

Standards Correlations

Sports Medicine/Athletic Training II

(7662—36 weeks/280 hours and 8317—36 weeks/140 hours)

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Demonstrating Personal Qualities and Abilities			
Demonstrate creativity and innovation.	English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate critical thinking and problem solving.	English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1		

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
	Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3, 7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Demonstrating Interpersonal Skills			
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, VUS.1		
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

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Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1		
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrating Professional Competencies			
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6 History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4		
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1		

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Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8		
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10		
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

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	Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1		
Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1		
Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4, A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: 6.1, PH.1, PS.1		
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5		

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	History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Examining All Aspects of an Industry			
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16		
Examine aspects of management within an industry/organization.			
Examine aspects of financial responsibility within an industry/organization.			
Examine technical and production skills required of workers within an industry/organization.			
Examine principles of technology that underlie an industry/organization.			
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16		
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16		

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Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16		
Addressing Elements of Student Life			
Identify the purposes and goals of the student organization.			
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.			
Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.			
Identify Internet safety issues and procedures for complying with acceptable use standards.			
Exploring Work-based Learning			
Identify the types of work-based learning (WBL) opportunities.			

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Reflect on lessons learned during the WBL experience.			
Explore career opportunities related to the WBL experience.			
Participate in a WBL experience, when appropriate.			

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Understanding Exercise Physiology			
Identify the components of fitness.	English: 12.5	Sections 1, 2, 3, 4, & 6 <ul style="list-style-type: none"> • Review fitness assessment considerations. • Review concepts for program design. • Describe hydration concepts. • Identify fitness technologies and trends. • Describe behavior change strategies for client results. • Describe exam taking best practices and preparation. Section 3 Exercise Metabolism and Bioenergetics	Health Science Events <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology Health Professions Events Sports Medicine

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Describe the primary methods of how the body produces energy for exercise. • Differentiate between aerobic and anaerobic metabolism. • Distinguish which energy pathways predominate for various intensities and durations of exercise. • Understand the interaction of carbohydrates, fat, and protein as fuels for exercise. • State the differences in the energy use during steady state and exhaustive exercise. • Discriminate between the energy requirements of steady state versus intermittent exercise. • Describe basic training-induced adaptations in energy production. <p>Section 4 Fitness Assessment</p> <ul style="list-style-type: none"> • Explain the components of and rationale for an integrated fitness assessment. • Understand how to administer a health history 	

