# **COURSE DESCRIPTION**

# **HEALTH/PHYSICAL EDUCATION**

# Health Required Grade: 10 Semester ½ Credit

This course explores the development of the individual from a physical, psychological, and emotional perspective. The content will include an overview of types of pathogens, how they spread, and preventive methods used to control the spread of communicable diseases. Discussion will center on the consequences for the use and abuse of tobacco, alcohol and illegal drugs. Furthermore, a focus on effective, proven prevention strategies will be looked at with the developing adolescent in mind. Finally, an introduction to the study of mental health will examine what it is, how to effectively manage stress and identify certain common disorders and their effects on self, family, and society.

# **Physical Education Coed**

Recommended for Grades: 9 Year Long

#### 1 Credit

This course is recommended to students who have participated in physical education at the middle school level and/or are willing to be at a competitive level in a coed environment. The same design and expectations will apply as with the above mentioned physical education course.

# **Advanced Physical Education Coed**

### Recommended Grades: 10-12 Year Long

### 1 Credit

Advanced physical education will provide an opportunity for the student to participate in many of the same activities which are included in regular high school physical education but at an advanced level with other physically skilled students. A student must first pass regular high school physical education while exhibiting an advanced skill level in many of the activities presented in that course before he may enroll in advanced physical education. A strong emphasis will be placed on dressing appropriately for activity throughout the course. A reasonable portion of the student's grade will reflect his achievement in these areas since all are considered essential to obtaining course outcomes. The primary goal of Advanced Physical Education will be to improve the student's physical fitness level through participation in team activities with skilled participants and individual training programs using weights and running as the primary means. Students completing the Course should become more physically fit as a result and also have a thorough understanding of how to maintain this fitness level on their own in the future.

# **HS Body Mechanics**

Recommended Grades: 9-12 Year Long 1 Credit

## PREREQUISITES: None

This course is designed to further the opportunity for its participants to learn and reinforce training concepts and techniques used for obtaining and maintaining optimal physical fitness. Students will benefit from comprehensive weight training, performance-based training, and cardiorespiratory endurance activities. Students will establish and then build upon the fundamentals learned in regards to weight training, strength training, aerobic training, fitness training/conditioning, nutrition, and applied functional sciences (i.e., the convergence of physical, biological and behavioral sciences that consist of the principals, strategies, and techniques process for functional assessment, training and conditioning, rehabilitation and injury prevention).

## STRUCTURE OF CURRICULUM (Michigan Department of Education): Physical Education Standards

- Standard 1: Demonstrates competency in motor skills and movement patterns needed to perform variety of physical activities.
- Standard 2: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to learning and performance of physical activities.
- Standard 3: Participates regularly in lifelong physical activity.
- Standard 4: Achieves and maintains a health-enhancing level of physical fitness.
- Standard 5: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.
- Standard 6: Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

### **GENERAL DESCRIPTIONS OF THE CONTENT STANDARDS:** HS Body Mechanics

- Standard 1: The students will demonstrate the ability to use competency in various methods of weight training and conditioning.
  - o Objectives The students will be able to:
    - Demonstrate competence in performing advanced weight training exercises, plyometric exercises and manual resistance exercises.
    - Observe and analyze the techniques of another while performing various lifts (or oneself through video) and write an analysis of the performance.
    - Explain and apply biomechanical principles of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> class levers specific to a variety of lifting techniques.
    - Differentiate among various advanced weight training methods (tri-setting, weight stripping, light to heavy, pyramiding, split, routines, negatives, blitz, super overload, and super sets).

- Continued movement progressions emphasizing the three basic planes of motion: the sagittal plane (forward and backward), the frontal or coronal plane (side to side), and the transverse plane (rotational); all movement in athletics and general function take place in these planes of motion.
- Standard 2: The students will demonstrate the ability to understand muscle function, proper nutrition, and physiology of exercise.
  - Objectives The students will be able to:
    - Differentiate among the three energy systems (phosphagen, glycolysis, and aerobic) used in muscular activity.
    - Identify the prime mover muscles, antagonistic muscles, and stabilizer muscles for each of the core weight training exercises.
    - Identify, compare, and analyze marketing products of the health and fitness industry including performance-enhancing supplements and current fitness trends.
    - Describe the stress adaptation syndrome as it applies to weight training and conditioning.
    - Analyze anatomical movement within the various planes of the body.
    - Describe the anatomy and function of skeletal muscle.
- Standard 3: The students will demonstrate the ability to apply safety guidelines and concepts to specific training activities and demonstrate the ability to apply training theories to daily workouts.
  - Objectives The students will be able to:
    - Perform advanced weight training exercises with proper alignment, form, and techniques.
    - Understand and differentiate between varying strength-training programs (such as athletic, power lifting, Olympic, bodybuilding, etc.).
    - Understand and differentiate between varying conditioning programs.
    - Identify common training injuries, list preventive measures, and describe basic methods of rehabilitating injuries.
    - Identify and analyze the risk and effects of anabolic steroid use.
    - Demonstrate proper spotting techniques for both safety and a partner's workout enhancement.
  - Objectives The students will be able to:

- Participate daily in all aspects of the weight training and conditioning program.
- Maintain daily records including long and short term goals, work out logs, and fitness testing results.
- Design and implement an individual weight training program based on personal long and short term goals and fitness assessment results (sport/coach approved).
- Standard 4: The students will demonstrate the ability to maintain a health-enhancing level of physical fitness.
  - Objectives The students will be able to:
    - Assess and record personal fitness status.
    - Develop a performance-specific program that is tailored to their personal health-related fitness needs.
- Standard 5: The students will demonstrate the ability to have responsible personal and social behavior in the physical activity setting.
  - Objectives The students will be able to:
    - Initiate responsible personal and social behavior in the weight room and conditioning areas.
    - Accept responsibility for taking leadership roles to accomplish group and individual goals.
- Standard 6: The students will demonstrate the ability to explain how weight training and conditioning provide opportunities for enjoyment, challenge, self-expression, and social interaction.
  - Objectives The students will be able to:
    - Enjoy the challenge of different advanced weight training activities.
    - Recognize that physical conditioning can provide opportunities for positive social interactions.
    - Enjoy regular participation in various training and conditioning methods.

### BASIC OUTLINE OF CONTENT AND GENERAL TIME ALLOTMENT: HS Body Mechanics

Introduction to "HS Body Mechanics" (1 day)

 Class curriculum; expectations; grading policy; class room rules and procedures; locks and locker room procedures; dressing policy Fitness Pre/Post-Tests (1 week at the start or end of each Marking Period)

- Assess present state of personal fitness levels; compare personal scores data to health standards; set goals of maintenance and improvement
- Reassess and record personal fitness scores/data/goals

Concepts, Techniques and Training (1<sup>st</sup> Marking Period - ongoing)

- Apply principles of resistance training; apply physiological principles involved in human movement; match alternative physical activity as tie-in with various strength and conditioning methods; examine current trends in fitness and conditioning; incorporate various fitness technologies (heart rate monitors/wands, calipers, software, etc.); apply the convergence of physical, biological and behavioral sciences that consist of the principals, strategies, and techniques process for functional assessment, training and conditioning, rehabilitation and injury prevention.
- Apply principles of resistance training; safety techniques (spotting, proper body alignment, lifting techniques, etc.); demonstrate an understanding of proper weight training principles and concepts in order to achieve desired result; perform resistance exercises and weight/strength training

Nutrition (1<sup>st</sup> Marking Period – ongoing)

- Nutrients; nutrition labeling information; food choices (Food Guide Pyramid, food sources, food values, etc.); weight management (proper practices to maintain, lose, gain); eating disorders; hydration; effects of performance enhancements (ephedra, creatine, steroids, etc.); importance of sleep/rest
- Enhancement/reinforcement of the "Health Course" offered by Benzie Central

Cardiorespiratory Fitness (1<sup>st</sup> Marking Period – ongoing)

• Examine, understand, and apply a variety of cardiorespiratory activities/programs

The Bridge to the Next Cycle (1 week between each cycle)

• Reflection; evaluate, set-up, and implement the next cycle of training based upon each athlete's needs

### **METHODS:** HS Body Mechanics

 A variety of instructional strategies will be used to accommodate all learning styles (including a heavy emphasis on technology/"flipping the classroom"), but the basic premise for this action course is guided practice. The student-centered learning will include: peer coaching; reciprocal teaching; checklists; video (peer and self-analysis); guided discovery; circuits based on timed segments; various technologies and supplemental movement tools.

MATERIALS: HS Body Mechanics

• TBD (current strength and cardio options); numerous reading supplements ranging from motivational (*Winning Every Day* by Lou Holtz) to reflective (*The Growth Mindset* by Carol Dweck) to instructional (various websites); iPads and other video recording devices; heart rate monitors; master glossary of terms/vocabulary used/to-be-mastered

## **EVALUATION:** HS Body Mechanics

• Journals/logs (written and video); portfolios; checklists; rubrics of performance assessments during activity; quizzes; tests; video; percent of grade connected to the six Content Standards