Texas CTE: Health Science

Principles of Exercise Science and Wellness

The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to: EXSCIWL	**A** express ideas in a clear, concise, and effective manner; EXSCIWL
	B exhibit the ability to cooperate, contribute, and collaborate as a member of a team; and EXSCIWL
	C identify employer expectations such as punctuality, attendance, time management, communication, organizational skills, and productive work habits. EXSCIWL
The student applies mathematics, science, English language arts, and social studies in exercise and wellness science. The student is expected to: EXSCIWL	**A** calculate measurement conversions between systems including pounds to kilograms; EXSCIWL
	B apply data from tables, charts, and graphs to provide solutions to exercise or nutrition-related problems and to communicate results and progress to clients; EXSCIWL
	C describe the impact current media has on fitness and wellness such as body image, eating disorders, and exercise and fitness outcomes; EXSCIWL
	D construct reports and summaries for clients, documentation, and company records, such as SOAP (Subjective, Objective, Assessment, Plan) notes; EXSCIWL
	E develop presentations to promote health and fitness for multiple types of audiences and mediums; and EXSCIWL
	F compose responses using precise and clear language to communicate ideas based on audiences. EXSCIWL
The student assesses career options and the preparation necessary for employment in the exercise science industry. The student is expected to EXSCIWL	**A** research qualifications for different career options and employment in the exercise industry; EXSCIWL
	B identify opportunities in high school and post-secondary to obtain a certification in the exercise industry; and EXSCIWL
	C compare exercise related careers pertaining to planning, managing, and providing stress management, exercise physiology, fitness assessment services, and training. EXSCIWL

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The student assesses career options and the preparation necessary for employment in the wellness industry. The student is expected to EXSCIWL	**A** research qualifications for different career options and employment in the wellness industry; EXSCIWL
	B identify opportunities in high school and post-secondary to obtain a certification in the wellness industry; and EXSCIWL
	C compare wellness related careers pertaining to planning, managing, and providing stress management, nutrition and diet, health assessment services and training, and health promotion EXSCIWL
The student discusses the importance of maintaining a safe environment and eliminating hazardous situations. The student is expected to: EXSCIWL	**A** identify governing regulatory agencies such as the World Health Organization, the Centers for Disease Control and Prevention, Health Resources and Services Administration, Occupational Safety and Health Administration, U.S. Food and Drug Administration, Joint Commission, and National Institute of Health, American Red Cross, American Heart Association; EXSCIWL
	B identify potential malfunctions of equipment used in the exercise and wellness industry; and EXSCIWL
	C demonstrate immobilization of a limb for the purpose of first aid and injury prevention, including splints, slings, and wraps. EXSCIWL
The student applies proper biomechanics principles to the exercise and wellness industry. The student is expected to:	**A** identify proper body mechanics and movement during exercise and daily activity;
	B explain how forces affect movement, torque, tension, and elasticity on the human body;
	C describe general guidelines of protective equipment use and application in exercise and sport;
	D describe risk factors caused by improper use of biomechanics and equipment during exercise;
	E describe common factors of daily activity that cause biomechanical problems in the body; and
	F identify the effect biomechanics has on mental health.
The student discusses the importance of proper nutrition and diet when working in the exercise and wellness industry. The student is expected to:	**A** describe proper nutrition and diet needed for specific fitness and wellness goals;
	B explain the impact media has on nutrition and diet;
	C describe common dietary and nutrition-related problems such as eating disorders, type II diabetes, hypertension, heart disease, and obesity;
	D describe the effects that diet and nutrition have on mental health; and
	E examine risk factors that are associated with improper diet and nutrition.

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The student describes the importance of exercise and wellness through different periods of life. The student is expected to:	**A** describe specific exercise and wellness goals for the different periods of development, such as infant, adolescent, young adult, middle age, and elderly;
	B explain how the developmental stages are affected by improper exercise and wellness; and
	C identify the implications of improper exercise and wellness through the different developmental stages.
The student analyzes various recovery methods from traumatic events associated with exercise and wellness. The student is expected to:	**A** identify the seven rehabilitation principles, including avoid aggravation, timing, compliance, individualization, specific sequencing, intensity, and total patient;
	B evaluate a variety of traumatic events associated with exercise and wellness, including loss of a limb, break or sprain, and change in lifestyle or living situation;
	C compare recovery methods of a variety of traumatic events; and
	D develop a plan to promote recovery and long-term wellness.
The student evaluates different types of fitness and nutrition programs. The student is expected to:	**A** evaluate the different types of fitness and nutrition programs and their effectiveness for the specific goals;
	B compare and contrast competitive and noncompetitive fitness and nutrition programs; and
	C develop a fitness and nutrition program for a specific goal.
The student interprets ethical behavior standards and legal responsibilities. The student is expected to:	**A** discuss ethical behavior associated with confidentiality, including the consequences of a breach of confidentiality;
	B compare published professional codes of ethics and scope of practice for exercise and wellness professionals;
	C discuss ethical issues related to exercise and wellness, including implications of technological advances;
	D examine issues related to malpractice, negligence, and liability in health and wellness; and
	E interpret laws governing the exercise and wellness industry.