**Campbell Collegiate**

**Exercise Science 30**

**Ms. Lynch**

This course focuses on the study of human movement and of systems, factors, and principles involved in human movement. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sports, and the factors that influence an individual’s participation in physical activity.

The Exercise Science course is designed to pique intellectual curiosity and to apply analytical and critical thought to concepts related to human movement and well being. In addition, this course aims to foster enthusiasm for an active and healthy lifestyle and to emphasize the importance of effective lifestyle practices.

**Prerequisite:** Any 20 level course in science, or any 20 level course in Physical Education.

**The Exercise Science 30 course is divided into five major units, as follows:**

UNIT 1: ANATOMY & PHYSIOLOGY - 28 HOURS

Students will explore the anatomy and physiology of the human body using correct anatomical terminology

and physiological principles to describe human performance. They will demonstrate an understanding of the skeletal and muscular systems and joint mechanics related to movement. Students will analyze the relationship of the cardio respiratory and energy systems as they related to physical activity.

UNIT 2: HUMAN PERFORMANCE - 29 HOURS

Students will describe the relationship between nutrition and activity and will investigate the effects of performance enhancing methods and substances on human performance. Students will demonstrate an understanding of the effects of training principles, technology and environmental conditions on human performance. They will use biomechanical principles to demonstrate an understanding related to improving movement.

UNIT 3: MOTOR DEVELOPMENT - 23 HOURS

Students will demonstrate an understanding of the stages of development from infancy to adulthood to help them design an age- appropriate activity. They will also demonstrate an understanding of the factors that affect physical growth and development. They will investigate the physical and psychological factors that affect skill performance. Students will demonstrate an understanding of motor learning such as phases of motor development and skill acquisition process to analyze or teach a skill.

UNIT 4: EVOLUTION OF PHYSICAL ACTIVITY AND SPORT - 10 HOURS

Students will explore the world of sports and physical activity from a sociological perspective. Students will

demonstrate an understanding of the role of physical activity within the culture of sport. Students will discover the evolution of sports through diverse time periods. They will demonstrate an understanding of various sport- related issues (e.g., coaching, role- modeling, violence in sport, exploitation in sport, equal access to sports). Students will identify Canadian athletes and describe their contributions to the development of the current Canadian sport landscape.

UNIT 5: RELATIONSHIP OF SOCIETY & CULTURE TO PHYSICAL ACTIVITY & SPORT - 10 HOURS

Students will demonstrate an understanding of the connections between society and culture as they influence and interact with the world of sport and physical activity. Students will analyze relationships through such topics as business and sport, amateur versus professional sport, gender representation and ethno-cultural preferences. Students will describe the benefits of school and community physical activity and sports programs for themselves and society.

**KEY LEARNINGS**

• To describe the structure and function of the human body and of the physiological principles relating to human performance;

• To use biomechanical principles to analyze and improve movement;

• To demonstrate an understanding of the ways in which nutrition and training principles affect human performance;

• To demonstrate an understanding of individual differences in performance, growth, and development;

• To use principles of motor learning to analyze or teach a skill;

• To investigate the evolution of physical activity and sport;

• To analyze the relationship of society and culture to sports and physical activity.

**ASSESSMENT, EVALUATION AND REPORTING**

**Term Work: 85% -** You will be given numerous and varied opportunities to demonstrate your achievement of the expectations across these four categories:

|  |  |  |  |
| --- | --- | --- | --- |
| **Knowledge/Understanding/**  **Application**  **45%** | **Thinking/Inquiry**  **25%** | **Communication**  **15%** | **Final Evaluation**  **15%** |
| * Tests * Quizzes * Minor Assignments * Projects * Worksheets | * Journal Entries * Blog | * Oral Presentations * Social Media Involvement * Special Presenter - Involvement | * Portfolio |

The Portfolio Assignment is a collection of your work that reflects a higher level of thinking and understanding of many of the key learning’s of the course. It is an opportunity for you to explore and learn more about areas of passion and interest in this course. The collection of work will focus on each of the five units in Exercise Science. Essentially you will be creating your own magazine related to Exercise Science.

* Major assignments will be corrected within 10 school days. Minor assignments will be corrected within 5 school days.

**INFORMATION GUIDELINES FOR STUDENTS STUDENT RESPONSIBILITY**

• Arrive at class **on time**; **prepared with your textbook and workbook.**

• **Achievement** level and **success** are directly related to **attendance**.

• It is **your responsibility** to catch up any work you have missed.