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		<p>questionnaire and then from that be able to stratify a client's overall risk for fitness assessment.</p> <ul style="list-style-type: none"> • Understand the importance of posture, how it relates to movement observation, and how to assess it. <p>Understand how to perform a comprehensive health-related fitness assessment, obtain subjective and objective information about clients, and how to use the information collected to help design an exercise program.</p>	
Explain the metabolic energy systems.	<p>English: 12.5</p> <p>Science: BIO.6</p>	<p>Section 3 The Cardiorespiratory System</p> <ul style="list-style-type: none"> • Describe the structure and function of the cardiovascular and respiratory systems. • Explain how each of these systems relates to human movement. • Describe how the cardiovascular and respiratory systems work in unison. • Explain the influence that dysfunctional breathing can 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>have on the human movement system.</p> <p>Section 3 Exercise Metabolism and Bioenergetics</p> <ul style="list-style-type: none"> • Describe the primary methods of how the body produces energy for exercise. • Differentiate between aerobic and anaerobic metabolism. • Distinguish which energy pathways predominate for various intensities and durations of exercise. • Understand the interaction of carbohydrates, fat, and protein as fuels for exercise. • State the differences in the energy use during steady state and exhaustive exercise. • Discriminate between the energy requirements of steady state versus intermittent exercise. • Describe basic training-induced adaptations in energy production. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>Section 5 Cardiorespiratory Fitness Training</p> <ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. • Describe the health-related benefits associated with cardiorespiratory fitness. • Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. • Describe how to design and implement cardiorespiratory training programs to a variety of clients using an individualized approach. <p>Instruct clients on how to perform safe and effective cardiorespiratory exercise.</p>	
Explain methods to analyze body composition.	English: 12.5, 12.8	Section 4 Fitness Assessment	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Explain the components of and rationale for an integrated fitness assessment. • Understand how to administer a health history questionnaire and then from that be able to stratify a client’s overall risk for fitness assessment. • Understand the importance of posture, how it relates to movement observation, and how to assess it. <p>Understand how to perform a comprehensive health-related fitness assessment, obtain subjective and objective information about clients, and how to use the information collected to help design an exercise program.</p>	<ul style="list-style-type: none"> • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine <p>Clinical Specialty</p>
Perform body composition analysis using a variety of methods, including anthropometric measurements.	English: 12.5	<p>Section 4 Fitness Assessment</p> <ul style="list-style-type: none"> • Explain the components of and rationale for an integrated fitness assessment. • Understand how to administer a health history questionnaire and then from that be able to stratify a 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>client’s overall risk for fitness assessment.</p> <ul style="list-style-type: none"> • Understand the importance of posture, how it relates to movement observation, and how to assess it. <p>Understand how to perform a comprehensive health-related fitness assessment, obtain subjective and objective information about clients, and how to use the information collected to help design an exercise program.</p>	
Assess vital signs.	English: 12.5	<p>Section 3 The Cardiorespiratory System</p> <ul style="list-style-type: none"> • Describe the structure and function of the cardiovascular and respiratory systems. • Explain how each of these systems relates to human movement. • Describe how the cardiovascular and respiratory systems work in unison. • Explain the influence that dysfunctional breathing can 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>have on the human movement system.</p> <p>Section 4 Fitness Assessment</p> <ul style="list-style-type: none"> • Explain the components of and rationale for an integrated fitness assessment. • Understand how to administer a health history questionnaire and then from that be able to stratify a client’s overall risk for fitness assessment. • Understand the importance of posture, how it relates to movement observation, and how to assess it. <p>Understand how to perform a comprehensive health-related fitness assessment, obtain subjective and objective information about clients, and how to use the information collected to help design an exercise program.</p>	
Differentiate between acute and chronic adaptations to exercise.	<p>English: 12.5</p> <p>History and Social Sciences: GOVT.1</p>		<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
<p>Explain the body's response to exercise throughout the lifespan.</p>	<p>English: 12.5</p>	<p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> • Describe the stages of the general adaptation syndrome. • Define and describe the principle of adaptation and specificity. • Define stability, muscular endurance, muscular hypertrophy, strength, and power. • List and define the various stages of strength and training systems. <p>Section 5 Cardiorespiratory Fitness Training</p> <ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. • Describe the health-related benefits associated with cardiorespiratory fitness. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. Describe how to design and implement cardiorespiratory training programs to a variety of clients using an individualized approach. <p>Instruct clients on how to perform safe and effective cardiorespiratory exercise.</p>	
Application of Biomechanical Principles			
Explain lever systems associated with the human body.	English: 12.5	<p>Section 5 Plyometric (Reactive) Training Concepts</p> <ul style="list-style-type: none"> Define plyometric (reactive) training and describe its uses. Discuss the importance of plyometric training. Design a plyometric training program for clients at various levels of fitness. Perform and instruct various plyometric training exercises. 	<p>Health Science Events</p> <ul style="list-style-type: none"> Medical Spelling Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> • Describe the stages of the general adaptation syndrome. • Define and describe the principle of adaptation and specificity. • Define stability, muscular endurance, muscular hypertrophy, strength, and power. • List and define the various stages of strength and training systems. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. • Design a progressive balance training program for clients in any level of training. • Understand and incorporate the principles of selected research outcomes when 	

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		<p>designing a balance training program.</p> <ul style="list-style-type: none"> • Perform, describe, and instruct various balance training exercises. <p>Section 3 Human Movement Science</p> <ul style="list-style-type: none"> • Explain the concept of functional multiplanar biomechanics including basic biomechanical terminology. • Describe how muscle actions and outside forces relate to human movement. • Explain the concepts of motor learning and motor control as they relate to exercise training. <p>Section 5 Cardiorespiratory Fitness Training</p> <ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. 	

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		<ul style="list-style-type: none"> • Describe the health-related benefits associated with cardiorespiratory fitness. • Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. • Describe how to design and implement cardiorespiratory training programs to a variety of clients using an individualized approach. • Instruct clients on how to perform safe and effective cardiorespiratory exercise. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Design a core training program for clients at any level of training. Perform, describe, and instruct various core training exercises.	
Demonstrate the principles associated with the planes and axes of human movement.	English: 12.5	Section 5 Plyometric (Reactive) Training Concepts <ul style="list-style-type: none"> Define plyometric (reactive) training and describe its uses. Discuss the importance of plyometric training. Design a plyometric training program for clients at various levels of fitness. Perform and instruct various plyometric training exercises. Section 5 Resistance Training Concepts <ul style="list-style-type: none"> Describe the stages of the general adaptation syndrome. Define and describe the principle of adaptation and specificity. Define stability, muscular endurance, muscular 	Health Science Events <ul style="list-style-type: none"> Medical Spelling Medical Terminology Health Professions Events Sports Medicine

