Hillside Township School District

Introduction to Sports Medicine

Grade 12

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Board of Education Approved:

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Table of Contents

Section	Page
Mission Statement	3
Academic Overview	3
Affirmative Action Compliance Statement	3
Unit 1 -39	4 -42
Pacing Charts	43-45

District Mission Statement

Hillside High School, in partnership with students, parents, and the greater Hillside Community, will focus on developing independent critical thinkers. By fostering a positive school culture, Hillside High School will encourage self-awareness, responsibility, and civility, while celebrating student achievement and accomplishment. Through innovative instruction and challenging curriculum, students will enhance their communicative, technological, and problem solving skills, thereby supplying them with the tools to become productive leaders in our global economy.

Academic Area Overview

The Hillside Township School District is committed to excellence. We believe that all children are entitled to an education that will equip them to become productive citizens of the twenty-first century. We believe that an education in the fundamental principles of Business Education will provide students with the skills and content necessary to become future leaders.

The Business Education Department at Hillside High School provides students with an opportunity to acquire knowledge and develop skills, which are critical for success in the world of Business. Programs and courses are designed for students who are moving on to higher education in the area of Business or students who are entering the world of work directly after graduation. We, in the Business Education Department, are committed to delivering cutting-edge curriculum in order to ready our students for the ever-changing global business environment. Academic business courses, which can earn college credit, are offered, as well as a structured-learning experience (Cooperative Education).

The Business Education Department delivers a variety of Business disciplines for students to discover their talents beginning in Grade 9 and continuing through Grade 12. Our program provides teachers with resources online, and in print, that incorporate the use of technology, to help students reach the level of accomplishment that is outlined in the NJ Common Core State Standards for 21st Century Life and Career Skills.

Affirmative Action Statement Equality and Equity in Curriculum

The Hillside Township School District ensures that the district's curriculum and instruction are aligned to the State's Core Curriculum Content Standards and addresses the elimination of discrimination and the achievement gap, as identified by underperforming school-level AYP reports for State assessment, by providing equity in educational programs and by providing opportunities for students to interact positively with others regardless of race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability or socioeconomic status.

N.J.A.C. 6A:7-1.7(b): Section 504, Rehabilitation Act of 1973; N.J.S.A. 10-5; Title IX, Education Amendments of 1972.

UNIT: ____1

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ How disease ✓ The basic giving first ✓ How the C	guidelines that decrease the risk of getting or transmitting an infectious dise	ase while	 ✓ How do you identify an emergency? ✓ How does the EMS system work? ✓ What are some forms of protection needed when dealing with an emergency? ✓ Why must you have a person's permission before giving care?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	✓ Determ	Ty a possible emergency nine potential limitations and decide how to handle the gency in spite of them ty remove and discard latex gloves

UNIT: _____2

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ How ident	lp an ill or injured person. ify a life threatening condition. ng a victim is not always necessary.		 ✓ What are the 3 basic emergency action steps and why are they important? ✓ How do you determine if a call to 911 necessary? ✓ What are the various moving techniques and why would you choose one over another?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	✓ Detern ✓ Demo blan	nstrate the 3 basic emergency steps through role playing. mine if the victim has a life threatening condition. nstrate pack strap carry, two person carry, clothes drag, ket drag, and foot drag. in when and why they would use each method of moving

UNIT: ____3___

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ The 6 steps ✓ The 8 steps ✓ The 9 steps	s in checking a conscious victim s in checking an Unconscious adult s in checking an Unconscious child s in checking an Unconscious infant of shock and how to deal with shock		 ✓ How does checking a conscious victim differ from checking an Unconscious victim? ✓ Why is pulse checked at different places on an infant from an adult or child? ✓ How does the elevating of a victim's feet help them physiologically?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	emer ✓ Identif	me a complete check while role playing various regency situations by a victim of shock and properly treat them while role ring emergency situations

UNIT: ____4

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ The recover ✓ The comm ✓ The 6 steps	of a breathing emergency ery positions for a victim on causes of choking s to save a conscious and unconscious adult, child and infant from choking s of rescue breathing for an adult, child or infant		 ✓ How can a choking emergency be avoided? ✓ Why is hand placement anatomically important to save and protect choking victims?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	cons ✓ Perfor ✓ Place ✓ Design	m all the required steps to stop the choking of a cious adult, child, and infant m recue breathing on adult and child dummies a victim in a recovery position a checklist to follow to make their home safe for ints and children

UNIT: _____5___

	ENDURING UNDERSTANDINGS	ESSENTIAL QU	ESTIONS
✓ Causes of ✓ How to ca ✓ How to pr	heart attack a heart attack re for a heart attack victim event heart disease and heart attacks o use an AED	 ✓ What are the causes of I ✓ How can heart disease I ✓ Why is early medical can attack victim? ✓ What are the signs of and do you treat a heart attached why is an AED effective attack victim? 	be prevented? are crucial for a heart theart attack and how ck victim?
NJCCCS	KNOWLEDGE	SKILLS	
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	 Students will be able to: ✓ Perform CPR on an adult, a child, and ✓ Properly apply and use an AED on an a infant. 	

