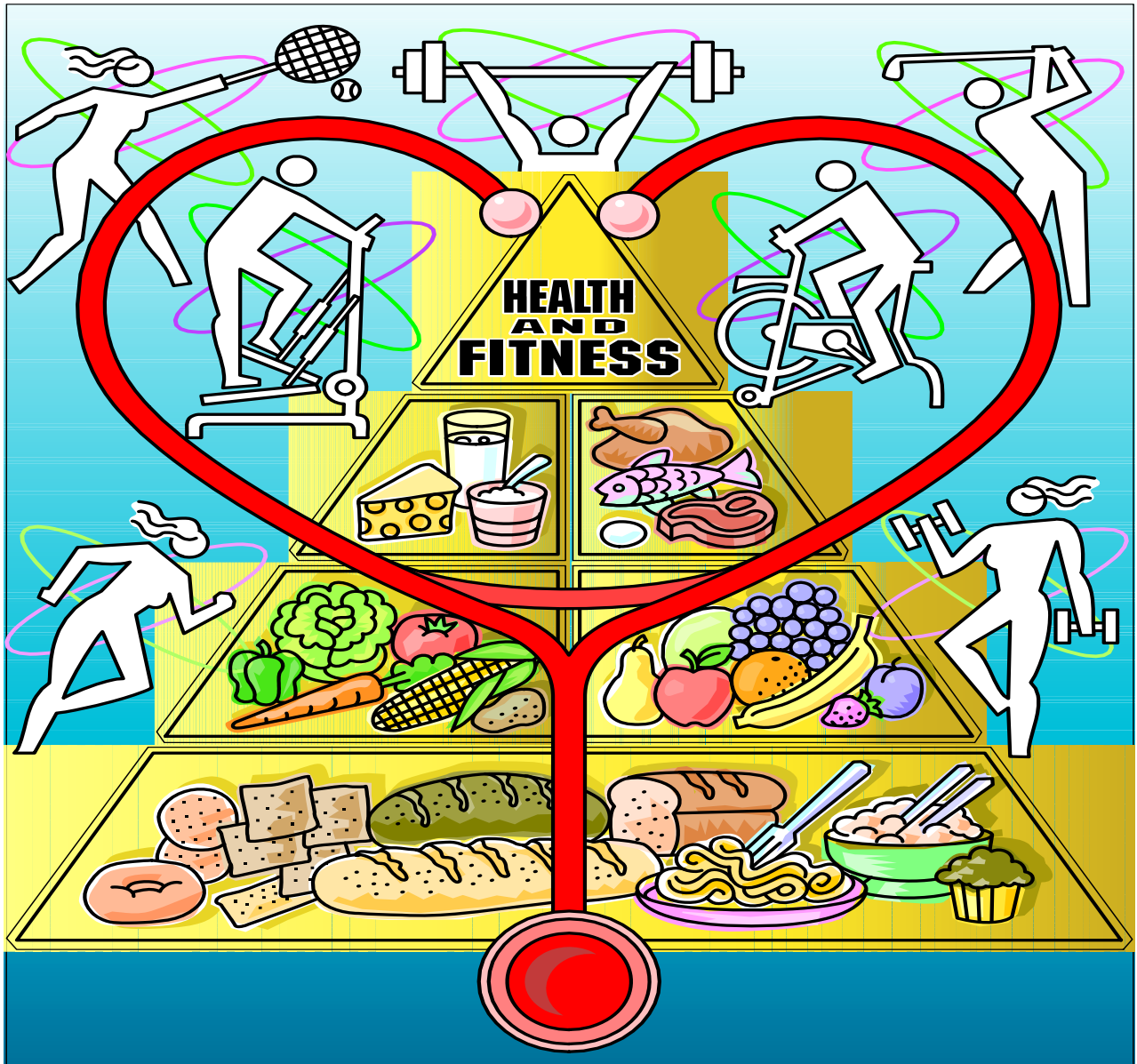


WEST ALLEGHENY SCHOOL DISTRICT

HEALTH AND PHYSICAL EDUCATION
CURRICULUM



ACKNOWLEDGEMENTS

The following individuals served on the 2006 Health and Physical Education Curriculum project. Their participation in and support of the project greatly enhanced the curriculum writing process.

Mr. Adam Angelici

Dr. Christine Assetta

Mr. Andrew Barry

Ms. Mindy Dinger

Dr. John DiSanti

Dr. William Englert, Jr.

Mrs. Munaii Franjione

Mrs. Mary Lococo

Mr. Jeffrey Lesko

Mrs. Erin Rakoci

Mr. Curt Russell

Mr. Daniel Smith

Dr. Earl Bradford Smith

Mr. Richard Smith

Health Education

Philosophical Orientation

The West Allegheny School District Health Curriculum reflects the philosophical orientation and instructional recommendations advocated by the Joint Committee on National Health Education Standards and the Association for the Advancement of Health Education. Effective health instruction promotes critical thinking in students and encourages them to make connections between healthy living and personal health experiences. Young people need to be reflective and actively observe and examine their responses to personal and instructional health related issues in order to assess potential risks and consequences and to make health enhancing decisions. They also need to learn to identify and analyze the roles culture, media, and technology play in shaping health related decisions among adolescents. The attitudes they develop toward their health in the early years will have lasting ramifications for their long-term well being.

Comprehensive health instruction teaches students fundamental health skills and concepts through sequential, coordinated, and interdisciplinary teaching of health education. The planned, sequential curriculum addresses a variety of topics aligned with state and national health standards and adjusts the degrees of complexity appropriate to students' developmental levels as they move from early to middle childhood and then to adolescence. The health instructor is trained to define the intellectual level and depth of instruction most appropriate for students.

The mission of health education is to develop health literate individuals who can obtain, interpret, and understand basic health information and the public resources and services available. This knowledge enhances an individual's health as well as the health of others and promotes a supportive environment where individual similarities and differences are acknowledged and accepted. Instruction on healthy lifestyles encourages young people to live more fully and celebrate life to the greatest extent.

Physical Education

Philosophical Orientation

The West Allegheny School District Physical Education Curriculum reflects the philosophical orientation and instructional recommendations advocated by the National Association for Physical Education (NASPE). Physical education addresses the development of students' physical potential and their related social, emotional, and intellectual growth. Its primary purpose is to assist the learner in developing:

- total physical fitness and a desire to maintain it
- movement abilities ranging from functional life skills to those needed for successful participation in leisure activities
- safety awareness
- an appreciation and understanding of specific sports and dances

The mastery of these objectives promotes the development of wellness skills which enable students to lead full, productive, and healthy lives.

Research completed by the National Association for Physical Education (NASPE) and the Center for Disease Control and Prevention (CDC) reveal that there is a direct relationship between academic achievement and fitness. Movement, physical activity, and exercise enhance the learning state for memory retention and retrieval. As such, physical activity is a catalyst for learning in all content areas and should be an essential element of students' daily routines.