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>hypertrophy, strength, and power.</p> <ul style="list-style-type: none"> List and define the various stages of strength and training systems. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> Define balance and describe its role in performance and injury risk. Discuss the importance of balance training. Design a progressive balance training program for clients in any level of training. Understand and incorporate the principles of selected research outcomes when designing a balance training program. Perform, describe, and instruct various balance training exercises. <p>Section 3 Human Movement Science</p> <ul style="list-style-type: none"> Explain the concept of functional multiplanar biomechanics including basic biomechanical terminology. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Describe how muscle actions and outside forces relate to human movement. • Explain the concepts of motor learning and motor control as they relate to exercise training. <p>Section 5 Cardiorespiratory Fitness Training</p> <ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. • Describe the health-related benefits associated with cardiorespiratory fitness. • Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. • Describe how to design and implement cardiorespiratory training programs to a variety 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>of clients using an individualized approach.</p> <ul style="list-style-type: none"> • Instruct clients on how to perform safe and effective cardiorespiratory exercise. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. <p>Perform, describe, and instruct various core training exercises.</p>	
<p>Explain how force, mass, and gravity relate to human body mechanics.</p>	<p>English: 12.3, 12.5</p> <p>History and Social Sciences: GOVT.1</p> <p>Science: PH.3</p>	<p>Section 3 Human Movement Science</p> <ul style="list-style-type: none"> • Explain the concept of functional multiplanar biomechanics including basic biomechanical terminology. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Describe how muscle actions and outside forces relate to human movement. <p>Explain the concepts of motor learning and motor control as they relate to exercise training.</p>	
Exploring Exercise Program Design			
Describe acute training variables and phases within exercise program design.	English: 12.5, 12.8	<p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> Describe the stages of the general adaptation syndrome. Define and describe the principle of adaptation and specificity. Define stability, muscular endurance, muscular hypertrophy, strength, and power. List and define the various stages of strength and training systems. <p>Sections 1 & 6 The Scientific Rationale for Integrated Thinking</p> <ul style="list-style-type: none"> Explain the history of the profession of personal training. 	<p>Health Professions Events</p> <p>Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Identify common characteristics of personal training clients. • Demonstrate an understanding of the principles of integrated exercise program design. • Describe the Optimum Performance Training (OPT) model. <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. <p>Design programs for each phase of training.</p>	
Explain health-related fitness factors.	English: 12.5	<p>Section 5 Plyometric (Reactive) Training Concepts</p> <ul style="list-style-type: none"> • Define plyometric (reactive) training and describe its uses. • Discuss the importance of plyometric training. 	<p>Health Professions Events</p> <p>Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Design a plyometric training program for clients at various levels of fitness. • Perform and instruct various plyometric training exercises. <p>Section 5 Speed, Agility, and Quickness Training</p> <ul style="list-style-type: none"> • Define and describe speed, agility, and quickness training and its purpose. • Discuss the importance of speed, agility, and quickness training for a variety of populations. • Design a speed, agility, and quickness training program for clients at any level of training. • Perform, describe, and instruct various speed, agility, and quickness training exercises. <p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> • Describe the stages of the general adaptation syndrome. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define and describe the principle of adaptation and specificity. • Define stability, muscular endurance, muscular hypertrophy, strength, and power. • List and define the various stages of strength and training systems. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. • Design a progressive balance training program for clients in any level of training. • Understand and incorporate the principles of selected research outcomes when designing a balance training program. • Perform, describe, and instruct various balance training exercises. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. • Design programs for each phase of training. <p>Section 5 Flexibility Training Concepts</p> <ul style="list-style-type: none"> • Explain the effects of muscle imbalances on the human movement system (kinetic chain). • Provide a scientific rationale for the use of an integrated flexibility training program. • Differentiate between the various types of flexibility techniques. • Perform and instruct appropriate flexibility techniques for given situations. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>Section 5 Cardiorespiratory Fitness Training</p> <ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. • Describe the health-related benefits associated with cardiorespiratory fitness. • Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. • Describe how to design and implement cardiorespiratory training programs to a variety of clients using an individualized approach. • Instruct clients on how to perform safe and effective cardiorespiratory exercise. <p>Section 5 Core Training Concepts</p>	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. Perform, describe, and instruct various core training exercises.	
Design programs for each phase of training.	English: 12.1, 12.5 History and Social Sciences: GOVT.1	Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. Design programs for each phase of training.	Health Professions Events Sports Medicine
Preventing Injuries			
Describe the relationship between preexisting conditions and injury prevention.	English: 12.5 History and Social Sciences: GOVT.1	Section 1 Chronic Health Conditions and Physical or Functional Limitations	Health Science Events <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology Health Professions Events