UNIT: <u>6</u>

	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
	y risk factors y procedures for vehicles, for fire, at home, at work and, at play	 ✓ What factors increase a person's risk of being injured? ✓ How do injury statistics reflect changes in society?
NJCCCS	KNOWLEDGE	SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	be able to: n a survey to identify a person's predictable and entable risks of injury

UNIT:	7	

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ The ✓ The ✓ How	s of internal bleeding 4 main types of open wounds characteristics of burns to identify the 4 types of burns ents will research a type of infection and present their findings to rest of the	e class	 ✓ How does an infection spread through and affect the body? ✓ How can infections be prevented?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	✓ Care f ✓ Identif	or closed and open wounds

UNIT: ____8___

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ Wha	The 4 basic types of injuries to muscle signs of serious muscle, bones, and joint injuries at RICE stands for different types of splints and when they are used	es, bones, and	 ✓ How does immobilization aid the healing of an injury? ✓ Why is the immobilization of the head critical when there is a suspected neck or back injury?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	✓ Demo	nstrate the 7 steps to apply an anatomic splint instrate the 7 steps to apply a soft splint instrate the 6 steps to apply a rigid splint instrate the 7 steps to apply a sling and binder

UNIT: ____9___

ESSENTIAL QUESTIONS

ENDURING UNDERSTANDINGS

 ✓ Wha ✓ The ✓ F.A. ✓ Strol ✓ Stud assoc 	common signs of sudden illness t is diabetes? proper care for seizures S.T. recognition of stroke the prevention tents will research diabetes to learn the unique health problems and their predictated with this disease will diabetes.org	eautions	 ✓ Why are the general guidelines for dealing with any emergency effective when dealing with sudden illness? ✓ How does diabetes affect the body?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6 2.1.12.C.1 2.1.12.C.2	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies. Predict diseases and health conditions that may occur during one's lifespan and speculate on potential prevention and treatment strategies. Develop strategies that will impact local, state, national, and international public health efforts to prevent and control diseases and health conditions.	a seizu ✓ Identify	and protect from further injury a victim experiencing are a victim of stroke and treat a diabetes patient suffering from low or high
2.1.12.C.3	Determine the emotional, social, and financial impact of mental illness on the family, community, and state.		

UNIT: <u>10</u>

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ The different types of poisoning ✓ The general care of victims of poisoning ✓ How to identify dangerous insect and animal bites and how to treat them ✓ Students will research a poisoning or animal bite ✓ www.cde.gov ✓ www.apic.or.st.edu 	 ✓ How can individuals safeguard themselves from being poisoned? ✓ What methods are used to treat a poison victim?

NJCCCS	KNOWLEDGE	SKILLS
2.1.12.D.1	Determine the causes and outcomes of <u>intentional and unintentional injuries</u> in adolescents and young adults and propose prevention strategies.	Students will be able to: ✓ Identify the signs and symptoms of a poisoning or bite as enacted by classmates based on their research
2.1.12.D.2	Explain ways to protect against abuse and all forms of assault and what to do if assaulted.	✓ Explain the proper treatment for the enacted poisoning or bite
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	
2.3.12.A.1	Determine the potential risks and benefits of the use of new or experimental medicines and herbal and medicinal supplements.	
2.3.12.A.2	Summarize the criteria for evaluating the effectiveness of a medicine.	
	Relate personal abuse of prescription and over-the-counter medicines to	

2.3.12.A.3	wellness.	

	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
✓ The j	t heat and cold related illness is and the names for them proper care for heat related illness at each stage proper care for cold related emergencies, especially frost bite and hypothern to prevent heat and cold related emergencies	 ✓ What is the progression of heat related emergencies and how is the body affected? ✓ What is the progression of cold related emergencies and how is the body affected?
NJCCCS	KNOWLEDGE	SKILLS

UNIT: ____11____

2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Identify the heat or cold related emergency as enacted by fellow students in a role playing session ✓ Explain and/or demonstrate the proper care for that emergency ✓ Explain the reasons the proper care is effective

UNIT: ____12

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ How	ous methods to communicate with children and help them overcome their fe to better communicate with a person who has limited hearing, usually an ob- to better communicate or assist a person with limited or lost vision		✓ Why is it important to be prepared to deal with the special needs and considerations of children, older adults, people with disabilities, and people who do not speak the same language you speak in providing care during an emergency?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6 2.2.12.A.1	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies. Employ skills for communicating with family, peers, and people from other backgrounds and cultures that may impact the health of oneself and others.	specia ✓ Discuss why	and demonstrate methods used to communicate with all needs victims that are effective methods of communicating that are ineffective and how the situation could have been handled better

UNIT: ____13___

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
 ✓ Asthma can be triggered by exercise, cold air, allergens and other irritants ✓ How asthma makes breathing difficult and how frightening that is for the asthma ✓ The steps used to help an asthma victim breath 		victim	✓ What triggers an asthma attack?✓ How does the body react to these triggers?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.		be able to: in and demonstrate the 4 steps to help an asthma victim an asthma inhaler
2.3.12.A.1	Determine the potential risks and benefits of the use of new or experimental medicines and herbal and medicinal supplements.		
2.3.12.A.2	Summarize the criteria for evaluating the effectiveness of a medicine.		