WEST ALLEGHENY SCHOOL DISTRICT

**HEALTH AND PHYSICAL EDUCATION
CURRICULUM**

HEALTH EDUCATION – GRADE 6	1
Major Health Education Concepts	2
Academic Standards	3
Health, Safety and Physical Education	
Concepts of Health.....	4
Healthful Living.....	5
Safety and Injury Prevention	6
 HEALTH EDUCATION – GRADE 7	7
Major Health Education Concepts	8
Academic Standards.....	9
Health, Safety and Physical Education	
Concepts of Health.....	10
Healthful Living.....	11
Safety and Injury Prevention	12
 HEALTH EDUCATION - GRADE 10	13
Major Health Education Concepts	14
Academic Standards.....	15
Health, Safety and Physical Education	
Concepts of Health.....	16
Healthful Living.....	18
Safety and Injury Prevention	19
 PHYSICAL EDUCATION – GRADE 6	20
Major Health Education Concepts	21
Academic Standards	22
Health, Safety and Physical Education	
Physical Activity.....	23
Concepts, Principles and Strategies of Movement	24

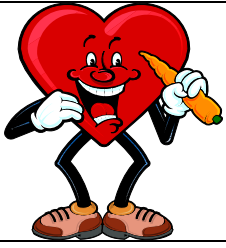
WEST ALLEGHENY SCHOOL DISTRICT

HEALTH AND PHYSICAL EDUCATION CURRICULUM

PHYSICAL EDUCATION – GRADE 7 and 8	26
Major Health Education Concepts	27
Academic Standards	28
Health, Safety and Physical Education	
Physical Activity	29
Concepts, Principles and Strategies of Movement	31
PHYSICAL EDUCATION – GRADE 9 thru 12	33
Major Health Education Concepts	34
Academic Standards	35
Health, Safety and Physical Education	
Physical Activity	36
Concepts, Principles and Strategies of Movement	37
PHYSICAL CONDITIONING – GRADE 9 thru 12	39
Major Physical Conditioning Concepts	40
Academic Standards	41
Health Related Fitness Components	42
Skill Related Fitness Components	48
EXERCISE SCIENCE – GRADE 11 thru 12	54
Major Exercise Science Concepts.....	55
Academic Standards	56
Macronutrients and Foods.....	57
Macronutrients and Water.....	59
Fundamentals of Human Energy Transfer.....	60
Human Energy Transfer During Exercise.....	61
Energy Expenditure	62
Energy Generating Capacities.....	63
Optimal Nutrition for Exercise and Sport.....	64
Anaerobic and Aerobic Energy Systems	65
Training a Muscle to Become Stronger	66
Environment and Exercise	67
Ergogenic Aids.....	68
Body Composition Components	69
Obesity, Exercise and Weight Control.....	70
The Role of Exercise in Weight Control.....	71
Modification of Health Related Behaviors	72
Reversing Obesity and Inactivity in Children.....	73
Exercise, Aging, and Cardiovascular Health	74

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

GRADE 6 - HEALTH



MAJOR HEALTH EDUCATION CONCEPTS
ADDRESSED IN EACH GRADE LEVEL COURSE

Reporting
Category

HEALTH EDUCATION – Grade 6

The following concepts will be covered throughout the health education curriculum for:

Concepts of
Health

- Growth and development changes
- Body systems
- Prevention and identification of health problems

Concepts,
Principles
and
Strategies of
Movement

N/A

Healthful
Living

- Individual well being
- Sun protection
- Media's effect on personal health
- Decision making

Physical
Activity

- Benefits of physical activity
- Factors effecting choices of activities

Safety and
Injury
Prevention

- Emergency response

WEST ALLEGHENY SCHOOL DISTRICT

Subject: HEALTH EDUCATION
GRADE 6



ACADEMIC STANDARDS

ACADEMIC STANDARDS

	<u>Literacy</u>	<u>Family/consumer science</u>	<u>Science</u>
10.1 A,B,C,D,E	1.1.8 A,B,C,D	11.1.6 D,G	3.7.7 E
10.2 A,B,C,D,E	1.2.8 A,B	11.2.6 A	3.8.7 A
10.3 A,B,C,D		11.3.6 E	
10.4 A,B,C,D,E,F			
10.5 A,B,C,D,E,F			

COURSE DESCRIPTION:

This course stresses physical, mental, social, and intellectual well-being. Subject matters will include but not be limited to: developmental and growth changes, body systems, prevention, decision making, emergency response, and media effects on personal health.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

- Current Health Magazine
- Glencoe Health Teachers Guide

ASSESSMENT:

- Teacher generated exams and quizzes
- Labs
- Individual projects

TECHNOLOGY USED:

- Web pages
- DVD, CD, VCR
- Overhead
- Power point

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 6
----------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.1 Concepts of Health
<p>The students will:</p> <ol style="list-style-type: none">1. identify the physical changes that occur between childhood and adolescence.2. view videos and participate in activities pertaining to the reproductive and immune systems.3. identify potential health problems and methods for prevention.<ul style="list-style-type: none">▪ diseases (e.g., cancer, diabetes, <u>STD/HIV/AIDS</u>, cardiovascular disease)▪ preventions (e.g., do not smoke, maintain proper weight, eat a balanced diet, <u>practice sexual abstinence</u>, be physically active)	<p>10.1.6 A Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes.</p> <p>10.1.6 B Identify and describe the structure and functions of the major body systems.</p> <p>10.1.6 E Identify health problems that can occur throughout life and describe ways to prevent them.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 6
----------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.2 Healthful Living
<p>The students will:</p> <ol style="list-style-type: none">1. identify healthy choices in order to establish individual wellness.<ul style="list-style-type: none">▪ immunizations▪ health examinations2. identify levels and importance of skin protection as it pertains to skin disease.3. interpret various effects of media on health and safety concerns.4. D.A.R.E.5. identify diseases which are caused by the environment.<ul style="list-style-type: none">▪ indoor air quality (e.g., second-hand smoke, allergens)▪ chemicals, metals, gases (e.g., lead, radon, carbon monoxide)▪ radiation▪ natural disasters	<p>10.2.6 A Explain the relationship between personal health practices and individual well-being.</p> <p>10.2.6 B Explain the relationship between health-related information and consumer choices.</p> <p>10.2.6 C Explain the media’s effect on health and safety issues.</p> <p>10.2.6 D Describe and apply the steps of a decision-making process to health and safety issues.</p> <p>10.2.6 E Analyze environmental factors that impact health.</p>

WEST ALLEGHENY SCHOOL DISTRICT

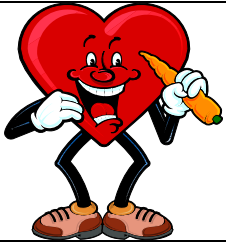
STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION STRAND: Health, Safety and Physical Education GRADE: 6

Student Learning Outcomes	Standard: 10.3 Safety and Injury Prevention
<p>The students will:</p> <p>1. demonstrate correct emergency response procedures.</p>	<p>10.3.6 B Know and apply appropriate emergency responses.</p> <ul style="list-style-type: none">▪ basic first aid▪ Heimlich maneuver▪ universal precautions▪ check/call/care

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

GRADE 7 - HEALTH



MAJOR HEALTH EDUCATION CONCEPTS
ADDRESSED IN EACH GRADE LEVEL COURSE

Reporting
Category

HEALTH EDUCATION – Grade 7

The following concepts will be covered throughout the health education curriculum for:

Concepts of
Health

- Growth and development
- Relationships, communicating
- Abstinence, STD's, and HIV
- Personal choices

Concepts,
Principles
and
Strategies of
Movement

N/A

Healthful
Living

- Health care products and services specific to the adolescent
- Personal health and safety
- Environmental and personal health

Physical
Activity

N/A

Safety and
Injury
Prevention

- Prevention and treatment of sports injuries

WEST ALLEGHENY SCHOOL DISTRICT

Subject: HEALTH EDUCATION
GRADE 7



ACADEMIC STANDARDS

ACADEMIC STANDARDS

	<u>Literacy</u>	<u>Family/Consumer Science</u>	<u>Science</u>
10.1 A,B,C,D,E	1.1.8 A,B,C,D	11.2.9 A,H	3.7.7 E
10.2 A,B,C,D,E	1.2.8 A,B	11.3.9 D	3.8.7 A
10.3 A,B,C,D			
10.4 A,B,C,D,E,F			
10.5 A,B,C,D,E,F			

COURSE DESCRIPTION:

This course stresses physical, mental, social, and intellectual well-being of the adolescent. Subject matters will include, but are not limited to: growth and development, relationships, personal choices, prevention of injury, abstinence, HIV, AIDS, and STDs.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

- Current Health Magazine
- Glencoe Health Teachers Guide

ASSESSMENT:

- Teacher generated exams and quizzes
- Labs
- Individual projects and reports

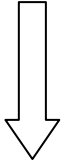
TECHNOLOGY USED:

- Web pages
- DVD, CD, VCR
- Overhead
- Power point

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7
----------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.1 Concepts of Health
<p>The students will:</p> <ol style="list-style-type: none">1. apply general knowledge of proper relationship management through role play.2. identify risk factors which impact your health.3. describe how to prevent STD and HIV infection.<ul style="list-style-type: none">▪ relationships (e.g., dating, friendships, peer pressure)▪ interpersonal communication▪ risk factors (e.g., physical inactivity, substance abuse, intentional/unintentional injuries, dietary patterns)▪ abstinence and reproductive system review▪ STD and HIV prevention4. identify special dietary choices depending on athletic goals.<ul style="list-style-type: none">▪ athletic goals5. analyze the causes of various human diseases, conditions and disorders.	<p>10.1.7 A Analyze factors that impact growth and development between adolescence and adulthood.</p> <div style="text-align: center;"></div> <p>10.1.7 C Analyze factors that impact nutritional choices of adolescents.</p> <p>10.1.7 E Analyze how personal choice, disease, and genetics can impact health maintenance and disease prevention.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7
----------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.2 Healthful Living
<p>The students will:</p> <ol style="list-style-type: none"> 1. describe the influence of health care products and services on their health. 2. analyze health related information as it relates to weight control and steroids. <ul style="list-style-type: none"> ▪ weight control products ▪ steroids 3. evaluate and analyze different strategies used by media to influence adolescent choices. 4. analyze a decision making process as it applies to health and safety. 5. identify sources of health care availability. 6. identify sources of environmental caused diseases (e.g., respiratory disease, lyme disease, West Nile virus, air pollution). 	<p>10.2.7 A Identify and describe health care products and services that impact adolescent health practices.</p> <p>10.2.7 B Analyze the relationship between health-related information and adolescent consumer choices.</p> <p>10.2.7 C Analyze media health and safety messages and describe their impacts on personal health and safety.</p> <p>10.2.7 D Analyze and apply a decision-making process to adolescent health and safety issues.</p> <p>10.2.7 E Explain the relationship between the environment and personal health</p> <ul style="list-style-type: none"> ▪ availability of health care/individual health ▪ air pollution/respiratory disease ▪ breeding environments/lyme disease/West Nile virus

WEST ALLEGHENY SCHOOL DISTRICT

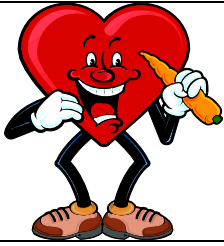
STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7
----------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.3 Safety and Injury Prevention
<p>The students will:</p> <ol style="list-style-type: none">1. demonstrate ways to prevent and treat common sports injuries.<ul style="list-style-type: none">▪ self-care▪ sport injuries 2. demonstrate personal responsibility for safety during group activities in health and physical education.	<p>10.3.7 B Describe and apply strategies for emergency and long-term management of injuries.</p> <p>10.3.7 D Analyze the role of individual responsibility for safety during organized group activities.</p>

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

GRADE 10 - HEALTH



MAJOR HEALTH EDUCATION CONCEPTS
ADDRESSED IN EACH GRADE LEVEL COURSE

Reporting
Category

HEALTH EDUCATION – Grade 10

The following concepts will be covered throughout the health education curriculum for:

Concepts of
Health

- Acute/chronic illness
- Communicable/non communicable diseases
- Health status
- Relationships
- Fitness levels
- Nutrition
- Addictions
- STD's/STI's
- Sexual behavior

Concepts,
Principles
and
Strategies of
Movement

N/A

Healthful
Living

- Health care services
- Consumer decisions
- Media influences
- Life-long health goals
- Decision-making
- Disease prevention

Physical
Activity

N/A

Safety and
Injury
Prevention

- Intentional/unintentional injury
- Negative risk behaviors
- Violence
- Life-long activity

WEST ALLEGHENY SCHOOL DISTRICT

Subject: HEALTH EDUCATION
GRADE 10



ACADEMIC STANDARDS

ACADEMIC STANDARDS

	<u>Literacy</u>	<u>Science</u>
10.1 A,B,C,D,E	1.1.11 A,C,E,F	11.1.12 A
10.2 A,B,C,D,E	1.2.8 A,B	11.2.12 A,B,F,H
10.3 A,B,C,D	1.4.11 B	11.3.12 B,C,D,F
	1.5.11 B,C,F	11.4.12 B
	1.6.11 A,C,D,E,F	
	1.8.11 A,B,C	

COURSE DESCRIPTION:

This is a co-educational course that stresses physical, mental/intellectual, emotional, and social wellness. Subject matters will include but not be limited to: making healthy choices, nutrition, physical fitness, preventing substance abuse (D.A.R.E), diseases and disorders (human growth development and sexuality), and first aid/CPR. Activities in health will encourage students to look closely at their own lifestyles, learn skills necessary for changing negative behavior and set goals for their well-being. This class will also offer students simple suggestions for making personal choices in their lives and reinforce the importance of responsible decision-making to good health. The successful completion of this course is required for graduation.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

- Glencoe Wellness (Text)
- Internet
- Current health (magazine)

ASSESSMENT:

- Exams
- Quizzes
- Reports
- Projects

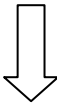

TECHNOLOGY USED:

- Power point
- Overheads
- Videos/DVD's
- Internet

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 10
----------------------------------	--	------------------

Student Learning Outcomes	Standard: 10.1 Concepts of Health
<p>The students will:</p> <ol style="list-style-type: none">1. compare and contrast the effects of acute and chronic illness and communicable and non-communicable diseases and how they apply to health status.2. analyze the impact of relationships and the aging process on wellness.3. assess current fitness levels and develop strategies for improvement of health status through proper nutrition and physical activity.4. identify the importance of the immune system in maintaining wellness.5. analyze current nutritional requirements and apply to individual nutrition of fitness needs.<ul style="list-style-type: none">▪ consumer skills (e.g., understanding food labels evaluating fads)▪ nutritional knowledge▪ changes in nutritional requirements (e.g., age, physical activity level)	<p>10.1.12 A Evaluate factors that impact growth and development during adulthood and late adulthood.</p> <p style="text-align: center;"></p> <p>10.1.12 B Evaluate factors that impact the body systems and apply protective/preventive strategies.</p> <p style="text-align: center;"></p> <p>10.1.12 C Analyze factors that impact nutritional choices of adults.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 10
----------------------------------	--	------------------

Page 2

Student Learning Outcomes	Standard: 10.1 Concepts of Health
<p>The students will:</p> <ol style="list-style-type: none">6. identify and analyze the social psychological and individual impact of addictions and addictive substances.<ul style="list-style-type: none">▪ laws relating to alcohol, tobacco, and chemical substances▪ impact on the community (concepts reinforced through D.A.R.E)7. evaluate influences on health promotion and prevention including medical research and technological advances.<ul style="list-style-type: none">▪ government policies/regulations8. identify the most common STD's (HIV/AIDS) and their effect on the individual and society.9. evaluate the most effective methods for health promotion and STD (HIV/AIDS) prevention.10. evaluate the influence of media on sexual behavior and the consequences associated with these behaviors.11. analyze the impact of sexual behavior on emotional/social health.	<p>10.1.12 D Evaluate issues relating to the use/non-use of drugs.</p> <p>10.1.12 E Identify and analyze factors that influence the prevention and control of health problems.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 10
----------------------------------	--	------------------

