**Strength and Conditioning Preparation**

**(KINE 4630) Course Syllabus**

**Fall 2022**

**Professor**: C. Brooks Mobley, PhD, CSCS **Phone**: 334-844-1922

**Office**: 169 School of Kinesiology **Prerequisites**: None

**Office hours**: MWF 10:00 – 11:00 am\*\* **Class schedule**: TR 9:30 – 10:45 am **E-mail**: [moblecb@auburn.edu](mailto:moblecb@auburn.edu) **Class Location:** KINE 126

**\*\*Please email me to schedule an appointment that fits your schedule, if needed.**

**Course Description**

This course will focus on the physiological, anatomical/biomechanical and biochemical/molecular aspects of training for strength and power athletes. While not required for credit completion, students that excel in this class should be prepared to take the Certified Strength and Conditioning Specialist (CSCS) examination administered by the National Strength and Conditioning Association (NSCA). However, it is highly recommended that students preparing to take the CSCS exam also obtain extra materials from the NSCA such as practice exams and ancillary study materials.

**Course Objectives**

The specific objectives of this class for the student are as follows:

* Establish a foundational understanding for the physiological adaptations that occur in response to different strength and aerobic training paradigms.
* Establish a foundational understanding for the anatomical and biomechanical aspects of exercise training.
* Understand the basic concepts of sports nutrition and sports supplementation in strength and conditioning.
* Understand the concepts of strength and conditioning testing and prescription.
* Understand the concept of periodization and the principles practice of resistance and endurance training.
* Familiarize students in the basics of developing and delivery of strength and conditioning programming.

**Textbooks**: “Required” text:

Baechle, T.R. & Earle, R. (2008) or Haff, G.G. & Triplett, N.T. (2016). Essentials of Strength and Conditioning. (3rd or 4th Ed.) Champaign, IL: Human Kinetics.

Peer-reviewed manuscripts will be posted throughout the semester when relevant in order to keep the student up to date on the current literature and perspectives of the strength training field.

**Student Learning Outcomes**

(a) Demonstrate knowledge of the concepts and applications of exercise science

(b) Demonstrate knowledge of testing and evaluation within the area of strength and conditioning

(c) Demonstrate knowledge of exercise techniques

(d) Demonstrate knowledge of program design

(f) Demonstrate knowledge of organization and administration of fitness facilities

**Grading Scale**

|  |  |  |
| --- | --- | --- |
| **Letter Grade** | **Point Range** | **Percent Scale** |
| A | 360 - 400 | 90-100 |
| B | 320 - 359 | 80-89 |
| C | 280 - 319 | 70-79 |
| D | 240 - 279 | 60-69 |
| F | < 240 | <60 |

**Semester Grading Rubric:**

|  |  |  |
| --- | --- | --- |
| **Assignments** | **Description** | **Points/ % of final grade** |
| **Exams** | **(3)** Examinations over Lecture material  \*100 points per exam | **300 / 75%** |
| **Class Final Project** | Sport Periodization Programming Project | **100 / 25%** |
| **Total** | **-** | **400 / 100%** |

**Class Policies**

**Attendance and Late work**

Please refer to the Student Policy eHandbook (www.auburn.edu/studentpolicies) for the definition of excused absences. Attendance is not mandatory as such; class attendance will not directly impact your course grade. Students will be expected, should they choose to be absent for any excused or unexcused reasons, to obtain all information necessary for successful completion of this course. Exams can be re-scheduled for any excused absence, but unexcused absences will result in a zero for the missed assignment.

**Exam Attendance**

Exam dates will be announced in class at least one week prior to the scheduled exam date. Missed exams will result in 0 points for that portion of the course grade, with no exceptions. Excused absences on exam dates must be arranged prior to the start of the exam for makeup consideration. Students who do not contact me in advance of their missed exam will not be allowed to take the exam at a later date. The student is responsible for being aware of scheduled exams even in the event that a student misses a class where an exam is announced for excused or unexcused reasons.

**Cell Phone Policy**

Cell phones must be turned off or on silent mode during class and not present from view. You will not be prohibited from answering cell phone calls during class time, though you will be required to leave class to answer a call. Cell phones and other handheld devices may not be used or visible during exams. If you need a calculator during an exam, you must bring a “low-tech” device that is not capable of text messaging. Students choosing to have a texting device visible during an exam will receive a 0 grade for that exam.

**Accommodations**

Students who need accommodations are asked to electronically submit their approved accommodations through

AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if

accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be

arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations

through the Office of Accessibility, but need accommodations, make an appointment with the Office of

Accessibility, 1228 Haley Center, 334-844-2096 (V/TT).