UNIT: <u>14</u>

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ The ca	gns of anaphylaxis re of anaphylaxis rious auto injectors		✓ How can a responder recognize and treat anaphylactic shock?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will	be able to: ✓ Using an epi-pen trainer, students will demonstrate the 5 steps to follow when assisting with an epinephrine auto injector.
2.3.12.A.1	Determine the potential risks and benefits of the use of new or experimental medicines and herbal and medicinal supplements.		auto injector.
2.3.12.A.2	Summarize the criteria for evaluating the effectiveness of a medicine.		

UNIT: ___15____

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ How athle	t are the specific roles of the athletic trainer in overseeing the total health ca	are for the	 ✓ Who are members of the sports medicine team and various sports medicine organizations? ✓ What is the role of the individual supervising a recreational program in athletic injury management?
NJCCCS	KNOWLEDGE		SKILLS
2.2.12.A.1 2.2.12.A.2 2.2.12.A.3 2.2.12.D.1	Employ skills for communicating with family, peers, and people from other backgrounds and cultures that may impact the health of oneself and others. Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts. Analyze the impact of technology on interpersonal communication in supporting wellness and a healthy lifestyle. Plan and implement an advocacy strategy to stimulate action on a state, national, or global health issue, including but not limited to, organ/tissue donation.	train spor ✓ Descri care, ✓ Descri	be able to: the how fitness professionals, including personal fitness ers and strength and conditioning coaches, relate to the ts medicine team the the role of the coach in injury prevention, emergency, and injury management the the role of the team physician and his/her interaction the athletic trainer

UNIT: <u>16</u>

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
 ✓ The athletic health care program serves the athletes best by establishing specific policies regulations governing the use of the services. ✓ Budgets should provide for the purchase of equipment and supplies essential for preventat and rehabilitative care of the athlete. ✓ Pre participation physicals are a must and should include a medical history, a general physical exam, and an orthopedic screening ✓ The athletic h/c program can be enhanced by designing and/or renovating a facility to maximize the use of available space. 		preventative neral physical	 ✓ What are the major administrative functions necessary in overseeing an athletic health care program? ✓ What are the budgetary concerns when ordering supplies and equipment? ✓ Why is the pre participation physical examination important? ✓ What makes a well designed athletic health care facility?
NJCCCS	KNOWLEDGE		SKILLS
2.2.12.A.1 2.2.12.A.2 2.2.12.A.3 2.2.12.D.1	Employ skills for communicating with family, peers, and people from other backgrounds and cultures that may impact the health of oneself and others. Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts. Analyze the impact of technology on interpersonal communication in supporting wellness and a healthy lifestyle Plan and implement an advocacy strategy to stimulate action on a state, national, or global health issue, including but not limited to, organ/tissue donation.	and and and and and are sequents. ✓ Select requestion collect sequents.	he able to: In athletic h/c facilities for a medium sized high school another for a large university the equipment from current catalogues that would be ired by a medium size high school, a university or ege, or a clinical facility op a reasonable budget for the athletic h/c program of a l high school, a large high school, and a large college or ersity

UNIT: __17_

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
liabi ✓ Indi care ✓ Liab The	essential that policies and procedures that conform to the legal guidelines go lity be followed in an athletic environment. viduals can reduce the risk of litigation by taking all steps necessary to provi of an injured athlete bility is the state of being legally responsible for the harm one can cause anot standard of reasonable care assumes that the individual acts according to the dards of care that a person with similar education or training would provide.	de reasonable her person.	 ✓ What are the legal considerations for anyone acting as a health care provider? ✓ What measures can be taken to minimize the chances of litigation? ✓ What is product liability?
NJCCCS	KNOWLEDGE		SKILLS
2.2.12.A.1 2.2.12.A.2 2.2.12.A.3 2.2.12.D.1	Employ skills for communicating with family, peers, and people from other backgrounds and cultures that may impact the health of oneself and others. Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts. Analyze the impact of technology on interpersonal communication in supporting wellness and a healthy lifestyle. Plan and implement an advocacy strategy to stimulate action on a state, national, or global health issue, including but not limited to, organ/tissue donation.	negli ✓ Explai care ✓ Partici www.duharm www.topics.l	n and evaluate the major legal concerns of liability, igence, assumption of risk, and torts? n how an individual can provide reasonable and prudent for an injured athlete pate in a mock trial in class iee.org awcornell.edu/wex/sports law

