

# Course Syllabus: Sports Nutrition

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

## Course Description

This course explores the vital link between nutrition and athletic excellence. Students will transition from foundational nutrient science to practical, real-world applications—including personalized dietary tracking, sport-specific fueling strategies, and supplement evaluation. By the end of the term, students will be equipped to design comprehensive nutrition plans that enhance energy, recovery, and long-term health.

## Learning Objectives

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

- **Analyze Metabolic Roles:** Explain the specific functions of macronutrients (carbohydrates, proteins, and fats) and micronutrients (iron, calcium, etc.) in relation to energy production, muscle repair, and bone density.
- **Design Fueling Protocols:** Apply the “4-2-1 rule” for maintaining hydration and calculate individual sweat rates to create effective hydration and nutrient timing schedules for various training intensities.
- **Evaluate Personal Nutrition:** Conduct a data-backed personal dietary analysis using tracking tools like [Cronometer](#) to identify nutrient gaps and set actionable SMART goals.
- **Assess Supplement Safety:** Critically evaluate ergogenic aids and dietary supplements for safety, efficacy, and label transparency using third-party verification standards.
- **Perform Culinary Skills:** Execute performance-based recipes in a lab setting, demonstrating proper kitchen safety and the ability to modify meals for specialized diets (e.g., vegan or gluten-free) without compromising performance.
- **Construct Athletic Plans:** Develop a comprehensive 7-day fueling and recovery plan for a specific athlete case study, integrating sport-specific needs and lifestyle factors.
- **Explore Career Pathways:** Identify professional roles within the industry, such as [Registered Dietitian Nutritionists \(RDNs\)](#) and Certified Athletic Trainers, and complete relevant certifications like the NFHS Sports Nutrition course.

## Course Schedule

- Phase 1: Foundations of Nutrition (Weeks 1–4)
- Phase 2: Fueling & Hydration Strategies (Weeks 5–8)
- Phase 3: Applied Sports Nutrition (Weeks 9–13)
- Phase 4: Specialized Topics & Trends (Weeks 14–18)

## Grading Policy

- **25% — Foundational Assessments:** Weekly quizzes and "Bell-Ringer" discussion prompts (Weeks 1–8)
- **20% — Mid-Term Project:** Personal Dietary Analysis (Week 9)
- **20% — Applied Labs:** Hands-on kitchen safety and recipe execution (Week 16)
- **10% — Certifications & Participation:** Completion of the NFHS Sports Nutrition Course and classroom engagement (if free for all students)
- **25% — Final Capstone:** 7-day Athlete Case Study & Presentation (Week 18)

## Classroom Expectations

- **Active Engagement:** Students are expected to participate in "Bell-Ringer" discussions and contribute to small-group work.
- **Respectful Dialogue:** Given that we discuss sensitive topics like body image and ergogenic aids, maintain a professional and supportive tone during all debates and peer reviews.
- **Device Management:** Turn off or silence cell phones and other devices unless they are being used for specific course activities like dietary tracking.
- **Authentic Data:** For the Mid-Term Personal Dietary Analysis, students must provide accurate and honest food logs to ensure the validity of their SMART action plans.
- **Integrity:** Plagiarism or academic dishonesty will not be tolerated and will result in a failing grade for the assignment or course.

## Required Materials

- **Digital Tracking Tool:** Access to a free account on Cronometer or MyFitnessPal for the Phase 3 analysis.
- **3-ring Binder and Notebook:** Materials provided by the teacher, but will be required to put in a 3-ring binder.
- **Lab Attire:** Closed-toe shoes and a hair tie (for Week 16 Athlete Lab).

- **Hydration Gear:** A reusable [shaker bottle or squeeze bottle](#) for hydration testing.

## Supporting Resources for Parents & Students

For deeper research and certification, students are encouraged to use:

- **Fact Sheets:** Use the [USOPC Nutrition Factsheets](#) for quick guides on iron, caffeine, and travel nutrition.
- **Science Database:** Access the GSSI (Gatorade Sports Science Institute) for the latest hydration and electrolyte research.
- **Supplement Verification:** Use NSF Certified for Sport or Informed Sport to evaluate ergogenic aids for safety