physical well being

Class Policies and Student Conduct:

- Attendance is imperative for success in this class. The student is responsible for any information presented, discussed and assigned in class regardless of whether or not the student was present. Make-up tests, quizzes, assignments, or other grades will be granted for excused absences only:
 - serious illness (doctor's note required)
 - official university excused absences (with proper documentation <u>and</u> prior notification)
 - extenuating AND unusual circumstances (<u>PRIOR approval</u> should be obtained or direct contact made with the instructor **within 24 hours** of the event). Whether or not specific circumstances quality as both extenuating AND unusual is at the discretion of the instructor on a case by case basis.
 - Documentation of the reason for any absence must be provided to the instructor.
 - In emergencies where advance notification is not possible, the student must contact the Dean of Students to initiate an official request for an excused absence (940-397-4291).
- ✓ Late assignments will not be accepted for any reason barring the guidelines described in the course syllabus.
- When contacting the instructor in reference to class issues via e-mail (michael.olson@msutexas.edu) or other method (for example a note in my mail box or on my office door), if you do not receive confirmation that I have received your message, project, etc., within a reasonable time period (2 work days), then I did not get it! In other words, if you do not hear back from me, please follow up to make sure we are communicating effectively!
- ✓ Please check your msutexas e-mail account AND D2L prior to coming to class. If I am ill or there is a change in the class location, materials required, or meeting time, I will send an e-mail out to all of your student accounts.
- ✓ Students are strongly encouraged to ask, and respond to, questions in class, because this identifies problem areas for the instructor.
- ✓ It is also recommended that every day after class you go through and review and organize the notes you have taken, rectifying the material with what you have read in the text. Preparation immediately before the examinations is greatly facilitated by this process.
- ✓ Students are encouraged to come to office hours in order to ask additional questions on the material or to gain a better understanding of grades on exams or assignments.
- ✓ Please turn off your cell phones and put them away prior to the start of class. Failure to comply

with this policy will result in the student being dismissed from class and will have major implications for the student's participation grade.

Please understand that slides are an outline and do not represent all of the information which will be covered in class. If we talk about topics in class, unless I specify otherwise, they are fair game for exam material. If there is something that comes up in class discussion which you do not understand, please be sure to let me know so that I can slow down and help you get it right.

Evaluation:

EXAMS:

There will be three (3) exams during the semester. Exams will be in multiple choice format.

Students who give prior notification for a university excused absence will be allowed to complete an *alternate* version of the exam outside of class.

Students who miss class for an emergency are required to schedule a time to make the exam up within 3 school days of return to classes. Students who miss exams for something which is scheduled ahead of time (sports, musical ensembles, etc.) must make arrangements prior to take the exam. The exam does not necessarily have to be taken prior to traveling, but the arrangements as far as when the exam will be taken must be made prior to traveling. It is the student's responsibility to make these arrangements within one week of returning from travel.

Students who miss an exam for what would *not* be considered a university excused absence or who do *not* give prior notification of excused absences will *not* be allowed to take the exam at an alternate time.

EXERCISE PRESCRIPTION PROJECT:

- O Develop a 6-month exercise prescription program for a person to be determined in class:
- o Details:
 - ✓ Give background information on your individual or your group.
 - ✓ Talk about any specific concerns in dealing with a person with the specific characteristics of your subject
 - ✓ Break overall plan down from the macrocycle to mesocycle to the microcycle level
 - ✓ Give a general overview of each phase as you move through the program
 - ✓ Provide a graph for volumes, intensities, and rest-times for each mesocycle for each type of training (i.e. resistance, cardiovascular, flexibility, balance, speed, etc...)
 - ✓ Use the principles of periodization, or planned variation down to the microcycle level THIS IS IMPORTANT!
 - ✓ Use the appropriate stimulus for the desired response See class notes or research papers for determination of intensities, volume, exercise selection
 - O Some of this can be found in the optional resources listed in the beginning of the course syllabus
 - Exercise choices on the part of students which do not reflect scientific principles discussed in class or in the readings or which are not supported by peer-reviewed research will be heavily penalized
 - ✓ Show sufficient detail that I could implement this program correctly with your subject if needed THIS IS IMPORTANT!

- ✓ Reference where appropriate
 - O See end of syllabus for approved sources for this project!
- ✓ Proper grammatical structure, spelling, format, and citation methods (APA Format) is important (APA Format)
- ✓ Projects must be submitted via TurnItIn in D2L in a file for the class which will be created by the instructor by *Friday April 15, 2022*. TurnItIn is a plagiarism detection service.

PRACTICAL/ORAL EXAMS:

On the days designated as "Practical Exam" days, students will individually demonstrate how to teach a new exercise or skill and may be required to complete an oral quiz over material covered throughout the semester. Students should also be able to identify flaws in lifting technique being performed by another lifter. The lifts chosen and information tested upon is at the sole discretion of the instructor and may include any and all information presented in class, in the text, and in your article readings.

