

Department of Athletic Training and Exercise Physiology EXPH 3003 Strength and Conditioning – Theory and Application Fall 2021

Instructor:

Michael Olson, Ph.D. Office: 215 Ligon Coliseum E-mail: michael.olson@msutexas.edu Office Phone: 940-397-4053 Office Hours: M/W 1:00-2:00pm; T/TH 11:00am-1:00pm Course Location: Ligon Coliseum 111 Course meeting days: Monday, Wednesday, Friday Course time: 9:00-9:50am

TAs: Shariff Muhammad Ross Dalton Natalie Delgadillo

Important Dates:

First Day of Class	Monday, August 23
Last day to Add/Drop	Wednesday, August 26
Last day for "W"	Monday, October 25 (4pm)
Thanksgiving Holiday	November 24 and 26 (no class)
Exam I	Wednesday, October 13
Final Exam	Monday, December 6 (8-10am)

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

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.

Attendance

Attendance at class is **compulsory** if you intend on performing well in this course. Attendance will be taken for both face to face and virtual meetings.

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

while in the classroom or the building. 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.

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Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). 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)
- Training Log (smaller notebook will be fine)
- Appropriate clothing to exercise in (no gear supporting other universities on Fridays when we are lifting)

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. Understand how to train specific energy systems in a conditioning setting
- 2. Demonstrate safe and effective lifting techniques for strengthening a variety of upper and lower body muscle groups
- 3. Be able to integrate information from exercise physiology, biomechanics, and motor control in the performance of conditioning and strength activities
- 4. 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:

It is assumed that everyone enrolled in this course is here to pursue further knowledge in the area of human movement. The following list provides what will be expected by the instructor and should also be expected by the students:

• Attendance in class is expected. If you will not be able to participate in a class session please notify the instructor PRIOR to your absence in a timely manner. Only those with

excuses that are related to University events (academic, athletic, etc.) or religious purposes may make-up work. If you have an excused absence and will not be available for an exam (EXCLUDING the FINAL EXAM) you must take the exam PRIOR to your absence (NO EXCUSES!!). Those individuals who do not have an excuse for an absence will receive a zero score for that day's evaluation.

- Turn off all cell phones, pagers, and any other electronic devices before class begins. It is disrupting to other students, and disturbing to the instructor if these electronic devises are active during the class period.
- Food is not permitted in the classroom. Bottled beverages (with caps/resalable tops) will be the ONLY beverage allowed in the classrooms.
- If you have a question that was not answered during the class period please feel free to stop by my office or email me your question (see front page).
- Neither academic dishonesty nor plagiarism will be tolerated and as such, disciplinary action will be issued in accordance with university guidelines (Student Handbook-2018-19).

Evaluation:

EXAMS:

There will be two (2) exams during the semester. The format of the exams will be discussed prior to each exam.

EXERCISE PRESCRIPTION PROJECT:

- Develop a <u>6-month</u> 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
 - \checkmark Break overall plan down from the macrocycle to mesocycle to the microcycle level
 - \checkmark 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 <u>down to the microcycle level</u> THIS IS IMPORTANT!
 - ✓ Use the appropriate stimulus for the desired response See class notes or research papers for determination of intensities, volume, exercise selection
 - 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
 - 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 November 19, 2020*. 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.

TRAINING LOGS:

Students must participate in regular documented exercise 3 times per week throughout the semester. One of these sessions can be fulfilled on the days we lift as part of class. However, the rest of the days must come on the student's own time. At the end of the semester, students must turn in a training log demonstrating the workouts completed. These training logs should reflect use of the exercises and principles learned inside the class. Students who do not participate properly or who do not turn in an exercise log will fail the course.

PARTICIPATION:

The instructor will also keep track of attendance and evaluate effort and participation on practical application days. In addition, student attitude (being respectful of the instructor, graduate assistants, and other students) will be factored into participation points for the class grade. Students who are not in class or who do not participate with good effort should expect heavy penalty on their participation grade.

<u>These points are not automatic</u>! Students are expected to earn them through their actions, attitude, and behavior throughout the semester in all areas, not just one or two. For example, a student who is ready to go when class starts and follows instructions correctly but who does not answer questions when called upon or does not willingly engage in class discussions will earn only partial credit for this portion of class grade. A student who is engaging in class and who participates willingly but who is consistently late, messing with their phone, etc. will earn at most, only partial credit in this area. Only students who are in class on time, have their phones, etc. silenced and put away, and who regularly and cheerfully participate in class discussion will earn full points for participation.

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 be dropped from the class administratively or, if the withdraw date has passed, 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	25%
Training Logs	10%
Student participation	
2 Exams, 20%/each	40%

GRADING SCALE:

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

 $\begin{array}{l} 90-100\ \%=A\\ 80-89.99\ \%=B\\ 70-79.99\ \%=C\\ 60-69.99\ \%=D\\ <60\ \%=F \end{array}$

Tentative Course Schedule:

Week	Dates	Content	Reading
1	Aug 23-27	Welcome, Introduction, Chapter 1: Structure& Function of Body Systems	pp. 1-18
2	Aug 30-Sept 1 Sept 3	Chapter 2: Biomechanics of Resistance Exercises Practical/Applied Session	pp. 19-42
3	Sept 8-10 Sept 10	Chapter 3: Bioenergetics of Exercise & Training <u>Background information for Exercise Prescription project is du</u>	рр. 43-64 <u>е</u>
4	Sept 13-15 Sept 16	Chapter 4: Endocrine Responses Practical/Applied Session	pp. 65-86
5	Sept 20-22 Sept 24	Chapter 5: Adaptations to Anaerobic Training Practical/Applied Session	pp. 87-114
6	Sept 27-29 Oct 1	Chapter 6: Adaptations to Aerobic Endurance Training Program Practical/Applied Session <u>Exercise Prescription General Plan is due</u>	is pp. 115-134
7	Oct 4-6 Oct 8	Chapter 7: Age and Sex Related Differences: Implications for R Practical/Applied Session	esistance Exercise pp. 135-154
8	Oct 11 Oct 13 Oct 15	Chapter 13: Administration, Scoring & Interpretation of Selecte Exam I: Chapters 1-7 Practical/Applied Session	d Tests pp. 259-316
9	Oct 18-20 Oct 22	Chapter 21: Periodization Practical/Applied Session	pp. 583-604
10	Oct 25-27 Oct 29	Chapter 14: Flexibility Training Practical/Applied Session	pp. 317-350
11	Nov 1-3 Nov 5	Chapter 17: Program Design for Resistance Training Practical/Applied Session	pp. 439-470

12	Nov 8-10 Nov 12	Chapter 21: Program Design & Technique for Aerobic Endurance Practical/Applied Session	e Training pp. 559-584
13	Nov 15-17 Nov 19	Chapter 8: Psychology of Athletic Preparation & Performance Practical/Applied Session <u>Exercise Prescription Program is due!!</u>	pp. 155-174
14	Nov 22 Nov 24-28	Chapter 11: Performance Enhancing Substances No class/Thanksgiving Break	pp. 225-248
15	Nov 29 –Dec 1 Dec 3	Chapter 22: Rehabilitation & Reconditioning Review for Final Exam	pp. 605-622
16	Final Exam	Monday December 7 (8-10am)	

* Actual weekly schedule may fluctuate depending on class progress

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.