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define and describe the cause and symptoms of selected chronic health conditions. • Describe the characteristics of selected health and age-related physical and functional limitations to exercise. • Recognize how the conditions discussed in this chapter affect exercise training variables within the OPT model. • Recognize how acute and chronic responses to exercise vary in clients with chronic health conditions or physical or functional limitations compared with apparently healthy clients. • Describe how to modify program design for clients with chronic health and physical or functional limitations. <p>Section 3 Basic Exercise Science</p>	Sports Medicine

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define the components of the human movement system (kinetic chain). • Explain the basic structure and function of <ul style="list-style-type: none"> ○ the nervous system ○ the skeletal system ○ the muscular system ○ the endocrine system. • Describe how these systems respond and adapt to exercise. <p>Section 3 The Cardiorespiratory System</p> <ul style="list-style-type: none"> • Describe the structure and function of the cardiovascular and respiratory systems. • Explain how each of these systems relates to human movement. • Describe how the cardiovascular and respiratory systems work in unison. <p>Explain the influence that dysfunctional breathing can have on the human movement system.</p>	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Explain the criteria used to determine readiness to participate in physical activities.	English: 12.5	<p>Section 6 Fitness Assessment</p> <ul style="list-style-type: none"> • Explain the components of and rationale for an integrated fitness assessment. • Understand how to administer a health history questionnaire and then from that be able to stratify a client’s overall risk for fitness assessment. • Understand the importance of posture, how it relates to movement observation, and how to assess it. <p>Understand how to perform a comprehensive health-related fitness assessment, obtain subjective and objective information about clients, and how to use the information collected to help design an exercise program.</p>	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>
Perform a fitness assessment.	English: 12.5	<p>Sections 1,2,3,4,&6</p> <ul style="list-style-type: none"> • Review fitness assessment considerations. • Review concepts for program design. • Describe hydration concepts. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Identify fitness technologies and trends. • Describe behavior change strategies for client results. • Describe exam taking best practices and preparation. <p>Section 6 Fitness Assessment</p> <ul style="list-style-type: none"> • Explain the components of and rationale for an integrated fitness assessment. • Understand how to administer a health history questionnaire and then from that be able to stratify a client’s overall risk for fitness assessment. • Understand the importance of posture, how it relates to movement observation, and how to assess it. <p>Understand how to perform a comprehensive health-related fitness assessment, obtain subjective and objective information about clients, and how to use the information collected to help design an exercise program.</p>	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
<p>Demonstrate safe exercise progression for healthy individuals.</p>	<p>English: 12.5 History and Social Sciences: GOVT.16</p>	<p>Section 5 Plyometric (Reactive) Training Concepts</p> <ul style="list-style-type: none"> • Define plyometric (reactive) training and describe its uses. • Discuss the importance of plyometric training. • Design a plyometric training program for clients at various levels of fitness. • Perform and instruct various plyometric training exercises. <p>Section 5 Speed, Agility, and Quickness Training</p> <ul style="list-style-type: none"> • Define and describe speed, agility, and quickness training and its purpose. • Discuss the importance of speed, agility, and quickness training for a variety of populations. • Design a speed, agility, and quickness training program for clients at any level of training. • Perform, describe, and instruct various speed, 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>agility, and quickness training exercises.</p> <p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> • Describe the stages of the general adaptation syndrome. • Define and describe the principle of adaptation and specificity. • Define stability, muscular endurance, muscular hypertrophy, strength, and power. • List and define the various stages of strength and training systems. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. • Design a progressive balance training program for clients in any level of training. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Understand and incorporate the principles of selected research outcomes when designing a balance training program. • Perform, describe, and instruct various balance training exercises. <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. • Design programs for each phase of training. <p>Section 5 Flexibility Training Concepts</p> <ul style="list-style-type: none"> • Explain the effects of muscle imbalances on the human movement system (kinetic chain). 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Provide a scientific rationale for the use of an integrated flexibility training program. • Differentiate between the various types of flexibility techniques. • Perform and instruct appropriate flexibility techniques for given situations. <p>Section 5 Cardiorespiratory Fitness Training</p> <ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. • Describe the health-related benefits associated with cardiorespiratory fitness. • Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Describe how to design and implement cardiorespiratory training programs to a variety of clients using an individualized approach. Instruct clients on how to perform safe and effective cardiorespiratory exercise. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> Understand the importance of the core musculature. Differentiate between the stabilization system and the movement system. Discuss the importance of core training. Design a core training program for clients at any level of training. <p>Perform, describe, and instruct various core training exercises.</p>	
Explain safe training principles to include frequency, intensity, duration, and mode.	<p>English: 12.3, 12.5</p> <p>History and Social Sciences: GOVT.16</p>	<p>Section 5 & 6 Introduction to Exercise Modalities</p> <ul style="list-style-type: none"> Define and describe the safe and effective use of selected exercise training methods, 	<p>Health Science Events</p> <ul style="list-style-type: none"> Medical Spelling Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>including various forms of resistance and proprioceptive modalities.</p> <ul style="list-style-type: none"> • Describe how these exercise training modalities can safely and effectively be incorporated into a training program for a variety of clients. • Describe how these exercise training modalities can be systematically used within the Optimum Performance Training (OPT) Model. <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. • Design programs for each phase of training. <p>Section 5 Cardiorespiratory Fitness Training</p>	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define and describe the components associated with cardiorespiratory training. • Describe how various physiologic systems respond and adapt to cardiorespiratory training. • Describe the health-related benefits associated with cardiorespiratory fitness. • Describe current guidelines and recommendations for prescribing safe and effective cardiorespiratory exercise to apparently healthy individuals. • Describe how to design and implement cardiorespiratory training programs to a variety of clients using an individualized approach. <p>Instruct clients on how to perform safe and effective cardiorespiratory exercise.</p>	