UNIT: <u>18</u>

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
✓ How ✓ The	year round conditioning is important in preventing injury the SAID principle relates to sports conditioning and injury prevention relationship between maximum aerobic capacity and heart rate. difference between aerobic and anaerobic training methods		 ✓ What are the principles of conditioning? ✓ Why are warm up and cool down periods important? ✓ Why are flexibility, strength, and cardio respiratory endurance important in preventing injury?
NJCCCS	KNOWLEDGE		SKILLS
2.5.12.A.1 2.5.12.A.2 2.5.12.A.3 2.5.12.A.4	Explain and demonstrate ways to transfer movement skills from one game, sport, dance, or recreational activity to another (e.g., striking skills from/to tennis, badminton, ping pong, racquetball). Analyze application of force and motion (weight transfer, power, speed, agility, range of motion) and modify movement to impact performance. Design and lead a rhythmic activity that includes variations in time, space, force, flow, and relationships (creative, cultural, social, and fitness dance). Critique a movement skill/performance and discuss how each part can be made more interesting, creative, efficient, and effective.	✓ Critica cool ✓ Identif flexi	be able to: In a pre-season training and conditioning program ally observe how a variety of sports use warm up and down procedures fy specific techniques and principles for improving bility, muscular strength, and cardio respiratory trance

UNIT: ___19____

ents? ? nt in enhancing njuries isadvantages of
nd a balanced right aliper
ight

UNIT: <u>20</u>

ENDURING UNDERSTANDINGS			ESSENTIAL QUESTIONS
 ✓ What forms of protection are required by various sports to protect an athlete's body? ✓ The material durability and fit and wear requirements that must meet sports equipment ✓ Manufacturers must foresee all possible uses and misuses of their equipment and warn of potential risks 		nent standards	 ✓ What types of protective equipment are available for the various parts of the body? ✓ What are the legal responsibilities in terms of protective equipment? ✓ How can safety equipment be selected and used to decrease the risk of injuries and litigation?
NJCCCS	KNOWLEDGE		SKILLS
2.5.12.C.1 2.5.12.C.2	Analyze the role, responsibilities, and preparation of players, officials, trainers, and other participants and recommend strategies to improve their performance and behavior. Develop rule changes to existing games, sports, and activities that enhance safety and enjoyment.	Students will be able to: ✓ Discuss legal issues related to the use of protective equip ✓ Demonstrate the proper technique for fitting football helr and shoulder pads ✓ Discuss the consideration involved in shoe selection www.riddell.com www.thetrainingroom.com www.nocsae.org www.roadrunnersports.com www.douglaspads.com www.douglaspads.com www.kidsource.com/kidsource/content/eyewear.html	

UNIT: ___21____

ENDURING UNDERSTANDINGS			ESSENTIAL QUESTIONS
 ✓ The prime concern of emergency aid is to maintain cardio vascular function and, indirectly, central nervous system function ✓ A systemic assessment of the injured athlete should be made to determine appropriate care ✓ Secondary assessment consists of 4 major areas ✓ Protection, rest, ice ,compression, and elevation (PRICE) should be used for immediate care of a muscular skeletal injury 		 ✓ Why is cardiopulmonary resuscitation (CPR) important to know? ✓ How do you manage an obstructed airway? ✓ What are the different types of shock and how are they managed? ✓ What are the various phases of injury? 	
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	✓ Record	m proper spine boarding and crutch fitting d blood pressure, respiration, and pulse port an injured athlete—if appropriate for the specific

UNIT: _________

ENDURING UNDERSTANDINGS			ESSENTIAL QUESTIONS
 ✓ The policy on universal precautions in an athletic environment as proposed by OSHA ✓ Proper care of skin wounds ✓ Blood borne pathogens are microorganisms that can cause disease and are present in human blood and other bodily fluids 		 ✓ What are the universal precautions mandated by the Occupational Safety and Health Administration? ✓ How do they apply to the coach? ✓ What are the various types of skin wounds? 	
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Control bleeding using a variety of techniques ✓ Close a wound ✓ Design a safety checklist www.osha.gov www.os.dhhs.gov www.odc.gov www.nih.gov www.umdnj.edu	

UNIT: ___23___

	ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
 ✓ Heat stroke is a life threatening emergency and managing it requires a heroic effective body temperature ✓ The intervention strategies to help athletes avoid heat-related illnesses ✓ Low temperatures also pose serious problems for the athlete ✓ The flash to bang method 		ort to lower	 ✓ What are the causes of hypothermia and major cold disorders and how can they be prevented? ✓ How can an athlete be protected from exposure to the sun? ✓ What precautions should be taken in an electrical storn?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: Describe the symptoms and signs of most common heat disorders Take the steps necessary to prevent heat illness Identify the physiological basis for the body's susceptibe a cold disorder Help athletes protect themselves from the effects of ultradiation www.nata.org www.lighteningsafety.org www.lema.gov www.webmd.com www.princeton.edu/oa/safety/hypocold.shtml www.gssiwch.com	