**Face Coverings**

The university permits individual faculty members to require face coverings in their classrooms and instructional laboratories. All students enrolled in this course will be required to properly wear a face covering that covers the nose and mouth while inside the classroom, laboratory, studio, or office, ***if the university enforces a facemask mandate at any time during the semester***. Failure to comply with this requirement represents a potential Code of Student Conduct violation and may be reported as a non-academic violation. Please consult the [Classroom Behavior Policy (Links to an external site.)](about:blank) for additional details.

**Academic Honesty and Conduct**

Students are expected to do their work and cheating will not be tolerated. All portions of the Academic

Honesty code on <https://www.auburn.edu/academic/provost/academic-honesty/> & <https://sites.auburn.edu/admin/universitypolicies/Policies/AcademicHonestyCode.pdf> apply.

**Diversity, Equity, Equality**

Auburn University is committed to providing a working and academic environment free from discrimination and harassment and to fostering a nurturing and vibrant community founded upon the fundamental dignity and worth of ALL its members.

**Professionalism**

As faculty, staff, and students interact in educational settings, they are expected to demonstrate professional behaviors as defined in the College of Education’s conceptual framework. These professional commitments are as follows: 1) engage in responsible and ethical practices, 2) contribute to collaborative learning communities, 3) demonstrate a commitment to diversity, and 4) model and nurture intellectual vitality.

**Contingency Plan**

If the normal schedule is disrupted, the syllabus and other course plans may be modified to allow for the completion of the course and to benefit the student and their learning experience. Your instructor is aware that things may arise and affect the course of work as a class; in that case, your instructor will provide an addendum to your current syllabus with revised course assignments which will then replace this syllabus and all its content. A new syllabus (Syllabus B) will be employed at that time.

***\*\*\*TENTATIVE CLASS SCHEDULE\*\*\****

|  |  |  |
| --- | --- | --- |
| **Date** | **Topic Covered** | **Assignment** |
| 8/16, Tuesday | Introduction and Syllabus | --- |
| 8/18, Thursday | Muscular, Neuromuscular, CV, and Respiratory Systems |  |
| 8/23, Tuesday | Muscular, Neuromuscular, CV, and Respiratory Systems |  |
| 8/25, Thursday | Bioenergetics of Exercise |  |
| 8/30, Tuesday | Endocrine Response to Resistance Exercise |  |
| 9/1, Thursday | Biomechanics of Resistance Exercise |  |
| 9/6, Tuesday | Biomechanics of Resistance Exercise |  |
| 9/8, Thursday | Adaptations to Anaerobic Training |  |
| 9/13, Tuesday | Adaptations to Anaerobic Training |  |
| 9/15, Thursday | Adaptations to Aerobic Training |  |
| **9/20, Tuesday** | **EXAM 1** | **\*\*\*** |
| 9/22, Thursday | Age- and sex-related Differences and their Implication for Exercise |  |
| 9/27, Tuesday | Psychology of Athletic Preparation |  |
| 9/29, Thursday | Nutritional Factors |  |
| 10/4, Tuesday | Nutritional Factors |  |
| **10/6, Thursday** | **FALL BREAK** | **NO CLASS** |
| 10/11, Tuesday | Nutritional Factors |  |
| 10/13, Thursday | Principles of Test Selection & Administration |  |
| 10/18, Tuesday | Administration, scoring, and interpretation of selected tests |  |
| 10/20, Thursday | Warm-up & stretching |  |
| 10/25, Tuesday | Resistance Training and Spotting Techniques |  |
| **10/27, Thursday** | **Exam 2** | **\*\*\*** |
| 11/1, Tuesday | Program Design for Resistance Training |  |
| 11/3, Thursday | Program Design for Resistance Training |  |
| 11/8, Tuesday | Plyometric Training |  |
| 11/15, Thursday | Speed, Agility, Speed-endurance Training |  |
| 11/17, Tuesday | Program Design for Endurance Training |  |
| 11/19, Thursday | Periodization |  |
| **11/21 – 11/25** | **THANKSGIVING HOLIDAY BREAK** | **NO CLASS** |
| 11/29, Tuesday | Rehabilitation and Reconditioning |  |
| 12/1, Thursday | Facility Organization, Policy Development & Procedures |  |
| **12/5, Monday** | **\*\*\* Final Exam (aka Exam 3) \*\*\*** | **8:00 – 10:30a** |