Apply the principles of strength training to various case study scenarios.	English: 12.5	<p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> • Describe the stages of the general adaptation syndrome. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define and describe the principle of adaptation and specificity. • Define stability, muscular endurance, muscular hypertrophy, strength, and power. • List and define the various stages of strength and training systems. <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. <p>Design programs for each phase of training.</p>	
Explain safe techniques to enhance strength of major muscle groups.	<p>English: 12.5</p> <p>History and Social Sciences: GOVT.1</p>	<p>Section 5 Resistance Training Concepts</p> <ul style="list-style-type: none"> • Describe the stages of the general adaptation syndrome. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define and describe the principle of adaptation and specificity. • Define stability, muscular endurance, muscular hypertrophy, strength, and power. • List and define the various stages of strength and training systems. <p>Section 5&6 Introduction to Exercise Modalities</p> <ul style="list-style-type: none"> • Define and describe the safe and effective use of selected exercise training methods, including various forms of resistance and proprioceptive modalities. • Describe how these exercise training modalities can safely and effectively be incorporated into a training program for a variety of clients. • Describe how these exercise training modalities can be systematically used within 	<p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine <p>Teamwork Events</p> <p>Health Education</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>the Optimum Performance Training (OPT) Model.</p> <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> • Define and describe the acute training variables within the Optimum Performance Training (OPT) model. • Describe the phases within the OPT model. • Design programs for each phase of training. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		Perform, describe, and instruct various core training exercises.	
Demonstrate safe lifting and spotting techniques when performing strengthening activities.	History and Social Sciences: GOVT.16	<p>Section 5 Plyometric (Reactive) Training Concepts</p> <ul style="list-style-type: none"> • Define plyometric (reactive) training and describe its uses. • Discuss the importance of plyometric training. • Design a plyometric training program for clients at various levels of fitness. • Perform and instruct various plyometric training exercises. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. • Design a progressive balance training program for clients in any level of training. • Understand and incorporate the principles of selected research outcomes when designing a balance training program. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Perform, describe, and instruct various balance training exercises. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. <p>Perform, describe, and instruct various core training exercises.</p>	
Develop a safe strengthening program for healthy individuals.	<p>English: 12.1, 12.5</p> <p>History and Social Sciences: GOVT.1, GOVT.16</p>	<p>Sections 1, 2, 3, & 6</p> <ul style="list-style-type: none"> • Review fitness assessment considerations. • Review concepts for program design. • Describe hydration concepts. • Identify fitness technologies and trends. • Describe behavior change strategies for client results. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine <p>Teamwork Events</p> <p>Health Education</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Describe exam taking best practices and preparation. <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> Define and describe the acute training variables within the Optimum Performance Training (OPT) model. Describe the phases within the OPT model. <p>Design programs for each phase of training.</p>	
Explain the basic principles and importance of flexibility training.	English: 12.5	<p>Section 5 Flexibility Training Concepts</p> <ul style="list-style-type: none"> Explain the effects of muscle imbalances on the human movement system (kinetic chain). Provide a scientific rationale for the use of an integrated flexibility training program. Differentiate between the various types of flexibility techniques. 	<p>Health Science Events</p> <ul style="list-style-type: none"> Medical Spelling Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> Sports Medicine <p>Teamwork Events</p> <p>Health Education</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
<p>Explain safe techniques to enhance joint range of motion of major muscle groups.</p>	<p>English: 12.5 History and Social Sciences: GOVT.16</p>	<p>Perform and instruct appropriate flexibility techniques for given situations.</p> <p>Section 5 Flexibility Training Concepts</p> <ul style="list-style-type: none"> • Explain the effects of muscle imbalances on the human movement system (kinetic chain). • Provide a scientific rationale for the use of an integrated flexibility training program. • Differentiate between the various types of flexibility techniques. <p>Perform and instruct appropriate flexibility techniques for given situations.</p>	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine
<p>Develop a safe flexibility program for healthy individuals.</p>	<p>English: 12.1, 12.5 History and Social Sciences: GOVT.1, GOVT.16</p>	<p>Section 5 Flexibility Training Concepts</p> <ul style="list-style-type: none"> • Explain the effects of muscle imbalances on the human movement system (kinetic chain). • Provide a scientific rationale for the use of an integrated flexibility training program. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Differentiate between the various types of flexibility techniques. Perform and instruct appropriate flexibility techniques for given situations.	Teamwork Events Health Education
Explain the basic principles and importance of proprioception.	English: 12.5	Section 5 Introduction to Exercise Modalities <ul style="list-style-type: none"> Define and describe the safe and effective use of selected exercise training methods, including various forms of resistance and proprioceptive modalities. Describe how these exercise training modalities can safely and effectively be incorporated into a training program for a variety of clients. Describe how these exercise training modalities can be systematically used within the Optimum Performance Training (OPT) Model. Section 5 Balance Training Concepts	Health Science Events <ul style="list-style-type: none"> Medical Spelling Medical Terminology