UNIT: <u>24</u>

ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS	
 ✓ Elastic bandages can aid the recovery from a sport injury ✓ The two kinds of tape used to support and protect musculoskeletal injuries are non elastic white adhesive and elastic adhesvie 		 ✓ What can be done to minimize blisters? ✓ What can be done to ensure that taping provides the required support? 	
NJCCCS KNOWLEDGE SKILLS			
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Perform various bandaging and taping techniques correct	
		www.bloodand www.muellers www.cramers www.njn.com	portsmed.com

UNIT: <u>25</u>

ENDURING UNDERSTANDINGS			ESSENTIAL QUESTIONS
 ✓ The 8 stages of short term and long term rehabilitation ✓ The athlete can return to activity when he/she is fully reconditioned and has achie range of movement, strength, neuromuscular control, cardiovascular fitness,and s functional skills. ✓ The athlete must have regained full confidence to return to his or her sport. 			 ✓ What is the philosophy of the rehabilitative process in a sports medicine environment? ✓ What are the individual short term and long term goals of a rehabilitation program? ✓ What are the criteria and the decision making process to determine when the injured athlete may return to full activity?
NJCCCS	KNOWLEDGE		SKILLS
2.5.12.A.1	Explain and demonstrate ways to transfer <u>movement skills</u> from one game, sport, dance, or recreational activity to another (e.g., striking skills from/to tennis, badminton, ping pong, racquetball).	Students will be able to: ✓ Design a complete rehabilitation program for a specific injury	
2.5.12.A.2	Analyze application of force and motion (weight transfer, power, speed, agility, range of motion) and modify movement to impact performance.		
2.5.12.A.3	Design and lead a rhythmic activity that includes variations in time, space, force, flow, and relationships (creative, cultural, social, and fitness dance).	www.nata.org www.physsportsmed.com www.archives-pmr.org www.humankinetics.com	
2.5.12.A.4	Critique a movement skill/performance and discuss how each part can be made more interesting, creative, efficient, and effective.		
2.6.12.A.1	Compare the short- and long-term impact on wellness associated with physical inactivity.		
	Design, implement, and evaluate a fitness plan that reflects knowledge		

2.6.12.A.2	and application of fitness-training principles.	

UNIT: <u>26</u>

ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
predi ✓ The s	e no one personality type has been found to be injury prone, negative stresses an athlete to injury. Social support provided to the injured athlete, both stated and perceived, has ct on the course of injury rehab	to an injury?
NJCCCS	KNOWLEDGE	SKILLS

2.1.12.E.3	Examine how a family might cope with crisis or change and suggest ways to restore family balance and function.	Students will be able to:
2.1.12.E.4	Develop a personal stress management plan to improve/maintain wellness.	 ✓ Identify the sequence of possible emotions associated with the phases of the injury rehab process for short term, long term, chronic, and career ending injuries. ✓ Set appropriate goals for the injured athlete to achieve during the rehab process ✓ Generate guidelines for the coach to use in managing the psychological impact of the injury on the athlete. ✓ Consider all factors in the decision to return an athlete to competition.
		www.aaasponline.org www.aaspspa.org www.personal.umich.edu
		www.direlax.com

UNIT: <u>27</u>

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ Fractures may be classified as greenstick, transverse, oblique, spiral, communicated, impacted, or stress ✓ Dislocations and subluxations are disruptions of joint capsule and ligamentous structures surrounding the joint ✓ Repeated contusions may lead to the development of myositis ossification. ✓ Tendonitis is the inflammation of a muscle or tendon that causes pain from movement which is the result of overuse. 	 ✓ What are the characteristics of acute traumatic injuries such as fractures, dislocations and subluxations, contusions, ligament sprains, muscle strains, muscle soreness, and nerve injuries. ✓ What are chronic overuse injuries? ✓ How are the trigger points for tendonitis, tenosynovitis, bursitis, osteoarthritis, and myofascitis?

NJCCCS	KNOWLEDGE	SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Recognize and differentiate sports injuries www.redcross.org. www.nih.gov www.wheelessonline.com

UNIT: <u>28</u>

ENDURING UNDERSTANDINGS			ESSENTIAL QUESTIONS
 ✓ The anatomy of the foot ✓ How the foot's 26 bones are held in place by an intricate network of ligaments and fascia and how they are moved by a complex group of muscles. ✓ Foot injuries can be prevented by selecting appropriate footwear and using orthotic devices to protect the foot from abnormal forces, stresses, and strains. 		I fascia and ✓ Wh mir c devices to ✓ Wh	nat is the process to assess a foot injury? nat steps can be taken to prevent or nimize foot injuries? nat are the causes of common foot injuries in letes and how are they treated?
NJCCCS KNOWLEDGE			SKILLS

2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Assess foot injuries through class role playing ✓ Identify possible causes and describe proper treatment of these injuries through role playing

UNIT: <u>29</u>

	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS	
✓ How to prevent or minimize lower leg and ankle injuries by Achilles tendon stretching, strengthening key muscles, improving neuromuscular control, choosing appropriate footwear, and, if necessary proper taping and bracing.			
NJCCCS	KNOWLEDGE	SKILLS	

