Oxford College of Emory University PE 101 Weight Training - Spring 2004 Professor Lance Von Vogt lvonvog@emory.edu 4-8355

I. Goals of this course:

Upon completion of this course the student should be able to:

- 1. Demonstrate competency in the thirteen instructional objectives to the cognitive portion of the course (see V! below)
- 2. Engage in a progressive resistance exercise program wherein skeletal muscles are stressed in the positive, prescribed manner in order that they become more efficient. Students should also be able to practically apply the cognitive material to their exercise program.
- 3. Understand the relationships between the cognitive and physical components of the course and elements Two (2), Three (3), Four (4) and Six (6) listed in the preface to this course.

II. Course Description:

The course is designed for the novice (male or female) interest in learning the technique and implications for the progressive resistance exercise program based on physiological principles. Further, the emphasis here will be on methodology and the adherence to physiologically based principles of training.

III. Sequence of Events in Class:

Orientation (handout); Exercise Demonstration (handout); Discussions; Workouts; Exams. Workouts will be held each Monday, Wednesday and Friday.

IV. Text: Strengthening Skeletal Muscle, Dr. Richard Shappell

1. Specific readings in the text will be assigned prior to all discussions. The assigned text will directly relate to class discussions. Students should be prepared for all discussions by having read the assigned text prior to class.

V. Dress:

- 1. Shoes Must wear athletic shoes (cross-trainer, running, tennis or basketball shoes).
- 2. Must wear socks with your shoes.
- 3. Must wear athletic shorts or jogging pants
- 4. Must wear athletic shirt or t-shirt.
- 5. Every Student *must* bring a small towel to class each day
- 6. Must not wear any open toed shoe or non-athletic shoe
- 7. Must not wear cut off jeans or pants
- 8. Must not wear any shorts or pants with buckles or studs or belts

VI. Discussions

1. There will be 13 discussions during the semester; the student is required to read the assigned text prior to the class discussion.

Discussion #1 – must read Chapters 1 & 2

Chapter 1 – Human Skeletal Muscle

Chapter 2 – Skeletal Muscle Characteristics

<u>Instructional Objectives</u>: The student should be able to understand and explain the contents of the listed chapters.

Discussion #2 – must read Chapter 3

Chapter 3 – Training Principles and Training Regimens

<u>Instructional Objectives</u>: The student should be able to define, understand and implement the material included in Chapter Three.

Discussion #3 – must read Chapter 4

Chapter 4 – Gross Anatomy

<u>Instructional Objectives</u>: The student should be able to list, identify and understand the components of skeletal muscle

Discussion #4 – must read Chapter 5

Chapter 5 – Neuromuscular Structures

<u>Instructional Objectives</u>: The student should be able to list, identify and understand neural structures.

Discussion #5 – must read Chapter 6

Chapter 6 – Muscular Contraction

<u>Instructional Objectives</u>: The student should be able to list the steps in muscle contraction (sliding filament theory).

Discussion #6 – must read Chapter 7

Chapter 7 – Types of Contractions

<u>Instructional Objectives</u>: The student should be able to define and understand the three types of contractions and their relationship to training.

Discussion #7 – Must read Chapter 8

Chapter 8 – Energy Systems

Instructional Objectives: The student should be able to describe the energy systems that supply energy for muscle contraction.

Discussion #8 – Must read Chapter 9

Chapter 9 – Microanatomy and Other Muscle Structures

<u>Instructional Objectives</u>: The student should be able to list and describe the function of microanatomy other muscle structures including fiber type and fiber arrangement.

Discussion #9 – Must read Chapter 10

Chapter 10 – Muscles and Anatomical Terms

<u>Instructional Objectives</u>: The student should be able to define, describe, locate and explain the function of skeletal muscles.

Discussion #10 – Must read Chapter 11

Chapter 11 – Training Effects

<u>Instructional Objectives</u>: The student should be able to describe the effects of training on the body.

Discussion #11 – Must read Chapter 11

Chapter 11 – When Training Ceases & Maintenance Regimen Instructional Objectives: The student should be able to describe the effects of ceasing training on the body. The student should also understand the concept utilizing a maintenance regimen and its effects on the body.