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. • Design a progressive balance training program for clients in any level of training. • Understand and incorporate the principles of selected research outcomes when designing a balance training program. • Perform, describe, and instruct various balance training exercises. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
<p>Demonstrate safe techniques to enhance proprioception for self and others, explaining each technique.</p>	<p>History and Social Sciences: GOVT.16</p>	<p>Perform, describe, and instruct various core training exercises.</p> <p>Section 5 & 6 Introduction to Exercise Modalities</p> <ul style="list-style-type: none"> • Define and describe the safe and effective use of selected exercise training methods, including various forms of resistance and proprioceptive modalities. • Describe how these exercise training modalities can safely and effectively be incorporated into a training program for a variety of clients. • Describe how these exercise training modalities can be systematically used within the Optimum Performance Training (OPT) Model. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. 	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine <p>Teamwork Events</p> <p>Health Education</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Design a progressive balance training program for clients in any level of training. • Understand and incorporate the principles of selected research outcomes when designing a balance training program. • Perform, describe, and instruct various balance training exercises. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. <p>Perform, describe, and instruct various core training exercises.</p>	
Implement a safe proprioception program for healthy individuals, assessing for effectiveness over time.	<p>English: 12.1, 12.5</p> <p>History and Social Sciences: GOVT.1, GOVT.16</p>	Section 5 Introduction to Exercise Modalities	<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> • Define and describe the safe and effective use of selected exercise training methods, including various forms of resistance and proprioceptive modalities. • Describe how these exercise training modalities can safely and effectively be incorporated into a training program for a variety of clients. • Describe how these exercise training modalities can be systematically used within the Optimum Performance Training (OPT) Model. <p>Section 5 Balance Training Concepts</p> <ul style="list-style-type: none"> • Define balance and describe its role in performance and injury risk. • Discuss the importance of balance training. • Design a progressive balance training program for clients in any level of training. • Understand and incorporate the principles of selected research outcomes when 	<ul style="list-style-type: none"> • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine <p>Teamwork Events</p> <p>Health Education</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>designing a balance training program.</p> <ul style="list-style-type: none"> • Perform, describe, and instruct various balance training exercises. <p>Section 5 Core Training Concepts</p> <ul style="list-style-type: none"> • Understand the importance of the core musculature. • Differentiate between the stabilization system and the movement system. • Discuss the importance of core training. • Design a core training program for clients at any level of training. <p>Perform, describe, and instruct various core training exercises.</p>	
Identify environmental factors related to injury prevention.	English: 12.5		<p>Health Science Events</p> <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology <p>Health Professions Events</p> <ul style="list-style-type: none"> • Sports Medicine