2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Tape and brace the lower leg and ankle properly ✓ Assess lower leg and ankle injuries through scenarios ✓ Identify the cause of injury and describe its proper treatment
		www.barteby.com www.aofas.org www.worldortho.com www.apman.org www.orthoinfo.aaos.org

UNIT: <u>30</u>

	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ Prevention of knee injuries requires maximizing muscle strength and wearing appropriate shoes. Use of protective knee bracing is questionable ✓ The stabilizing structures most often injured are the medial and lateral collateral ligaments, the anterior and posterior cruciate ligaments and the menisci. ✓ Other knee joint injuries that can occur from acute trauma or from overuse are contusions, bursitis, joint mice, subluxation and dislocation, and chondromalacia patella. 		at the knee joint differ? ✓ How can knee injuries be prevented? ✓ What are the anatomical relationships of the
NJCCCS	KNOWLEDGE	SKILLS

2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	✓ Assess an injury to the knee joint by taking a history, observing both the appearance of the knee and how the athlete moves, palpitating the injured structures around the joint, and using special tests including valgus/varus stress tests, Lachman's test, and Apley's compression test to determine the stability of the joint.

UNIT: __31__

ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
strair ✓ A ma ✓ A co a blo	quadracep contusion is the most common sports injury to the thigh with the n next most common. ajor complication to repeated contusions is myositis ossificans. mmon problem with injury in the pelvic region is with the hip pointer, which we to the inadequately protected iliac crest. The contusion causes pain, spass function of the muscles in the pelvic area.	procedures for injuries to the thigh, groin, and pelvis? ✓ What are the major anatomical features of the
NJCCCS KNOWLEDGE		SKILLS

2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	 Students will be able to: ✓ Identify the signs and symptoms in each of the 3 degrees of quadricep contusions and explain how they are managed ✓ Describe and demonstrate hip pointer prevention and care ✓ Demonstrate correct hip, groin, quadricep, and hamstring wraps
		www.worldortho.com www.wheelessonline:com www.sportsinjurybulletin.com www.fpnotebook.com

UNIT: <u>32</u>

ENDURING UNDERSTANDINGS		ESSENTIAL QUESTIONS
acromic scapulo ✓ In evalo ✓ Rotator	major articulations of the shoulder complex: the sternoclavicular joint and loclavicular joint and ligament, the glenhumeral joint and ligament, and the othoracic joint. uating injuries to the shoulder, all 4 of the above joints must be assessed. c cuff strain, bursitis, contusions, and biceps tenosynovitis are common injures' shoulders	✓ What are the steps in assessing shoulder injuries?✓ How are specific should injuries managed?
NJCCCS	KNOWLEDGE	SKILLS

at en	automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Demonstrate how to assess a shoulder injury ✓ Identify the type of injury ✓ Explain the treatment for that injury ✓ Design rehab regimen for that injury www.wheelessonline.com www.nlm.nih.gov www.orthoinfo.aaos.org
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UNIT: __33_

	ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
throw ✓ Wrist exten ✓ Sprai ✓ Com	ulnar collateral ligament of the elbow is injured by valgus force from repetitiving. It injuries usually occur from falls on outstretched hands or from repeated fasion, and/or rotation of the joint ins, tendonitis, carpal tunnel syndrome, and wrist ganglion. Immon sports injuries are boxer's fracture, mallet finer, boutonniere deformity ekeeper's thumb, sprains, dislocations, fractures and subungual hematoma.	the elbow, forearm, wrist, and hand? ✓ What are the steps to properly assess injuries to the elbow, forearm, wrist, and hand? ✓ What are the possible causes of injuries to the
NJCCCS	KNOWLEDGE	SKILLS

2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	 ✓ Identify specific injuries to the elbow, wrist, and hand. ✓ Assess injuries and determine possible causes. ✓ Explain proper treatment for the injury ✓ Design a rehabilitation program

UNIT: <u>34</u>

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ The spine, or vertebral column, is made up of 33 movable vertebrae which are separated by the intervertebral disks and supported by a series of muscles and ligaments. This structure allows for the flexion, extension, lateral flexion, and rotation of the spine. ✓ The spinal cord has 31 pairs of spinal nerves extending from the sides of the spinal cord. ✓ Low back pain is one of the most common and disabling ailments for athletes and the general population. Low back pain can be prevented by avoiding the stresses and strains that result from poor posture and other aggravating positions. 	 ✓ How would you describe the anatomy of the cervical, thoracic, and lumbar spine? ✓ How do nerve roots from the spinal cord combine to form specific peripheral nerves? ✓ How can injuries to the spine be prevented?

