



Loyola

HIGH SCHOOL

Secondary 5 Exercise Science

Ms.Mongeon	mongeon@loyola.ca	Office hours: updated weekly
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Description:

This course aims to foster enthusiasm for an active and healthy lifestyle, through high intensity training combining foundational movements, proper weightlifting technique, and conditioning. Content from various disciplines of science will be incorporated to provide a robust understanding of the relationship between exercise and the human body, namely physiology, sports psychology, biomechanics, nutrition, and performance analysis. All skills and knowledge learnt in this course will be transferable to other sports and overall well-being.

An interest in sports alone will not be enough to be successful in this course. The goal is for all students to progress within their own capabilities. Improvements in mobility, strength, power and cardiovascular fitness are definite, should students approach every session with effort.

This course will also provide ample opportunity to develop leadership and mentoring skills by motivating and supporting peers, and building camaraderie.

Theory topics:

- Types of fitness training
- Muscular-skeletal system
- Biomechanics
- Nutrition, supplements & hydration
- Injury management and prevention (mobility/stretching)
- Developing athletic potential (strength, conditioning, core stability)
- Sport psychology (mindset/goals)

Practical knowledge:

- Movement techniques
- Weight training and progression
- Biomechanics
- Fitness testing
- Video analysis (identifying faults/adjustments)
- Leadership, mentoring and coaching

Evaluations

*subject to be modified

At least 1 written and video assignment can be expected per term.

1) Written assignment- nutrition tracking, programing a class: warm-up/workout, fitness goals and mental toughness, elite athlete profile etc. **(20 % of grade)**

2) Video assignment- how to video, identifying and adjusting faults, functional movement comparison to everyday actions etc. **(30 % of grade)**

3) Participation and improvement (50% of grade)

Term 1 (20%)

Term 2 (20%)

Term 3 (60%)

Expectations:

- Participation in this course is essential in achieving a passing grade.
- Outside sporting commitments do not excuse participation, as all training sessions can be modified.
- Any injuries **MUST** be accompanied with a note from parent/s.
- Students must present in LHS physical education clothing and running shoes (water bottle highly recommended).
- iPads required only upon request.