Student Learning Outcomes	Standard: 10.2 Healthful Living
<p>The students will:</p> <ol style="list-style-type: none">1. identify the importance of health care services on adult health.2. analyze health services and information and its impact on consumer decisions.<ul style="list-style-type: none">▪ cost▪ safety3. compare and contrast the effects of media on wellness.4. identify the 5-step decision-making process and how it applies to life-long goals.5. compare and contrast the impact of health promotion and disease prevention and individual choices on environmental and community wellness.<ul style="list-style-type: none">▪ maintenance of environment▪ recreational opportunities/health status	<p>10.2.12 A Evaluate health care products and services that impact adult practices.</p> <p>10.2.12 B Assess factors that impact adult health consumer choices.</p> <p>10.2.12 C Compare and contrast the positive and negative effects of the media on adult personal health and safety.</p> <p>10.2.12 D Examine and apply a decision-making process to the development of short and long-term health goals.</p> <p>10.2.12 E Analyze the interrelationship between environmental factors and community health.</p>

WEST ALLEGHENY SCHOOL DISTRICT


STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: HEALTH EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 10
----------------------------------	--	------------------

Student Learning Outcomes	Standard: 10.3 Safety and Injury Prevention
<p>The students will:</p> <ol style="list-style-type: none">1. analyze the impact of negative risk behaviors on the individual and society.<ul style="list-style-type: none">▪ loss of personal freedom▪ personal injury▪ loss of income▪ impact on others▪ loss of motor vehicle operator’s license2. identify and utilize the proper CPR and first aid practices.3. identify the negative consequences of violence on society.4. identify the benefits associated with life-long activity.	<p>10.3.12 A Assess the personal and legal consequences of unsafe practices in the home, school, or community.</p> <p>10.3.12 B Analyze and apply strategies for the management of injuries.</p> <p>10.3.12 C Analyze the impact of violence on the victim and surrounding community.</p> <p>10.3.12 D Evaluate the benefits, risks, and safety factors associated with self-selected life-long physical activities.</p>

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

GRADE 6 – PHYSICAL EDUCATION

	<p style="text-align: center;">MAJOR PHYSICAL EDUCATION CONCEPTS ADDRESSED IN EACH GRADE LEVEL COURSE</p>
<p>Reporting Category</p>	<p style="text-align: center;">PHYSICAL EDUCATION - GRADE 6</p>
	<p>The following concepts will be covered throughout the physical education curriculum for:</p>
<p>Concepts, Principles, and Strategies of Movement</p>	<ul style="list-style-type: none"> ▪ Skilled repetitions and development ▪ Flexibility ▪ Strategies of game play
<p>Physical Activity</p>	<ul style="list-style-type: none"> ▪ Aerobic activity – vigorous ▪ Anaerobic activity – muscle development

WEST ALLEGHENY SCHOOL DISTRICT

Subject: PHYSICAL EDUCATION
GRADE 6



ACADEMIC STANDARDS

ACADEMIC STANDARDS

10.4 A,B,C,D,E,F

10.5 A,B,C,D,E,F

COURSE DESCRIPTION:

This course stresses physical activity, sportsmanship, strategies, and teamwork in the physical education setting. The program is designed to meet multiple skill levels. The student will acquire knowledge for use in lifetime activities and conditioning for personal preference.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

- Current Health
- Presidential physical fitness guide
- Internet based web sites

ASSESSMENT:

- Presidential physical fitness test

TECHNOLOGY USED:

- DVD
- TV
- VCR

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

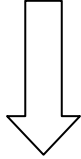
SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 6
------------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.4 Physical Activity
<p>The students will:</p> <ol style="list-style-type: none"> 1. participate in aerobic and anaerobic physical activity. 2. understand the effects of exercise on the body by monitoring heart rate, blood pressure, and breathing rate. <ul style="list-style-type: none"> ▪ heart rate monitoring ▪ checking blood pressure ▪ fitness assessment 3. choose physical activities based upon personal preferences. <ul style="list-style-type: none"> ▪ enjoyment ▪ personal interest ▪ social experience ▪ opportunities to learn new activities ▪ parental preference ▪ environment 4. understand the importance of repetition as it relates to skill development. <ul style="list-style-type: none"> ▪ success-oriented activities ▪ school-community resources ▪ variety of activities ▪ time on task 5. understand rules, team concepts, and strategies by participating in physical activities. <ul style="list-style-type: none"> ▪ leading ▪ following ▪ teamwork ▪ etiquette ▪ adherence to rules 	<p>10.4.6 A Identify and engage in moderate to vigorous physical activities that contribute to physical fitness and health.</p> <p>10.4.6 B Explain the effects of regular participation in moderate to vigorous physical activities on the body systems.</p> <p>10.4.6 C Identify and apply ways to monitor and assess the body’s response to moderate to vigorous physical activity.</p> <p>10.4.6 D Describe factors that affect childhood physical activity preferences.</p> <p>10.4.6 E Identify factors that have an impact on the relationship between regular participation in physical activity and the degree of motor skill improvement.</p> <p>10.4.6 F Identify and describe positive and negative interactions of group members in physical activities.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 6
------------------------------------	--	-----------------

Student Learning Outcomes	Standard: 10.5 Concepts, Principles and Strategies of Movement
<p>The students will:</p> <ol style="list-style-type: none">1. understand the basic concepts of movement skills as it applies to certain physical activities and skill development. <div style="text-align: center;"></div> <ol style="list-style-type: none">2. practice a variety of proper repetitions in order to improve development in certain skills.3. explain and engage in activities that pertain to aerobic, anaerobic, flexibility, and cardiovascular activities.	<p>10.5.6 A Explain and apply the basic movement skills and concepts to create and perform movement sequences and advanced skills.</p> <p>10.5.6 B Identify and apply the concepts of motor skill development to a variety of basic skills.</p> <ul style="list-style-type: none">▪ transfer between skills▪ selecting relevant cues▪ types of feedback▪ movement efficiency▪ product (outcome/result) <p>10.5.6 C Describe the relationship between practice and skill development.</p> <p>10.5.6 D Describe and apply the principles of exercise to the components of health-related and skill related fitness.</p> <ul style="list-style-type: none">▪ cardio respiratory endurance▪ muscular strength▪ muscular endurance▪ flexibility▪ body composition

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

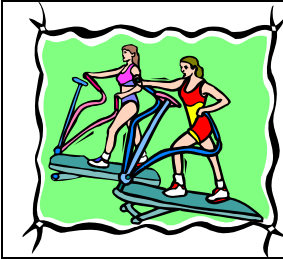
SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 6
------------------------------------	--	-----------------

Page 2

Student Learning Outcomes	Standard: 10.5 Concepts, Principles and Strategies of Movement
<p>The students will:</p> <p>4. explain the importance of Newton’s Laws of Motion as it applies to physical activity.</p> <p>5. understand strategies it applies to basic game play.</p>	<p>10.5.6 E Identify and use scientific principles that affect basic movement and skills using appropriate vocabulary.</p> <ul style="list-style-type: none">▪ Newton’s Laws of Motion▪ application of force▪ static/dynamic balance▪ levers▪ flight <p>10.5.6 F Identify and apply game strategies to basic games and physical activities.</p> <ul style="list-style-type: none">▪ give and go▪ one on one▪ peer communication

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

GRADE 7 and 8
PHYSICAL EDUCATION



MAJOR PHYSICAL EDUCATION CONCEPTS
ADDRESSED IN EACH GRADE LEVEL COURSE

Reporting Category	PHYSICAL EDUCATION - GRADE 7 AND 8
	The following concepts will be covered throughout the physical education curriculum for:
Concepts, Principles, and Strategies of Movement	<ul style="list-style-type: none">▪ Skilled repetitions and development▪ Flexibility▪ Strategies of game play
Physical Activity	<ul style="list-style-type: none">▪ Aerobic activity – vigorous▪ Anaerobic activity – muscle development