Discussion #12 – Must read Chapter 12

Chapter #12 – Factors Affecting Strength

<u>Instructional Objectives</u>: The student should be able to discuss the genetic factors that affect strength

Discussion #13 – Must Read Chapters 13 & 14

Chapter 13 – Diet and Ergogenic Aids

Chapter 14 – Training Exercises and The Muscles They Affect Instructional Objectives: The student should be able to discuss and understand the role diet and Ergogenic aids plays in weight training. The student should be able to discuss training exercises and the muscles they affect. The student should be able to build his/her own viable training regimen to fit his/her needs.

VII. Evaluation

A. Announced Written Exams 320 points

There will be five (5) written exams during the semester. The lowest test grade will be dropped.

B. Research Articles 80 points

There will be two research articles (internet, magazine, book) that will need to be submitted during the semester. The student will be required to submit a one (1) page summary for each research article submitted.

C. Final Exam: 100 points

Administered on the final class day, this exam is comprehensive.

D. Exercise Regimen & Program 500 points

Satisfactory completion of the exercise program earns the student 500 points.

E. Grading

Total Points: 1,000

A	90% - 100%	900 - 1,000
В	80% - 89%	800 - 899
C	70% - 79%	700 - 799
D	60% - 69%	600 - 699
F	Below 60%	0 - 599

F. Absentee Policy

Students may take three (3) absences. These are to be used for illness, emergency, religious holidays, etc. Students that are absent more than three (3) times will be penalized 50 points for each additional absence beyond three (3). These points will be deducted from your Exercise Regimen & Program aspect of this course.

G. Late Policy

Students may be late twice (2) during the semester without being penalized. Any additional late appearances will result in a ten (10) point deduction. These points will be deducted from your Exercise Regimen & Program aspect of this course.

VIII. Practical Application:

Students will apply what they have learned about basic muscle anatomy and physiology to training regimens of their own choice (increased muscle strength, increased muscle size, increased muscular contraction, endurance (toning) for a combination of all. These regimens (the training) will occur each class day (Monday, Wednesday & Friday).

IX. Honor Code

Students are expected to adhere to the Honor Code with reference to all matters relating to the evaluative process of this course.

X. Office Hours

M, W, F 9:30 a.m. – 11:00 a.m. T, TH 1:00 p.m. – 2:00 p.m.

Any student who cannot make these times may phone or email to schedule a convenient appointment for both parties.

PE 101 - Weight Training - Spring Semester 2004 M - W - F

Professor Von Vogt

Dates	Instruction & Assignments

January	
Wednesday - 14th	Orientation
Friday - 16th	Orientation/Medical Profile/Read Chapters 1, 2, 3 & 4
Wednesday - 21st	Discussion Chapters 1 & 2
Friday - 23rd	Discussion Chapters 3
Monday - 26th	Program Demonstration/Beginning Resistance
Wednesday - 28th	Discussion of Chapter 4/Program Orientation
Friday - 30th	Exam #1/ Read Chapters 5, 6, & 7/ Program
February	
Monday - 2nd	Discussion of Chapter 5/Program
Wednesday - 4th	Program/Alternate Exercises
Friday - 6th	Discussion of Chapter 6/Program
Monday - 9th	Program/Choosing Specific Program
Wednesday - 11th	Discussion of Chapter 7/Program
Friday - 13th	Program
Monday - 16th	Exam #2/Read Chapters 8, 9 & 10/Program
Wednesday - 18th	Program
Friday - 20th	Program
Monday - 23rd	Program /Review
Wednesday - 25th	Discussion of Chapter 8/Program
Friday - 27th	Program/Research Article & Summary #1
March	
Monday - 1st	Discussion of Chapter 9 & 10/Program
Wednesday - 3rd	Exam #3/Read Chapter 11/Program
Friday - 5th	Program
Monday - 15th	Exam #4/Read Chapters 12 & 13/Program
Wednesday - 17th	Exploding Myths
Friday - 19th	Program
Monday - 22nd	Program/BMI Index
Wednesday - 24th	Discussion of chapter 11 & 12/Program
Friday - 26th	Program
Monday - 29th	Body Building Discussion
Wednesday - 31st	Discussion of Chapter 13/Program
April	
Friday - 2nd	Program
Monday - 5th	Exam #5/Program

Wednesday - 7th	Program
Friday - 9th	Program
Monday - 12th	Program
Wednesday - 14th	Aerobics and Aerobic Training
Friday - 16th	Program/Research Article & Summary #2
Monday - 19th	Program
Wednesday - 21st	Student Evaluations
Friday - 23rd	Review/Study Guide
Monday - 26th	Final Exam