<u>PARTICIPATION</u>:

Evaluation for this portion of the class grade is subjective in nature and will be based on areas such as: cheerful and willing participation in class discussions, full engagement in class activities, following instructions, compliance with safety policies, having and displaying a positive attitude, readily and willingly answering questions when called upon in class, being on time and ready to start at the beginning of class (phones put away, headphones removed), etc.

Students who miss more than 15% of practical/applied sessions will earn a zero for their participation grade, regardless of their performance in other areas.

SAFETY POLICY:

Students are expected to follow instructor directions at all times. Any student who is acting in an unsafe manner will have the proper procedures explained to them. Failure to comply with those procedures will result in the removal of that student from that week's class which creates an inability for that student to earn participation points for that session. This will also have obvious negative implications for the participation grade for that particular student. Students who exhibit this behavior on a regular basis (defined as having to correct a student for unsafe behavior more than 2 times in the semester) will not be allowed to participate in the remainder of the practical sessions for the semester which will result in zero for the participation grade portion of the class and will likely lead to failure of the practical exam.

COURSE ASSESSMENT BREAKDOWN:

Practical exam	15%
Exercise prescription program	30%
Student participation	10%
3 Exams, 15%/each	45%

GRADING SCALE:

A student will earn a grade in class based upon his/her cumulative performance on class assessments.

$$90 - 100 \% = A$$

 $80 - 89.99 \% = B$
 $70 - 79.99 \% = C$
 $60 - 69.99 \% = D$
 $< 60 \% = F$

Tentative Course Schedule:

Week	Dates	Content	Reading
1	Jan 10-14	Welcome, Introduction, Chapter 1: Structure & Function of Body Systems	pp. 1-18
2	Jan 19-21	Chapter 2: Biomechanics of Resistance Exercises	pp. 19-42
3	Jan 24-26 Jan 28	Chapter 3: Bioenergetics of Exercise & Training Practical/Applied Session Background information for Exercise Prescription project is due	pp. 43-64
4	Jan 31-Feb 2 Feb 4	Chapter 4: Endocrine Responses Practical/Applied Session	pp. 65-86
5	Feb 7-9 Feb 11	Chapter 11: Performance Enhancing Substances and Methods Practical/Applied Session	pp. 225-248
6	Feb 14 Feb 16	Chapter 21: Periodization EXAM I	pp. 583-604
	Feb 18	Chapter 21: Periodization <u>Exercise Prescription General Plan is due</u>	pp. 583-604
7	Feb 21-23 Feb 25	Chapter 5: Adaptations to Anaerobic Training Practical/Applied Session	pp. 87-114
8	Feb 28-Mar 2 Mar 4	Chapter 17: Program Design for Resistance Training Practical/Applied Session	pp.115-134 pp. 259-316
9	Mar 7-9 Mar 11	Chapter 6: Adaptations to Aerobic Endurance Training Practical/Applied Session	pp. 115-134
10	Mar 21-23 Mar 25	Chapter 20: Program Design for Aerobic Endurance Training Practical/Applied Session	pp. 559-582
11	Mar 28 Mar 30	Chapter 7: Age/Sex Related Differences for Resistance Training EXAM II	pp. 135-154
	Apr 1	Chapter 7: Age/Sex Related Differences for Resistance Training	pp. 135-154
12	Apr 4-6 Apr 8	Chapter 8: Psychology of Athletic Preparation & Performance Practical/Applied Session	pp. 155-174
13	Apr 11-13 Apr 15	Chapter 10: Nutritional Strategies for Maximizing Performance Easter Holiday – no class, <i>Exercise Prescription Program is du</i>	
14	Apr 18 Apr 20 Apr 22	Chapter 12: Principles of Test Selection and Administration Chapter 13: Administration/Scoring/Interpretation of Tests Practical/Applied Session	pp. 249-258 pp. 259-316
15 16	Apr 25-27 Apr 29 Final Exam	Chapter 22: Rehabilitation & Reconditioning Review for Final Exam Wednesday May 24 from 3:30-5:30pm	pp. 605-622

Assumption of risk:

As with any activity there is an assumed risk while participating. We will do all we can to provide a safe environment; however, you are ultimately responsible for your well-being. The university will not be held liable for any injuries that occur.

Any student who has a documented medical condition, (e.g. Asthma, Hypertension, Cardiac Condition, etc.), or any injury or other musculoskeletal condition that may preclude participation in a specific activity should inform the instructor immediately.

Arrangements will be made with an alternate activity for your participation.

Extra Credit

There will be several impromptu activities related to our class or department throughout the semester. If you participate in those activities, you will receive extra credits to the EXAM point total from participating of research project, conference/thesis presentation, or/and study halls, etc.

Late Work

Late assignments will not be accepted.

Make Up Work/Tests

<u>No make-up exams/assignments</u> will be given for any personal reasons, except under medical/religious/family emergency situations/ authorized participation in official school functions.

Services for Students With Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to http://www.mwsu.edu/student-life/disability.

College Policies

Campus Carry Rules/Policies

Refer to: Campus Carry Rules and Policies

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designated-smoking areas at each location.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.