

TECHNICAL COMMITTEE REPORT FOR

PERSONAL TRAINER

STATE DIVISION OF PROFESSIONAL-TECHNICAL EDUCATION 2006

ACKNOWLEDGEMENTS

The Technical Committee process involves personnel from each industry who are selected by the Division with assistance from the State Council on Professional-Technical Education. People who are selected by the Division generally come from various industries and professions as needed to provide the necessary information about industry needs. These people serve with permission from their employers and give their time and energies to the project without cost. We are indebted greatly to these industry representatives and their employers for the resources so freely given to the pursuit of ensuring that Idaho students receive the most current training and education possible and that which is demanded by industry.

To this end, the Division recognizes the following people who served on the Personal Trainer Committee: Kelly Nelleson, Scott Marema, Sherry Moro, Jewels Carpenter, Kathleen Nelson, Jake Turner, Erica Chandler, and Louis Beech.

Your support and assistance was greatly appreciated. Your patience for enduring the educational process is also noted. The students and instructional staff will be much more able to accomplish their respective goals as a result of your contribution.

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Dan Petersen, PhD Director of Program Services

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PERSONAL TRAINER CURRICULUM COMMITTEE

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Personal Trainer Curriculum

Purpose Description

In July 2001, the American Council on Exercise® (ACE®) and CASTLE Worldwide, Inc. conducted a role delineation study to identify the primary tasks performed by personal trainers. The fundamental purpose of this study was to establish and validate appropriate content areas for a Personal Trainer Certification Examination. The result of this process includes this exam content outline, which sets forth the tasks, knowledge, and skills necessary for a personal trainer to perform job responsibilities at a minimum professional level. It is the position of ACE that the recommendations outlined here are not exhaustive to the qualifications of a personal trainer but represent a minimum level of proficiency and theoretical knowledge.

Please note that not all knowledge and skill statements listed in the exam content outline will be addressed on each exam administration. A certified Personal Trainer works in a health/fitness facility or in another appropriate setting administering individualized physical activity programs to asymptomatic individuals or those who have been cleared by a physician. A certified Personal Trainers will be competent to assess a client's health/medical/fitness status effectively; design safe and effective physical activity programs utilizing goal setting, exercise science principles, and safety guidelines; implement the exercise program safely and effectively; modify the program as necessary to achieve reasonable goals; and adhere to all codes, laws, and procedures applicable within the recognized scope of practice for personal trainers.

The ACE Personal Trainer Certification will be granted to those candidates who possess current healthcare provider CPR, are at least 18 years of age, and obtain the minimum passing score on an entry-level examination measuring ACE-identified competencies. This certification is appropriate for individuals working one-on-one, with small groups, or as floor staff, etc. The ACE certification will be valid for a two-year period, at which time it may be renewed. Requirements for renewal will be obtaining a pre-determined number of continuing education credits (CECs) and paying the applicable fee.

Instructor Qualifications. Instructors shall hold a Personal Trainer Certification and limited or standard Professional-Technical Education certificate.

Length of Program. This program is a minimum of 80 hours didactic and 40 hours of clinical under the supervision of a certified personal trainer or an appropriate health professional. Clinical experiences are part of the program. The Technical Committee recommends students have a variety of experiences in clinical settings for a minimum 40 hours.

Recommended Teacher Reference Textbooks.

Although a textbook is not required to successfully complete this course, the following reference texts are suggested:

ACE Personal Trainer Manual by Bryant, Cedric X., Green, Daniel J.(2003). Publishers: American Council on Exercise.

NSCA's Essentials of Personal Training by Earle, Roger W., Baechle, Thomas R. (2004). Publishers: National Strength & Conditioning.

Effective Strength Training by Brooks, Douglas.(2001). Published by Douglas Books.

ACSM Resource Manual for Guideline for exercise. Vol 30 pp. 975-91 (1998)American College of Sports Medicine.

Percentages indicate how much of the examination is devoted to each area. The number of questions on the exam is shown in parentheses. Please note that a basic knowledge of anatomy, exercise physiology, kinesiology, and nutrition is assumed for this examination.

I. Applied Sciences 15%

- A. Exercise Physiology
- B. Kinesiology and applied Biomechanics
- C. Anatomy
- D. Motor learning/control
- E. Nutrition and healthy abuse
- F. Substance use and abuse
- G. Weight Management
- H. Stress Management
- I. Basic Behavioral Sciences

II. Client Assessment 20%

- A. Obtain health/medical information
- B. Assess client expectations, preferences, motivation, and readiness biomechanics
- C. Obtain a detailed lifestyle and exercise history
- D. Motor learning/control
- E. Nutrition and healthy eating measures
- F. Substance use and abuse
- G. Weight management
- H. Stress management