WEST ALLEGHENY SCHOOL DISTRICT

Subject: PHYSICAL EDUCATION
GRADE 7 and 8



ACADEMIC STANDARDS

ACADEMIC STANDARDS

10.4 A,B,C,D,E,F

10.5 A,B,C,D,E,F

COURSE DESCRIPTION:

This course stresses physical activity, sportsmanship, strategies, and teamwork in the physical education setting. The program is designed to meet multiple skill levels. The student will acquire knowledge for use in lifetime activities and conditioning for personal preference.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

- Current Health
- Presidential physical fitness guide
- Internet based web sites

ASSESSMENT:

- Presidential physical fitness test

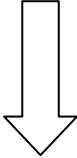
TECHNOLOGY USED:

- DVD
- TV
- VCR

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7 and 8
------------------------------------	--	-----------------------

Student Learning Outcomes	Standard: 10.4 Physical Activity
<p>The students will:</p> <ol style="list-style-type: none">engage in vigorous physical activities to achieve both personal and athletic goals.explain and understand the importance of vigorous activities in order to have a healthy lifestyle.  <ol style="list-style-type: none">choose physical activities based upon personal preferences encouraged by instructor.	<p>10.4.8 A Analyze and engage in physical activities that are developmentally/individually appropriate and support achievement of personal fitness and activity goals.</p> <p>10.4.8 B Analyze the effects of regular participation on moderate to vigorous physical activities in relation to adolescent health improvement.</p> <ul style="list-style-type: none">stress managementdisease preventionweight management <p>10.4.8 C Analyze factors that affect the responses of body systems during moderate to vigorous physical activities.</p> <ul style="list-style-type: none">exercise (e.g., climate, altitude, location, temperature)healthy fitness zoneindividual fitness status (e.g., cardio respiratory fitness, muscular endurance, muscular strength, flexibility)drug/substance use/abuse <p>10.4.8 D Analyze factors that affect physical activity preferences of adolescents.</p> <ul style="list-style-type: none">skill competencesocial benefitsprevious experienceactivity confidence

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7 and 8
------------------------------------	--	-----------------------

Page 2

Student Learning Outcomes	Standard: 10.4 Physical Activity
<p>The students will:</p> <p>4. understand the importance of participation in a regular physical education program as it relates to skill development and personal preferences.</p> <p>5. show tolerance and self control during large group instruction.</p>	<p>10.4.8 E Analyze factors that impact on the relationship between regular participation in physical activity and motor skill improvement.</p> <ul style="list-style-type: none">▪ personal choice▪ developmental differences▪ amount of physical activity▪ authentic practice <p>10.4.8 F Analyze the effects of positive and negative interactions of adolescent group members in physical activities.</p> <ul style="list-style-type: none">▪ group dynamics▪ social pressure

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7 and 8
------------------------------------	--	-----------------------

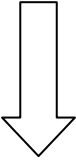
Student Learning Outcomes	Standard: 10.5 Concepts, Principles and Strategies of Movement
<p>The students will:</p> <ol style="list-style-type: none">1. apply components of skill-related fitness to movement performance.2. apply proper motor skills during physical activities.3. practice proper strategies in order to develop skill level.	<p>10.5.8 A Describe and apply the components of skill-related fitness to movement performance.</p> <ul style="list-style-type: none">▪ agility▪ balance▪ coordination▪ power▪ reaction time▪ speed <p>10.5.8 B Describe and apply concepts of motor skill development that impact the quality of increasingly complex movement.</p> <ul style="list-style-type: none">▪ response selection▪ stages of learning a motor skill (e.g., verbal cognitive, motor, automatic)▪ types of skill (e.g., discrete, serial, continuous) <p>10.5.8 C Identify and apply practice strategies for skill improvement.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

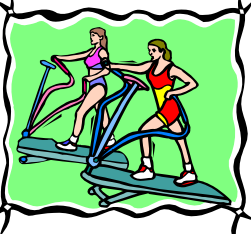
SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 7 and 8
------------------------------------	--	-----------------------

Page 2

Student Learning Outcomes	Standard: 10.5 Concepts, Principles and Strategies of Movement
<p>The students will:</p> <p>4. understand the principles of training techniques and proper form when it applies to physical activity.</p> <div style="text-align: center;"></div> <p>5. understand strategic concepts when they are applied to various games.</p>	<p>10.5.8 D Identify and describe the principles of training using appropriate vocabulary.</p> <ul style="list-style-type: none">▪ specificity▪ overload▪ progression▪ aerobic/anaerobic▪ circuit/interval▪ repetition/set <p>10.5.8 E Analyze and apply scientific and biomechanical principles to complex movements.</p> <ul style="list-style-type: none">▪ centripetal/centrifugal force▪ linear motion▪ rotary motion▪ friction/resistance▪ equilibrium▪ number of moving segments <p>10.5.8 F Describe and apply game strategies to complex games and physical activities.</p> <ul style="list-style-type: none">▪ offensive strategies▪ defensive strategies▪ time management

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

GRADE 9 THRU 12
PHYSICAL EDUCATION

	<p style="text-align: center;">MAJOR PHYSICAL EDUCATION CONCEPTS ADDRESSED IN EACH GRADE LEVEL COURSE</p>
<p>Reporting Category</p>	<p style="text-align: center;">PHYSICAL EDUCATION – Grade 9 thru 12</p>
	<p>The following concepts will be covered throughout the physical education curriculum for:</p>
<p>Concepts, Principles, and Strategies of Movement</p>	<ul style="list-style-type: none"> ▪ Fitness-related skills ▪ Life-long fitness ▪ Motor skills ▪ Motivation ▪ Opportunities ▪ Strategies ▪ Goal setting
<p>Physical Activity</p>	<ul style="list-style-type: none"> ▪ Psychomotor and cognitive development ▪ Improvement of skills ▪ Fitness techniques ▪ Application to programs ▪ Exercise principles ▪ Energy expenditures ▪ Game participation

WEST ALLEGHENY SCHOOL DISTRICT

Subject: **PHYSICAL EDUCATION**
 GRADE 9 thru 12



ACADEMIC STANDARDS

ACADEMIC STANDARDS

10.4 A,B,C,D,E,F

10.5 A,B,C,D,E,F

COURSE DESCRIPTION:

Physical Education is designed to develop the physical efficiency and recreational skills of the student. The program is designed to meet multiple skill levels. A basic understanding of team sports and fitness concepts are experienced by the students so that they may acquire the knowledge for use in lifetime recreational and conditioning activities. An adaptive physical education program is available for any student unable to participate in a normal physical activity class.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

- Internet

ASSESSMENT:

- Skills testing
- Participation
- Effort/attitude

TECHNOLOGY USED:

- Music
- CD player
- Sound system

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 9 thru 12
------------------------------------	--	-------------------------