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Demonstrate procedures for reporting potential environmental hazards to appropriate personnel.	English: 12.5		Health Science Events <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology Health Professions Events <ul style="list-style-type: none"> • Sports Medicine
Identify factors related to equipment safety.	English: 12.5, 12.8		Health Science Events <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology Health Professions Events <ul style="list-style-type: none"> • Sports Medicine
Demonstrate procedures for reporting potential equipment safety hazards to appropriate personnel.	English: 12.5		Health Science Events <ul style="list-style-type: none"> • Medical Spelling • Medical Terminology Health Professions Events <ul style="list-style-type: none"> • Sports Medicine

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Treating and Managing Injuries and Conditions			
Explain the purpose of goal setting in the treatment of injuries.	English: 12.5, 12.6, 12.7	Section 2 Lifestyle Modification and Behavioral Coaching <ul style="list-style-type: none"> • Describe the characteristics of a positive client experience. • Understand the stages of change model. • Describe characteristics of what effective communication skills are. Describe the elements of effective SMART goal-setting techniques.	Health Professions Events Sports Medicine
Manage an injury within the scope of first aid.			Health Professions Events Sports Medicine
Explain factors to consider in creating a progressive return-to-activity program following injury or illness.	English: 12.5	Section 1 Chronic Health Conditions and Physical or Functional Limitations <ul style="list-style-type: none"> • Define and describe the cause and symptoms of selected chronic health conditions. • Describe the characteristics of selected health and age-related physical and 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>functional limitations to exercise.</p> <ul style="list-style-type: none"> Recognize how the conditions discussed in this chapter affect exercise training variables within the OPT model. Recognize how acute and chronic responses to exercise vary in clients with chronic health conditions or physical or functional limitations compared with apparently healthy clients. Describe how to modify program design for clients with chronic health and physical or functional limitations. <p>Section 6 Integrated Program Design and the Optimum Performance Training (OPT) Model</p> <ul style="list-style-type: none"> Define and describe the acute training variables within the Optimum Performance Training (OPT) model. Describe the phases within the OPT model. 	

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Design programs for each phase of training. Section 2 Lifestyle Modification and Behavioral Coaching <ul style="list-style-type: none"> Describe the characteristics of a positive client experience. Understand the stages of change model. Describe characteristics of what effective communication skills are. Describe the elements of effective SMART goal-setting techniques.	
Identify appropriate referral sources based on the scope of practice of healthcare professionals.	English: 12.5		Health Professions Events Sports Medicine
Explain the theory and application of common therapeutic interventions to treat and manage injuries and conditions based on professional scope of practice.	English: 12.5		Health Professions Events Sports Medicine
Preparing for a Career			
Research sports medicine-related professions.	English: 12.5, 12.8 History and Social Sciences: GOVT.1	Section 1 Developing a Successful Personal Training Business <ul style="list-style-type: none"> Describe the qualities and characteristics of 	Health Professions Events <ul style="list-style-type: none"> Sports Medicine Leadership Events

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>uncompromising customer service.</p> <ul style="list-style-type: none"> • Describe strategies for finding an ideal workplace. • Understand the process for writing a resume. • Understand the four Ps of marketing. <p>Understand basic membership sales techniques, including strategies for solicitation of new sales and how to close sales.</p>	<ul style="list-style-type: none"> • Medical Photography <p>Teamwork Events</p> <p>Health Career Display</p>
Draft a résumé reflecting the student's career objective.	English: 12.5, 12.6, 12.7 History and Social Sciences: GOVT.1	<p>Section 1 Developing a Successful Personal Training Business</p> <ul style="list-style-type: none"> • Describe the qualities and characteristics of uncompromising customer service. • Describe strategies for finding an ideal workplace. • Understand the process for writing a resume. • Understand the four Ps of marketing. <p>Understand basic membership sales techniques, including strategies for</p>	<p>Leadership Events</p> <ul style="list-style-type: none"> • Interviewing Skills <p>Job-Seeking Skills</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		solicitation of new sales and how to close sales.	
Practice interviewing skills.	English: 12.1 History and Social Sciences: GOVT.1	Section 1 Developing a Successful Personal Training Business <ul style="list-style-type: none"> • Describe the qualities and characteristics of uncompromising customer service. • Describe strategies for finding an ideal workplace. • Understand the process for writing a resume. • Understand the four Ps of marketing. Understand basic membership sales techniques, including strategies for solicitation of new sales and how to close sales.	Leadership Events <ul style="list-style-type: none"> • Interviewing Skills Job-Seeking Skills
Explain the basic legalities related to employment hiring practices in the sports medicine field.	English: 12.5, 12.8 History and Social Sciences: GOVT.4, GOVT.9, GOVT.11, GOVT.15		Health Professions Events <ul style="list-style-type: none"> • Sports Medicine Teamwork Events Biomedical Debate
Explain the relationship between ethics and employment skills.	English: 12.5 History and Social Sciences: GOVT.1, GOVT.15, GOVT.16	Section 1 Developing a Successful Personal Training Business <ul style="list-style-type: none"> • Describe the qualities and characteristics of 	Leadership Events <ul style="list-style-type: none"> • Job-Seeking Skills Teamwork Events