NJCCCS	KNOWLEDGE	SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Identify causes of specific spinal injuries ✓ Assess injuries ✓ Explain proper treatment for the injury ✓ Design a rehabilitation program www.nlm.nih.gov/medlineplus/backpain.html www.sportsmed.com www.orthopedics.about.com www.aafp.org www.spine-health.com

UNIT: __35_

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ Injuries to the heart, lung, and abdominal viscera can be serious and life threatening and need to be recognized and managed appropriately ✓ In evaluating an injury to the abdomen or thorax, the initial survey should focus on signs and symptoms of life threatening conditions. Observing body positioning, palpatation of the injured area, and asking appropriate questions are critical to effective assessment 	 ✓ What is the anatomy of the thorax and the abdomen? ✓ What are the techniques for assessing thoracic and abdominal injuries? ✓ What are typical injuries to the thorax and abdomen?

NJCCCS	KNOWLEDGE	SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Identify causes of injuries to the thorax and abdomen ✓ Assess injuries ✓ Explain proper treatment for the injury ✓ Design a rehabilitation program

UNIT: <u>36</u>

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ Concussions are usually the result of rotational acceleration and deceleration forces. Just when is it safe for an athlete to return to competition after a concussion is a difficult decision for the sports medicine team because of the possibility of second impact syndrome and epidural and subdural hematomas. ✓ Injuries to the face involve fractures, dislocations of the jaw, and facial lacerations ✓ Most ear injuries involve the auricle and cauliflower ear is the most common Rupture of the ear drum, swimmer's ear, and middle ear infections are also common problems for athletes. ✓ Injuries to the eye should be treated by opthomalogists. Among eye injuries that are serious are retinal detachments, orbital fractures, and foreign bodies in the eye 	 ✓ How can injuries to the head and neck region be prevented? ✓ How are injuries to the head, neck, and face assessed? ✓ How are concussions and mild head injuries recognized and managed?

NJCCCS	KNOWLEDGE	SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	Students will be able to: ✓ Perform a thorough concussion evaluation and determine the degree of the concussion ✓ Explain the treatment needed www.aan.com www.aao.org www.ada.org www.sportsdentistry.com www.entnet.org

UNIT: <u>37</u>

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ Skin infections in athletes are caused by viruses (herpes simplex), bacteria (staph and strep), and fungi (ringworm and athlete's foot) ✓ Iron deficient anemia and sickle cell anemia can affect athletes and their performance. ✓ The importance of managing diabetes, both Type I and Type II, is critical for athletes. Diabetic athletes must take care to balance their food intake, their insulin intake and their exercise to avoid diabetic coma or insulin shock. ✓ High blood pressure may require careful monitoring by a physician and may prevent an athlete 	 ✓ What skin infections are common in athletes and what organisms cause them? ✓ What types of anemia commonly affect athletes and how should each be managed? ✓ What is diabetes mellitus? How does diabetic coma differ from insulin shock and how is each managed?
from participating in heavy resistive activities	✓ What is hypertension and how should it be

			addressed in athletes?
NJCCCS	KNOWLEDGE		SKILLS
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	most ✓ Descri ✓ Descri	fy and explain the causes, prevention and care of the a common skin infections in sports libe the problems unique to diabetic athletes libe the effects of anemia on athletes libe the dangers of hypertension for athletes libe the dangers libe the dangers of hypertension for athletes libe the danger
		www.gastro.c www.diabete www.aesnet.c	s.org

UNIT: ___38____

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ How athletes enhance performance ✓ The physiological effects of anabolic steroids, diuretics, and growth hormones on the athlete ✓ Why blood doping is used in sports and why it is dangerous 	 ✓ What are the effects of performance enhancing drugs commonly used by athletes? ✓ What are the negative effects of alcohol and tobacco on an athlete's health? ✓ How do drug testing programs identify the substance abuser?

NJCCCS	KNOWLEDGE	SKILLS
2.6.12.A.1	Compare the short- and long-term impact on wellness associated with physical inactivity.	Students will be able to:
2.6.12.A.2	Design, implement, and evaluate a fitness plan that reflects knowledge and application of fitness-training principles.	✓ List the dangers of tobacco ✓ List the effects of nicotine on the body ✓ Debate the issue of drug testing in athletes
2.6.12.A.3	Determine the role of genetics, gender, age, nutrition, activity level, and exercise type on body composition.	✓ Select a performance enhancing drug and research it
2.6.12.A.4	Compare and contrast the impact of <u>health-related fitness</u> components as a measure of fitness and health.	www.ncaa.org www.usantidoping.org www.olympic-usa.org
2.6.12.A.5	Debate the use of performance-enhancing substances (i.e., anabolic steroids and other legal and illegal substances) to improve performance.	www.wada-ama.org/en/prohibitedtest.ch2 www.samhsa.gov

UNIT: <u>39</u>

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
 ✓ Injuries to the immature muscularskeletal system are likely to happen with activities such as falling, jumping, landing on straight legs, repeated hard throwing motions, running long distances, and lifting heavy weights ✓ Coaches of youth sport activities must be trained in the techniques and skills specific to the sport, safety and injury prevention, first aid, and growth and development ✓ Avoid injuries in young athletes through proper conditioning and supervision, proper matching, use of proper equipment, and enforcing appropriate rules of competition 	 ✓ Why are young athletes prone to injuries more than adult athletes? ✓ What types of injuries are likely to occur in younger athletes? How are they identifies and managed? ✓ What can parents and coaches do to help prevent or at least minimize injuries in the young athlete?