• Complete **all assigned readings** so you are **prepared to discuss** the material in class.

• Hand in all work on time (10% deduction per day late).

• Be **prepared to work well** independently, with others and engage in class discussions.

• This class will require **high level thinking and commitment.**

**• Cell phone etiquette.**

**TEXTBOOK**

This semester we will be using the following textbook: Exercise Science (Thompson Publishing, 2003).

**WORKBOOK**

The workbooks cost $20.00. It is strongly urged to use **this workbook on a daily basis** to assist with your

comprehension of various units etc. Trust me! It’s a great habit to get into!

**ONLINE COMPONENT**

As you begin to summarize your notes and prepare for your final evaluation each unit it’s important to use all of the study tools available to you. **Throughout the semester** you are responsible for completing many on-line

quizzes. These on-line quizzes have been designed for students as a study tool.

Thompson Publishing Exercise Science Online Resource For Students –

**http://www.thompsonbooks.com/exercisescience/**

**Bellringers**: • If you are assigned a “Bellringer” you must go to the website listed above, click on the “Bellringers” link, then click on “Bellringer Quizzes.”

• Click on the “Bellringer” you have been assigned.

Bell Ringers are timed tests to accompany the Student Workbook/Lab Manual. These "Bell Ringers" are intended as a "Teacher's Aid". They are a way for students to learn basic terminology in their own time and at their own pace. By mastering basic terminology early, students will benefit more from the Exercise Science course. Alternatively, you can re-take questions that were not answered correctly until they answer them all correctly.

**Student Quizzes •** If you are assigned a “Student Quiz” you must go to the website listed above, click on the appropriate unit on the left, then the correct section, and finally the “Student Quizzes” link.

As stated above, the online component is an essential tool for you to use during this course. There will be several occasions throughout the semester when I will ask you to email your results to my account. If I have not requested you to do so, please do not send me your results. Nonetheless you may choose to complete the quizzes and bellringers as a means to check your understanding or prepare for evaluations.

**If I do require your results, please follow the procedure listed below:**

• Complete the student quiz on the appropriate site listed above.

• Once complete - email the result to my account: jessica.lynch@rbe.sk.ca

There is an option for you to do this at the end of the quiz. Please let me know if you encounter any troubles with the website. When you email me your results, state **what** you had troubles with – this will give me a clear picture when I assess your learning and provide me with direction during the **review** of the unit.

• I will not always be recording your actual scores on the quizzes, rather, I will record if you complete the quizzes or not. **Please feel free to take the quizzes as many times as you like. However once you send me a result, I will use that as your official score.**

• I look forward to your email confirmations.This website is a great study tool for students!

**ONLINE STUDY TOOLS**

These websites are great study tools as well. Let me know if you find others!

**A Human Atlas -** [http://www.bodymaps.com/](https://mail.rbe.sk.ca/exchweb/bin/redir.asp?URL=http://www.bodymaps.com/)  
**Sports Injuries** - [http://www.sportsinjuryclinic.net/](https://mail.rbe.sk.ca/exchweb/bin/redir.asp?URL=http://www.sportsinjuryclinic.net/)  
**Muscle and Bone Resource -** <http://www.exrx.net/Lists/Directory.html>

**Interactive Knee and Hip Surgery -** [http://www.edheads.org/](https://mail.rbe.sk.ca/exchweb/bin/redir.asp?URL=http://www.edheads.org/)

**RECOMMENDED TEXTBOOK**

You may want to consider purchasing an Anatomy Coloring Book. It will assist you throughout the first three units of the course. You can find one of these at Chapters or the U of R Bookstore.

**MATERIALS**

**You must be prepared for class every day**. While I will be working hard to introduce concepts and

materials relevant to the course, I will also be working on building your “skills” in preparation for your future.

This means that you should come prepared with your textbook, workbook, organized binder with note paper, pens, pencils, ruler, pencil crayons, and any materials you may need.

This class presents you with a unique learning opportunity. Exercise Science 30 is currently offered only in some school divisions in Ontario. As a group we need to work together to achieve personal success and create a strong foundation so the course is able to thrive in Western Canada. You are a part of something bigger than “just another class.”

**Important Information:**

**Website:** <http://www.thompsonbooks.com/exercisescience/>

**Student Log In:**

**Username:** studentES

**Password:** exsci1234

**Ms. Lynch’s Email:** [jessica.lynch@rbe.sk.ca](mailto:jessica.lynch@rbe.sk.ca)