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<p>uncompromising customer service.</p> <ul style="list-style-type: none"> • Describe strategies for finding an ideal workplace. • Understand the process for writing a resume. • Understand the four Ps of marketing. <p>Understand basic membership sales techniques, including strategies for solicitation of new sales and how to close sales.</p>	Biomedical Debate
Complete an internship in a sports medicine-related field.	<p>English: 12.1</p> <p>History and Social Sciences: GOVT.16</p>	<p>Section 1 Developing a Successful Personal Training Business</p> <ul style="list-style-type: none"> • Describe the qualities and characteristics of uncompromising customer service. • Describe strategies for finding an ideal workplace. • Understand the process for writing a resume. • Understand the four Ps of marketing. <p>Understand basic membership sales techniques, including strategies for</p>	<p>Health Professions Events</p> <p>Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Describe educational opportunities for advancement in sports medicine professions.	English: 12.5, 12.8	<p>solicitation of new sales and how to close sales.</p> <p>Section 1 Developing a Successful Personal Training Business</p> <ul style="list-style-type: none"> • Describe the qualities and characteristics of uncompromising customer service. • Describe strategies for finding an ideal workplace. • Understand the process for writing a resume. • Understand the four Ps of marketing. <p>Understand basic membership sales techniques, including strategies for solicitation of new sales and how to close sales.</p>	<p>Teamwork Events</p> <p>Health Career Display</p>
Describe the effect of technology in sports medicine.	English: 12.5, 12.8	<p>Section 1 Developing a Successful Personal Training Business</p> <ul style="list-style-type: none"> • Describe the qualities and characteristics of uncompromising customer service. • Describe strategies for finding an ideal workplace. 	<p>Health Profession Events</p> <p>Sports Medicine</p>

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
		<ul style="list-style-type: none"> Understand the process for writing a resume. Understand the four Ps of marketing. <p>Understand basic membership sales techniques, including strategies for solicitation of new sales and how to close sales.</p>	
Explain the NASM-PES and/or NASM-CPT credential.	English: 12.5, 12.8		Leadership Event Job Seeking Skills

Task	SOL Correlations	
Describing the Opioid Crisis		
Describe the history and current state of the opioid crisis in the United States.	English: 12.5	
Describe the history and current state of the opioid crisis in Virginia.	English: 12.5, 12.8	
Define the pharmacological components and common uses of opioids.	English: 12.3, 12.8	
Examining Key Factors of Drug Addiction		
Examine the science of addiction.	English: 12.5	
Explain prevention and early intervention strategies.	English: 12.5, 12.8	
Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	English: 12.5	
Describe the treatment models of addiction therapy.	English: 12.5	
Describe the medication management antidote used to prevent fatal opioid overdoses.	English: 12.5, 12.8	
Understanding Pain Management Protocols		

Task	SOL Correlations	NASM-Certified Personal Trainer Correlations	HOSA-Future Health Professionals Correlations
Explain the science of physiological and mental pain.	English: 12.3, 12.5		
Describe the diagnostic tools used in developing pain management plans.	English: 12.5		
Describe pain treatment options available to various populations of patients.	English: 12.5, 12.8		
Describe the effects of opioid dependency on the human body systems.	English: 12.5		
Explain the mechanism and physical effects of opioids on the human body.	English: 12.5		
Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.	English: 12.5		
Describe the withdrawal and tapering side effects of opioid use.	English: 12.5		
Describe storage and disposal options for opioids.	English: 12.5, 12.8		
Explain community resources for education about opioid use.	English: 12.5		
Working with Patients and Caregivers			
Describe key communication topics involving opioids for patients.	English: 12.5		
Describe communication topics for caregivers and family members.	English: 12.5		