

Course Syllabus: Exercise Science

Grade Level: 11–12 | **Duration:** 1 Semester | **Location:** Classroom & Weight Room | **Instructor:** Mrs. Yendra | **Email:** alison.yendra@ravennabluejays.org

Course Description

This course bridges the gap between exercise physiology and physical performance. Students will explore anatomy, biomechanics, and nutrition while mastering foundational bodyweight movements and advanced barbell techniques. The goal is to equip students with the "physical literacy" needed to design and safely execute lifelong fitness programs.

Learning Objectives

By the end of this semester, students will be able to:

- **Identify** major muscle groups and their roles in primary movement patterns.
- **Demonstrate** master-level form in core lifts: Squat, Bench Press, and Deadlift.
- **Execute** proper spotting and safety protocols in a weight room environment.
- **Design** a personalized, periodized 4-week training program based on the F.I.T.T. principle.
- **Analyze** peer movement using biomechanical principles and provide constructive feedback.

Weekly Course Schedule

- **Monday:** Theory & Anatomy (Classroom-based).
- **Tuesday/Thursday:** Weight Room Lab (Group lifting and skill mastery).
- **Wednesday:** Movement & Mobility (Bodyweight activities, dynamic stretching, yoga).
- **Friday:** "Fitness Friday" (High-intensity circuits, reflection logs, and goal tracking).

Grading Policy

- **40% Participation & Effort:** Daily engagement, proper attire, and adherence to safety rules.
- **30% Technical Skills & Checklists:** Proficiency in core lifts and quality of peer coaching.
- **20% Assignments & Unit Tests:** Anatomy quizzes, biomechanics labs, and nutrition logs.
- **10% Final Project:** Design and lead a peer group through a personalized mini-workout.

Classroom & Gym Expectations

1. **Safety First:** No lifting without a designated spotter for appropriate exercises.
2. **Respect the Gear:** All equipment must be cleaned and "racked" after every use.
3. **Community Focus:** Use the Peer Coaching Checklist to support your partner's growth.
4. **Professionalism:** No cell phones in the weight room unless being used for form analysis.

Required Materials

- Athletic clothing and closed-toe athletic shoes.
- Course Workbook / Fitness Log (Provided).
- Water bottle.

Supporting Resources for Parents & Students

- **Movement Directory:** ExRx.net – For technical lift breakdowns.
- **Video Library:** PLT4M YouTube – For visual demonstration of all class movements.
- **Anatomy Tool:** InnerBody – For studying muscle systems at home.