III. Program Design 21%

- A. Interpret the results of client assessment
- B. Establish client-specific goals and 15% objective measures
- C. Determine appropriate fitness procedure
- D. Address health-risk factors

IV. Program Implementation and Adjustment 29%

- A. Teach safe and effective exercise technique
- B. Teach strategies that promote physical activity
- C. Make appropriate modifications
- D. Promote exercise adherence

V. Professional Role 15%

- A. Emergency policy; plan, and procedure
- B. Scope of practice
- C. Legal Responsibilities
- D. Ethical Responsibilities
- E. Documentation

DOMAIN I: APPLIED SCIENCES (15%)

Topic B: Exercise Physiology [Meets Science Standards—Nature of Science 9-10.B.1.1.1]

- 1. Cardiorespiratory physiology. (Exercise Physiology)
- 2. Metabolism. (Exercise Physiology)

- 3. Neuromuscular physiology. (Exercise Physiology)
- 4. Temperature regulation. (Exercise Physiology)
- 5. Endocrine/hormonal responses. (Exercise Physiology)

Topic C: Kinesiology and Applied Biomechanics

Knowledge of:

- 1. Musculoskeletal system. (Biomechanics and Applied Kinesiology)
- 2. Principles of biomechanics and physics. (Biomechanics and Applied Kinesiology)

Topic A: Anatomy

[Meets Science Standards—Nature of Science 9-10.B.1.1.1]

Knowledge of:

- 1. Muscular system. (Human Anatomy)
- 2. Skeletal system. (Human Anatomy)
- 3. Cardiovascular system. (Exercise Physiology & Human Anatomy)
- 4. Pulmonary system. (Human Anatomy)
- 5. Central nervous system. (Human Anatomy)
- 6. Neuromuscular system. (Human Anatomy)

Topic D: Motor Learning/Control

Knowledge of:

- 1. Stages of learning. (Basics of Behavior Change and Health Psychology)
- 2. Principles of control (e.g., speed, accuracy). (Basics of Behavior Change and Health Psychology)
- 3. Feedback content, type, and scheduling (results). (Basics of Behavior Change and Health Psychology)
- 4. Demonstration, instruction, and technique. (Basics of Behavior Change and Health Psychology)
- 5. Basic reflexes. (Basics of Behavior Change and Health Psychology)

Topic E: Nutrition and Healthy Eating [Meets Health Standards—Healthy Lifestyles 9-12.H.1.1.1]

Knowledge of:

- 1. Principles of nutrition (macro- and micronutrients). (Health Screening)
- 2. Public health guidelines for healthy eating. (Health Screening)
- 3. Supplements and vitamins. (Health Screening)

Topic F: Substance Use and Abuse [Meets Health Standards—Healthy Lifestyles 9-12.H.2.1.2]

- 1. Tobacco. (Health Screening)
- 2. Alcohol. (Health Screening)
- 3. Prescribed Medications (Health Screening)
- 4. Other drugs and ergogenic aids. (Health Screening & App. F)

Topic G: Weight Management [Meets Health Standards—Healthy Lifestyles 9-12.H.1.1.1]

Knowledge of:

- 1. NIH Guidelines on safe and effective weight loss methods. (Principles of Adherence and Motivation)
- 2. Body weight and body composition.(Testing and Evaluation & Principles of Adherence and Motivation)
- 3. Role of exercise and nutrition in weight management. (Principles of Adherence and Motivation)
- 4. Warning signs for disordered eating patterns and behaviors and appropriate referrals. (Principles of Adherence and Motivation)

Topic H: Stress Management [Meets Health Standards—Healthy Lifestyles 9-12.H.5.1.1]

Knowledge of:

- 1. Theories of stress responses. (Principles of Adherence and Motivation)
- 2. Techniques (e.g., relaxation, visualization, cognitive restructuring). (Principles of Adherence and Motivation)
- 3. Role of exercise and nutrition in stress management. (Principles of Adherence and Motivation)

Topic I: Basic Behavioral Sciences [Meets Health Standards—Healthy Lifestyles 9-12.H.1.1.1] [Meets Communication Standard 9-12.Spch.6.1.1]

Knowledge of:

- 1. Motivational theory. (Communication and Teachings Techniques)
- 2. Methods to enhance exercise adherence. (Communication and Teachings Techniques)
- 3. Principles of effective goal setting.(Communication and Teachings Techniques & Basics of Behavior Change and Health Psychology)
- 4. Principles of social learning theory (e.g., modeling and shaping behavior, role of the environment, reinforcement, social support, expectations, self-efficacy). (Musculoskeletal Injuries)
- 5. Counseling, coaching, and communication strategies. (Basics of Behavior Change and Health Psychology)

Skills in:

- 1. Identifying non-verbal behavior and cues in clients and trainers.
- 2. Processing and analyzing communication patterns in clients

DOMAIN II: CLIENT ASSESSMENT (20%)

Task A: Obtain health/medical information using questionnaires, interviews, and other available records in order to determine appropriateness for exercise, identify the need for medical clearance and other referrals, and aid program design.