Student Learning Outcomes	Standard: 10.4 Physical Activity
<p>The students will:</p> <ol style="list-style-type: none">1. demonstrate fitness-related skills that enable the learner to achieve life-long fitness.2. engage in moderate to vigorous activities that enhance social, physiological, and psychological well-being.3. analyze the effects of aging, injury, and disease and its impact on participation in life-long physical activity.4. analyze the factors that impact an individual’s attitude and motivation toward physical activity and his/her opportunity for involvement.5. evaluate the benefits of regular physical activity and the enhancement of motor skills on a participants likelihood for life-long engagement in activity.6. analyze strategies for enhancement in group activity through shared responsibility, open communication, and goal setting.	<p>10.4.12 A Evaluate and engage in an individualized physical activity plan that supports achievement of personal fitness and activity goals and promotes life-long participation.</p> <p>10.4.12 B Analyze the effects of regular participation in a self-selected program of moderate to vigorous physical activities.</p> <p>10.4.12 C Evaluate how changes in adult health status may affect the responses of the body systems during moderate to vigorous physical activity.</p> <p>10.4.12 D Evaluate factors that affect physical activity and exercise preferences of adults.</p> <p>10.4.12 E Analyze the interrelationships among regular participation in physical activity, motor skill improvement and the selection and engagement in lifetime physical activities.</p> <p>10.4.12 F Assess and use strategies of enhancing adult group interaction in physical activities.</p>

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 9 thru 12
------------------------------------	--	-------------------------

Student Learning Outcomes	Standard: 10.5 Concepts, Principles, and Strategies of Movement
<p>The students will:</p> <ol style="list-style-type: none">1. demonstrate fitness related skills and movement concepts that enhance opportunity for life-long participation.2. display motor related fitness skills that enhance psychomotor and cognitive development in performance related skills.3. display fitness techniques that promote motor development and improvement of skills.4. demonstrate knowledge of exercise principles and skill-related fitness and apply strategies to programs that promote life-long participation.5. apply appropriate movement principles that incorporate energy expenditure through physical activity.	<p>10.5.12 A Apply knowledge of movement skills, skill-related fitness and movement concepts to identify and evaluate physical activities that promote personal life-long participation</p> <p>10.5.12 B Incorporate and synthesize knowledge of motor skill development concepts to improve the quality of motor skills.</p> <ul style="list-style-type: none">▪ open and closed skills▪ short-term and long-term memory▪ aspects of good performance <p>10.5.12 C Evaluate the impact of practice strategies on skill development and improvement.</p> <p>10.5.12 D Incorporate and synthesize knowledge of exercise principles, training principles, and health and skill related fitness components to create a fitness program for personal use.</p> <p>10.5.12 E Evaluate movement forms for appropriate application of scientific and biomechanical principles.</p> <ul style="list-style-type: none">▪ efficiency of movement▪ mechanical advantage▪ kinetic energy▪ potential energy▪ inertia▪ safety

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT


SUBJECT: PHYSICAL EDUCATION	STRAND: Health, Safety and Physical Education	GRADE: 9 thru 12
------------------------------------	--	-------------------------

Page 2

Student Learning Outcomes	Standard: 10.5 Concepts, Principles, and Strategies of Movement
<p>The students will:</p> <p>6. demonstrate strategies for game participation through individual team and life-long sports activities.</p>	<p>10.5.12 F Analyze the application of game strategies for different categories of physical activities.</p> <ul style="list-style-type: none">▪ individual▪ team▪ lifetime▪ outdoor

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

PHYSICAL CONDITIONING
GRADE 10-12

	<p style="text-align: center;">MAJOR PHYSICAL CONDITIONING CONCEPTS</p>
<p>Reporting Category</p>	<p style="text-align: center;">PHYSICAL CONDITIONING – Grade: 10-12</p>
<p style="text-align: center;">The following concepts will be covered throughout the physical conditioning curriculum.</p>	
<p>Cardiovascular Endurance</p>	<ul style="list-style-type: none"> • FITT principle • Overload Principle • Aerobic Activity • Interval Training
<p>Muscular Strength</p>	<ul style="list-style-type: none"> • Maximal Force • FITT & Overload principle for training • Principle of progression
<p>Muscular Endurance</p>	<ul style="list-style-type: none"> • Muscle’s ability to perform without fatigue • Principle of progression training • FITT & Overload principle
<p>Flexibility</p>	<ul style="list-style-type: none"> • Maximum range of motion • Proficiency in non-locomotor, locomotor, manipulative movements • Static and dynamic stretching
<p>Body Composition</p>	<ul style="list-style-type: none"> • Improving overall body composition • Designing workouts for maximal benefits • Improving muscle tissue
<p>Speed</p>	<ul style="list-style-type: none"> • Anaerobic effect on body • Perform movements in short period of time • Specificity of training and enhanced performance
<p>Agility</p>	<ul style="list-style-type: none"> • Ability of body to rapidly change position in space • Speed and accuracy of movements • Enhanced sport performance
<p>Balance</p>	<ul style="list-style-type: none"> • Maintenance of Equilibrium while stationary or in movement • Static and dynamic balance
<p>Coordination</p>	<ul style="list-style-type: none"> • Performing motor tasks smoothly and accurately • Coordination and efficiency • Coordination in loco motor movements • Specificity of training
<p>Power</p>	<ul style="list-style-type: none"> • Components required to perform work • External agents cause change in motion • Power and force impact inertia
<p>Reaction Time</p>	<ul style="list-style-type: none"> • Elapsed time between stimulation and response • Specificity of training • Enhanced sport performance

WEST ALLEGHENY SCHOOL DISTRICT

Subject: PHYSICAL CONDITIONING
Grade 10-12



ACADEMIC STANDARDS

10.3 D
10.4 A,B,C,D,E,F
10.5 A,B,C,D,E,F

COURSE DESCRIPTION:

This course consists of three (3) aspects including skeletal muscle development, cardiovascular development and wellness education. This course incorporates all components of health and skill related fitness.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

Internet sources for new workouts

ASSESSMENT:

- Measure of improvement of health related fitness components
- Measure of improvement of skill related fitness components

TECHNOLOGY USED:

- Web pages

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Health Related Fitness Components	GRADE: 10 -12
---------------------------------------	--	----------------------

Page 2

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> The progression of training 	<p>The student will:</p> <ul style="list-style-type: none"> construct aerobic workouts based on the FITT principle (Frequency, Intensity, Time, Type). discuss the effect of the overload principle on aerobic training. identify components and strategies for an effective warm-up and cool down. 	<p>10.3 D 10.4 A,B,C,D,F 10.5 D, E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Health Related Fitness Components	GRADE: 10-12
---------------------------------------	--	---------------------

Page 3

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Muscular strength 	<p>The student will:</p> <ul style="list-style-type: none"> demonstrate the muscle’s ability to exert maximal force. identify the impact of the FITT and overload principle on improving muscular strength. analyze the principle of progression on improving muscular strength. identify specific exercises to improve muscular strength. identify how repetition impacts muscular strength. determine an appropriate warm-up and cool down for an anaerobic workout. 	<p>10.3D 10.4 A,B,C,D 10.5 A,D,E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Health Related Fitness Components	GRADE: 10-12
---------------------------------------	--	---------------------

Page 4

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Muscular endurance 	<p>The student will:</p> <ul style="list-style-type: none"> identify the muscle’s ability to perform without fatigue. demonstrate the impact of the FITT and overload principle on improving muscular endurance. analyze the principle of progression on improving muscular endurance. identify the importance of repetition on muscular endurance. compare and contrast appropriate exercises for improvement of muscular endurance. 	<p>10.3D 10.4 A,B,C,D,F 10.5 A,D,E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Health Related Fitness Components	GRADE: 10-12
---------------------------------------	--	---------------------

Page 5

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Flexibility 	<p>The student will:</p> <ul style="list-style-type: none"> examine the range of motion available in a specific joint. evaluate how flexibility impacts the proficiency in non-locomotor, locomotor and manipulative movement. distinguish between static and dynamic balance and how flexibility impacts both. analyze the role of flexibility in an active warm-up and cool down. identify specific exercises to increase flexibility (e.g. exercise band workouts). 	<p>10.3D 10.4 A,B,C,D 10.5 A,D,E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Health Related Fitness Components	GRADE: 10-12
---------------------------------------	--	---------------------