NJCCCS	KNOWLEDGE	SKILLS		
2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.	 Students will be able to: ✓ Discuss where, how, and to whom youth sports injuries are occurring in the USA ✓ Describe Tanner's Stages of Maturity and explain how this scale is applied to matching athletes ✓ Discuss recognition and management of the types of injuries that are likely to occur in the young athlete 		
		www.nyssf.org www.myteam.com www.aap.org www.naysi.com www.aahperd.org www.myteam.com www.kidshealh.org www.safekids.org www.nays.org		

Pacing Chart Units 1-39

Grade 12

September	American Red Cross First Aid/CPR/AED for Schools and Community	 American Red Cross Skills Checklist American Red Cross Written Exams 	 American Red Cross Participant's Manual, 3rd Edition American Red Cross DVD for Schools and Community
October	 Defining roles of the Sports Medicine Team Preventing Injuries through Fitness Training Sports Nutrition & Supplements Substance Abuse 	 Scenarios: Students will research an injury or condition. Act out and explain the symptoms to another student who will attempt to correctly assess and identify the condition or injury. Tests: Students are given the test for each topic covered at the completion of the unit. Oral Practical Exams: Students practice various taping, wrapping, and first aid procedures. They are tested by performing the procedure in front 	 Essentials of Athletic Injury Management, 8th Edition, by William E Prentice, Ph.D., A.T.C., P.T., F.N.A.T.A. Concepts of Athletic Training, by Pfeiffer & Mangus 101 Strategies for Building Your High School Sports Medicine Program, by Dale F. Blair, M.S, C.S.C.S, A.T.C. Fundamentals of Sports Injury Management, by Anderson and Hill Continued
November	 Handling Emergency Situations & Injury Assessment Blood borne pathogens, universal precautions & wound care Understanding the potential dangers of adverse environmental conditions 	of an examiner. Each procedure has a check off sheet used to evaluate the student. • Teaching a class: Students are assigned a topic and given the opportunity during class time to research that topic. They will develop and outline, handouts, and a test to present with their oral presentation. • Term papers: Students write a term paper on an assigned topic. They are to have at least 3 sources. Continued	

Pacing Chart Units 1-39 Grade 12

TIME FRAME	TOPIC	PERFORMANCE TASKS	RESOURCES/INTERDISCIPLINARY
		ACTIVITIES/PROJECTS	CONNECTIONS
		ASSESSMENTS	

December	 Selecting & Using protective equipment Bandaging & Taping Techniques Understanding the Basics of Injury Rehabilitation Helping the Injured Athlete psychologically 	 Current event articles: Students summarize an article from a magazine, newspaper or the internet. They can also be required to bring a copy of the article. Topics can be discussed during class. Pretest: Students are given daily quizzes on difficult material like anatomy. The quizzes may or may not count toward their grades, but will help students memorize information. Small group assignments: Students work together in small groups to solve problems, work on assignments, and compete in activities. 	 A Teacher's Curriculum Guide to Cramer Sports Medicine, by Lauer. VIDEOS: Athletic Taping and Wrapping—Crame Athletic Training Series (4 videos: back, knee, ankle, and shoulder)— Cramer Sprains & Strains—Tylenol
January	 Recognizing Different Sports Injuries The Foot The Ankle & Lower Leg 	 Art work: Students practice drawing the various joints of the body. Their work may or may not be graded. Portfolios: Students keep all their class work in a folder that stays in the classroom. The work is graded on given dates. The work is used to review for exams and creates a resource for future use. 	•Straight Talk About Anabolic Steroids- NFL/PFATS INTERNET SITES: •NATA.org
February	 The Knee & Related Structures The Thigh, Hip, Groin, and Pelvis 	• Internet Sites: Spend the class time in the computer room so students can use the internet to research their topics.	 NCAA.org NSCA-LIFT.org NCPPA.org NOCSAE.org MEDFACTS.com MSPWEB.com

Pacing Chart Units 1-39 Grade 12

TIME FRAME	TOPIC	PERFORMANCE TASKS	RESOURCES/INTERDISCIPLINARY
		ACTIVITIES/PROJECTS	CONNECTIONS

		ASSESSMENTS	
March	 The Shoulder Complex The Elbow, Forearm, Wrist, and Hand 	See above. Tasks are the same for all months, September through June.	See above. Resources are the same for October through June
April	 The Spine The Thorax and Abdomen		
May	 The Head, Face, Eyes, Ears, Nose, and Throat General Medical Conditions and Additional Health Concerns 		
June	 Organizing & Administering an Athletic Health Care Program Legal Liability Insurance Preventing & Managing Injuries in Youth Athletes 		