Knowledge of:

- 1. Health conditions and risk factors that may interfere with the ability to safely participate in assessment (e.g., diabetes, cardiovascular disease, hyperlipidemia, orthopedic considerations, pregnancy). (Testing and Evaluation)
- 2. Accepted guidelines, their role in determining the need for referral, and their applications for test administration and participation in physical activity (e.g., American College of Sports Medicine [ACSM], American College of Obstetricians and Gynecologists [ACOG], American Heart Association [AHA]. (Testing and Evaluation & Principles of Adherence and Motivation)
- 3. Components of a health history form that adequately documents the client's health status (e.g., demographic information, health risk factors, medications, illness, surgery and injury history, family history). (Testing and Evaluation)
- 4. Cardiovascular and musculoskeletal risk factors and their significance to referral and the appropriate application of assessment tools. (Testing and Evaluation)
- 5. Recognition of, and appropriate precautions to take with, a client taking medications and other substances (e.g., beta blockers, diuretics, antihistamines, tranquilizers, alcohol, diet pills, cold medications, caffeine, nicotine, antihypertensives). (Testing and Evaluation & App. C)

Skill in:

- 1. Evaluating health appraisal instruments. (Testing and Evaluation)
- 2. Interpreting health risk appraisal results. (Testing and Evaluation)

Task B: Assess client expectations, preferences, motivation, and readiness using questionnaires and interviews in order to aid in establishing a safe and effective exercise program and to promote short and long-term adherence.

Knowledge of:

1. Methods to assess motivation, readiness, and expectations (e.g., standardized assessment instruments, interviews). (Communication and Teachings Techniques & Cardio Respiratory Fitness and Exercise)

Skill in:

1. Evaluating and selecting appropriate instruments for the assessment of motivation, readiness, and expectations. (Communication and Teachings Techniques)

Task C: Obtain a detailed lifestyle and exercise history using questionnaires and interviews in order to aid in establishing a safe and effective exercise program and to promote short- and long-term adherence.

- 1. Methods to collect information about present and former participation in exercise and physical activities. (Testing and Evaluation)
- 2. Methods to assess lifestyle health habits. (Testing and Evaluation)
- 3. The relationship of lifestyle to health. (Testing and Evaluation & Special Populations and Health Concerns)

Skill/Lab in:

- 1. Evaluating and selecting appropriate methods for the assessment of exercise history. (Testing and Evaluation & Cardio Respiratory Fitness and Exercise)
- 2. Evaluating and selecting appropriate instruments for the assessment of lifestyle. (Testing and Evaluation)

Task D: Conduct appropriate baseline measures (e.g., aerobic endurance, muscular strength and endurance, flexibility, and anthropometric assessments, heart rate, blood pressure) using information obtained from the client assessment and scientifically accepted measurement standards in order to aid in establishing a safe and effective exercise program and to track changes over time.

Knowledge of:

- 1. Established protocols to assess cardio respiratory endurance, muscular strength and endurance, flexibility, and body composition. (Cardio respiratory Fitness and Exercise)
- 2. Normal and abnormal physiological responses to cardio respiratory endurance tests and criteria for test termination. (Exercise Physiology & Cardio Respiratory Fitness and Exercise)
- 3. Established protocols for obtaining heart rate and blood pressure. (Cardio Respiratory Fitness and Exercise)
- 4. Accepted fitness test norms and health evaluation norms. (Cardio Respiratory Fitness and Exercise)
- 5. Test selection criteria. (Cardio Respiratory Fitness and Exercise)
- 6. Mathematical formulas related to fitness assessment. (Cardio Respiratory Fitness and Exercise 6)

Skill/Lab in:

- 1. Administering exercise tests. (Cardio Respiratory Fitness and Exercise)
- 2. Measuring resting and exercise heart rate and blood pressure. (Cardio Respiratory Fitness and Exercise)
- 3. Evaluating and selecting fitness test protocols. (Cardio Respiratory Fitness and Exercise)
- 4. Recognizing normal and abnormal responses during the administration of the cardio respiratory endurance test. (Exercise Physiology & Cardio Respiratory Fitness and Exercise)
- 5. Apply math as is pertains to fitness assessment. (Cardio Respiratory Fitness and Exercise)

DOMAIN III: PROGRAM DESIGN (21%)

Task A: Interpret the results of client assessment by analyzing data and responses in order to aid in the design of a safe and effective program.