Page 6

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none">• Body composition	<p>The student will:</p> <ul style="list-style-type: none">• discuss the importance of physical activity and training on body composition.• identify how specific exercises improve overall body composition.• formulate a workout program that incorporates cardiovascular endurance, muscular endurance, and muscular strength to improve body composition.• analyze the benefits of physical activity in improving lean muscle tissue.	10.3D 10.4 A,B,C,D 10.5 D		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Skill Related Fitness Components	GRADE: 10-12
---------------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> Speed 	<p>The student will:</p> <ul style="list-style-type: none"> identify the ability to perform a movement or cover a distance in a short period of time. summarize the anaerobic effect on the body during sprinting and weight lifting activities. develop specific workouts to improve speed. elaborate on the relationship between skill related fitness and enhanced performance in sport. theorize the relationship between specificity of training and enhanced performance outcome. 	<p>10.3D 10.4 A,B,C,D, E, F 10.5 A,B,C,D,E,F</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Skill Related Fitness Components	GRADE: 10-12
---------------------------------------	---	---------------------

Page 2

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Agility 	<p>The student will:</p> <ul style="list-style-type: none"> determine the ability of the body to rapidly change position in space with speed and accuracy. develop drills or activities to improve agility (e.g. ladders, cone drills, change of direction drills). elaborate on the relationship between skill related fitness in regards to agility and enhanced performance in sport. theorize the relationship between specificity of training and enhanced performance outcome. 	<p>10.3D 10.4 A,B,C,D, E, F 10.5 A,B,C,D,E,F</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Skill Related Fitness Components	GRADE: 10-12
---------------------------------------	---	---------------------

Page 3

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Balance 	<p>The student will:</p> <ul style="list-style-type: none"> analyze the maintenance of equilibrium while stationary or through movement. demonstrate activities that require static and dynamic balance. summarize the efficiency of movement and how it is impacted by dynamic balance. 	<p>10.3D 10.4 A,B,C,D, E, F 10.5 A,B,C,D,E,F</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Skill Related Fitness Components	GRADE: 10-12
---------------------------------------	---	---------------------

Page 4

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> Coordination 	<p>The student will:</p> <ul style="list-style-type: none"> identify the body’s ability to use the senses together with body parts in performing motor tasks smoothly and accurately. discuss the relationship between coordination and efficiency of movement identify the role of coordination in basic locomotor movements. formulate a workout that incorporates exercises to improve coordination. elaborate on the relationship between skill related fitness in regards to coordination and enhanced performance in sport. theorize the relationship between specificity of training and enhanced coordination and overall performance. 	<p>10.3D 10.4 A,B,C,D, E, F 10.5 A,B,C,D,E,F</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: Physical Conditioning	UNIT FOCUS: Skill Related Fitness Components	GRADE: 10-12
---------------------------------------	---	---------------------

Page 5

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Power 	<p>The student will:</p> <ul style="list-style-type: none"> identify the components needed that relate to the rate at which one can perform work. demonstrate how an external agent can cause a change in motion (e.g. force). predict how power and force impact inertia. design a workout to improve power (e.g. plyometrics) . 	<p>10.3D 10.4 A,B,C,D, E, F 10.5 A,B,C,D,E,F</p>		

WEST ALLEGHENY SCHOOL DISTRICT
STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT


SUBJECT: Physical Conditioning	UNIT FOCUS: Skill Related Fitness Components	GRADE: 10-12
---------------------------------------	---	---------------------

Page 6

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> • Reaction time 	<ul style="list-style-type: none"> • identify components of physical fitness that relate to the time elapsed between stimulation and the beginning of the response to it. • elaborate on the specificity of training in regards to reaction time in a sport related activity. • identify exercises and drills to improve reaction time. • elaborate on the relationship between skill related fitness in regards to reaction time and enhanced performance in sport. 	10.3D 10.4 A,B,C,D, E, F 10.5 A,B,C,D,E,F		

WEST ALLEGHENY SCHOOL DISTRICT
HEALTH AND PHYSICAL EDUCATION
CURRICULUM

EXERCISE SCIENCE
GRADE 11-12

	<p>MAJOR EXERCISE SCIENCE CONCEPTS</p>
<p>Reporting Category</p>	<p>EXERCISE SCIENCE – Grade: 11-12</p>
<p>The following concepts will be covered throughout the exercise science curriculum.</p>	
<p>Macronutrients, Foods & Water</p>	<ul style="list-style-type: none"> • Energy Content of Food • Water & Exercise • Vitamins, Minerals, & Supplements
<p>Fundamentals of Human Energy</p>	<ul style="list-style-type: none"> • Oxygen’s role in metabolism • Speed of energy transfer • Measurement of Energy Expenditure • Energy Transfer Capacity • Maximal Oxygen Uptake
<p>Environment & Exercise</p>	<ul style="list-style-type: none"> • Mechanisms of Thermoregulation • Environmental Stress during exercise • Exercise at Altitude
<p>Ergogenic Aids</p>	<ul style="list-style-type: none"> • Pharmacologic and Nutritional Agents • Physiologic Agents
<p>Optimal Nutrition for Exercise & Sport</p>	<ul style="list-style-type: none"> • Nutrient Requirements • Pre-competition meal • Glucose intake, electrolytes, & water
<p>Anaerobic & Aerobic Energy Systems</p>	<ul style="list-style-type: none"> • Generating training principals • Anaerobic and Aerobic training
<p>Body Composition Components</p>	<ul style="list-style-type: none"> • Composition of the human body • Methods to assess body size and composition
<p>Obesity, Exercise & Weight Control</p>	<ul style="list-style-type: none"> • Obesity • Achieving optimal body composition • Energy expenditure related to obesity • Physical activity considerations • Benefits of weight loss and weight control

WEST ALLEGHENY SCHOOL DISTRICT

Subject: EXERCISE SCIENCE
Grade 11-12



ACADEMIC STANDARDS

10.1A,B,C
10.2B,E
10.3D
10.4A,B,C,D
10.5A,C,D,E

COURSE DESCRIPTION:

This course is designed to teach students components of exercise science/sports medicine including exploration of therapeutic careers, medical terminology, anatomy, physiology, first aid, injury prevention, the healing process, rehabilitation techniques, therapeutic modalities, sport nutrition, sport psychology and performance enhancement philosophies.

BASIC TEXT/PUBLISHER AND INSTRUCTIONAL RESOURCES:

Current Fact Sheets (Centers for Disease Control)
Essentials of Exercise Physiology 2nd Edition

ASSESSMENT:

- Teacher generated exams and quizzes
- Lab activities
- Individual projects, research papers, and reports

TECHNOLOGY USED:

- Web pages
- DVD, CD, VCR
- Power Point

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Macronutrients and Foods	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> • Energy and building blocks for tissue synthesis • Carbohydrates • Lipids • Protein 	<p>The student will:</p> <ul style="list-style-type: none"> • analyze current nutritional requirements that apply to individual nutrition and fitness needs. • distinguish among the three units of carbohydrates. • discuss carbohydrate’s role as an energy source. • identify the major characteristics of high and low density lipoprotein cholesterols. • discuss HDL and LDL and the role they play in coronary heart disease. • identify the four functions of fat in the body. • define essential and non-essential amino acids. • recommend food sources that provide both essential and non-essential amino acids. • explain how the body uses protein for energy during exercise. 	10.1 C		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Macronutrients and Foods	GRADE: 11/12
----------------------------------	---	---------------------

Page 2

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none">• Energy content of food	<p>The student will:</p> <ul style="list-style-type: none">• determine how relative exercise intensity and duration influence carbohydrates, proteins, and fat use during exercise.• define heat of combustion, digestive efficiency and Atwater general factors.• compute the energy content of a meal from its macronutrient composition.	10.1 C		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Macronutrients and Water	GRADE: 11/12
----------------------------------	---	---------------------

Page 3

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> • Vitamins and supplements • Minerals and exercise performance • Water and exercise 	<p>The student will:</p> <ul style="list-style-type: none"> • analyze the functions of fat and water soluble vitamins. • discuss potential risks of consuming micronutrients in excess. • outline three broad roles of minerals in the body. • describe the effects of regular physical activity on bone mass and the body's iron stores. • outline factors related to the female athlete triad. • explain the functions of water in the body. • define heat cramps, heat stroke, and heat exhaustion. • discuss dehydration and the environmental factors that influence it. • explain factors that affect gastric emptying and fluid replacement. 	10.1C		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Human Energy Transfer During Exercise	GRADE: 11/12
----------------------------------	--	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> • Immediate energy, short term energy, and long term energy • Energy spectrum of exercise • Fast and slow twitch muscle fibers 	<p>The student will:</p> <ul style="list-style-type: none"> • identify the body’s three energy systems. • classify each system by its contribution to exercise in relation to intensity and duration. • describe differences in blood lactate threshold between sedentary and aerobically trained individuals. • outline the time course for oxygen uptake during moderate exercise. • create a diagram that explains the relationship between oxygen uptake and exercise intensity. • explain the difference in recovery from moderate to exhaustive exercise. • differentiate between the body’s two type of muscle fibers. • explain the rationale for using intermittent exercise and interval training. 	<p>10.1 C 10.4 A,B,C 10.5 A,D,E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Energy Expenditure	GRADE: 11/12
----------------------------------	---------------------------------------	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> • Measurement of energy expenditure • Energy expenditure at rest • Energy expenditure during physical activity 	<p>The student will:</p> <ul style="list-style-type: none"> • evaluate the concepts of direct and indirect calorimetry. • compare and contrast closed and open circuit spirometry. • define respiratory quotient; including its use to quantify energy release in metabolism. • explain the difference between respiratory quotient and respiratory exchange ratio. • define basal metabolic rate; including the factors that affect it. • describe two means to predict resting daily energy expenditure. • explain the effect of body weight on the energy cost of different forms of physical activity. • identify factors that contribute to an individual's total daily expenditure. • outline the different classification systems for rating a strenuous activity. • discuss factors that affect the energy cost of walking and running. • explain the concept of exercise economy. 	10.5 A,D,E		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Optimal Nutrition for Exercise and Sport	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> • Nutrient requirements • Carbohydrate intake and the pre-competition meal • Glucose intake, electrolytes and water 	<p>The student will:</p> <ul style="list-style-type: none"> • compare the nutrient and energy intakes of physically active men and women with sedentary counterparts. • outline the food guide pyramid recommendations. • describe the timing and composition of the pre-event meal; including reasons for limiting lipid and protein intake. • summarize the effects of low, normal and high carbohydrate intake on glycogen reserves and subsequent endurance performance. • describe the potential negative effects of consuming energy drinks prior to endurance competition. • discuss the benefits of consuming high glycemic carbohydrates during high intensity aerobic exercise. • design a general recommendation for carbohydrate intake for athletes engaging in intense training. 	<p>10.1C 10.4A,B,D 10.5 E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Anaerobic and Aerobic Energy Systems	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> • General training principles • Aerobic and anaerobic training 	<ul style="list-style-type: none"> • define the four principles of exercise training. • discuss the overload principle of training. • describe how the following factors impact an aerobic training program. <ul style="list-style-type: none"> – Initial fitness level – Genetics – Training frequency – Training duration – Training intensity • explain how exercise heart rate can establish an appropriate exercise intensity for aerobic training. • define training-sensitive zone. • explain the influence of age on maximal heart rate and training-sensitive zone. 	10.1B 10.3D 10.4A,B,C,D 10.5D,E		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Environment and Exercise	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> • Mechanisms of thermoregulation • Environmental stress during exercise • Exercise at altitude 	<p>The student will:</p> <ul style="list-style-type: none"> • explain the role of the hypothalamus in regulating the body’s temperature. • list four physical factors contributing to heat exchange during rest and exercise. • identify desirable clothing choices for various weather conditions. • quantify fluid loss during hot weather exercise. • explain how acclimatization, training, age, gender, and body fat modify heat tolerance. • explain the purpose of the wind chill index. • identify factors comprising the heat stress index. • outline the effects of increasingly higher altitudes. • describe immediate and long term physiologic adjustments to altitude exposure. 	<p>10.2E 10.3D 10.4B,C 10.5 D,E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Obesity, Exercise and Weight Control	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Obesity Achieving optimal body composition 	<p>The student will:</p> <ul style="list-style-type: none"> describe the current status of overweight and obesity among American adults and children. list significant health risks of obesity. discuss percent body fat, body fat distribution and fat cell size and number are criteria for obesity. define fat cell hypertrophy and fat cell hyperplasia. compare fat cell size and number of average weight and obese individuals. outline how “unbalancing” the energy balance equation affects body weight. explain the meaning of weight cycling. present a rationale for including regular physical activity into a weight loss program. describe the ways a moderate increase in physical activity affects a sedentary individual’s overall lifestyle. provide diet and exercise advice to an individual that wants to gain weight to improve appearance or enhance sports performance. 	10.1C 10.2B 10.4A,B,C,D 10.5D,E		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: The Role of Exercise in Weight Control	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> • Energy expenditure related to overweight and obesity • Physical activity considerations • Benefits of weight loss and weight control 	<p>The student will:</p> <ul style="list-style-type: none"> • analyze energy expenditure based on Resting Energy Expenditure (REE), Physical Activity (PA) and the thermogenetic effect of a meal. • examine the relationship between frequency, intensity, duration, and mode of exercise and its impact on weight reduction and weight maintenance. • identify the reduction in health related risk factors. <ul style="list-style-type: none"> – Blood pressure – Blood lipids – Insulin resistance – Metabolic – Physiological 	10.1C 10.2B 10.4A,B,C,D 10.5D,E		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Modification of Health Related Behaviors	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	√ for Mastery
<ul style="list-style-type: none"> • Motivation for change 	<p>The student will:</p> <ul style="list-style-type: none"> • discuss the stages of motivational readiness for change. <ul style="list-style-type: none"> – Pre-contemplation – Contemplation – Preparation – Action – Maintenance • analyze the six motivational factors that institute change. <ul style="list-style-type: none"> – Improve fitness – Improve health – Weight loss – Increase energy – Improve appearance • compare the readiness to change vs. willingness to change. • identify the obstacles in changing health behaviors. 	<p>10.1C 10.2B 10.4A,B,C,D 10.5D,E</p>		

WEST ALLEGHENY SCHOOL DISTRICT

STUDENT OUTCOME STATEMENTS – INDICATOR OF ACHIEVEMENT

SUBJECT: EXERCISE SCIENCE	UNIT FOCUS: Reversing Obesity and Inactivity in Children	GRADE: 11/12
----------------------------------	---	---------------------

Unit Content	Student Outcomes	Standards	Dates Taught	✓ for Mastery
<ul style="list-style-type: none"> Prevalence of obesity 	<p>The student will:</p> <ul style="list-style-type: none"> identify the primary predictors of overweight and obesity in children. develop strategies to overcome the primary predictors of overweight and obesity in children compare the relationship between childhood and adult obesity. discuss mother’s obesity status as a predictor of obesity in the child. formulate potential solutions for treatment and prevention of childhood obesity. propose school-based intervention plans that will create an environment where children can be active and learn about healthy eating habits. discuss the overall effectiveness or ineffectiveness of school-based intervention plans. analyze the link between academics and physical activity. 	<p>10.1C 10.2B 10.4A,B,C,D 10.5D,E</p>		