Knowledge of:

- 1. Standardized norms for blood pressure, heart rate, cardio respiratory endurance, muscular strength and endurance, flexibility, anthropometrics, and rating of perceived exertion (RPE). (Cardio Respiratory Fitness and Exercise)
- 2. Health risk factors and ACSM risk stratification. (Testing and Evaluation)
- 3. Chronic and acute conditions (e.g., orthopedic concerns, disease, disability). (Testing and Evaluation & Principles of Adherence and Motivation)
- 4. Safe and effective rates of change in physical fitness and body weight. (Special Populations and Health Concerns & Testing and Evaluation & Principles of Adherence and Motivation)

Skill/Lab in:

1. Researching medications, their classifications, and potential effects. (Testing and Evaluation & App. E)

Task B: Establish client-specific goals and objective measures using assessment results and current standards in order to provide program direction and optimize program adherence.

Knowledge of:

- 1. Applied behavioral and exercise science (e.g., goal setting theory, metabolism, cardio respiratory response). (Communication and Teachings Techniques & Basics of Behavior Change and Health Psychology)
- 2. Safe and effective rates of change in physical fitness and body weight. (Special Populations and Health Concerns & Testing and Evaluation & Principles of Adherence and Motivation)
- 3. Current standards and guidelines (e.g., ACSM, ACOG, AHA). (Testing and Evaluation & Principles of Adherence and Motivation)
- 4. Client's exercise history and its effect on current goals. (Basics of Behavior Change and Health Psychology)

Skill/Lab in:

- 1. Setting appropriate goals and timeframes. (Communication and Teachings Techniques & Basics of Behavior Change and Health Psychology)
- 2. Using assessment and evaluation results for goal setting and reinforcement. (Communication and Teachings Techniques & Basics of Behavior Change and Health Psychology)

Task C: Determine appropriate parameters (e.g., frequency, intensity, duration, and type) for cardio respiratory, muscular strength and endurance, and flexibility exercises and other physical activities using current standards and practices in order to develop a safe and effective exercise program.

- 1. Cardio respiratory, musculoskeletal, and basic neuromuscular anatomy. (Human Anatomy)
- 2. Basic exercise science (e.g., cardio respiratory, metabolic and neuromuscular exercise physiology, applied kinesiology, and biomechanics). , American Dietetic Association (ADA) (Exercise Physiology) Diabetes Association (ADA), AHA)]
- 3. Basic principles of psychology with respect to exercise motivation, adherence, and behavior modification.

- 4. Energy systems (e.g., aerobic, anaerobid and the relationship of these to training techniques. (Exercise Physiology)
- 5. The integration of the components of fitness (cardio Respiratory endurance, muscular strength and endurance, and flexibility) into a comprehensive physical activity program. (Muscular Strength and Endurance; Strength Training Program Design; Flexibility & Programming for the Healthy Adult)
- 6. Principles of body weight regulation and body composition as they relate to exercise selection. (Principles of Adherence and Motivation)
- 7. Motor learning as it applies to skill concepts acquisition (e.g., stages of learning, feedback, demonstration, mental practice). (Basics of Behavior Change and Health Psychology)
- 8. Biomechanical principles as they apply to exercise technique. (Biomechanics and Applied Kinesiology)
- 9. Physical activity programming and potential adaptations for populations with special needs that have been cleared by their physician to take part in a program of regular physical activity (e.g., aging, obesity, cardiovascular disease, arthritis, orthopedic disorders, pregnancy, youth, athletes, diabetes, and osteoporosis). (Principles of Adherence and Motivation)
- 10. Environmental conditions (e.g., heat, cold, altitude, air quality, humidity) and their impact on exercise parameters. (Muscular Strength and Endurance)
- 11. The characteristics and application of isometric, isotonic, and isokinetic exercise. (Strength Training Program Design)
- 12. Modification of an exercise program with respect to a client's injury history and injury risk. (Principles of Adherence and Motivation)
- 13. Applicable standards, guidelines, and position statements published by accepted organizations [e.g., ACSM, endurance, muscular strength and ACOG, National Heart, Lung, Blood Institute (NHLBI), American Dietetic Association (ADA), American Diabetes Association (ADA), American Heart Association (AHA)] to use in the formulation of recommendations. Health Screening; Testing and Evaluation &Principles of Adherence and Motivation)
- 14. Effectiveness and integration of complementary physical activity (e.g., hatha yoga, tai-chi, Pilates, Feldenkrais) (App.D)
- 15. Safety considerations as they apply to program design. (Muscular Strength and Endurance & Strength Training Program Design)
- 16. Techniques of cardio respiratory conditioning (e.g., interval, fartlek, endurance). (Muscular Strength and Endurance)
- 17. Principles of muscular strength and endurance (e.g., sets and reps, load, order, rest periods). (Strength Training Program Design)
- 18. Muscular training techniques and concepts (e.g., strength, power, hypertrophy, periodization, plymetrics, endurance). (Strength Training Program Design & Flexibility)
- 19. Principles and techniques for flexibility (e.g., proprioceptive neuromuscular facilitation, active-isolated, dynamic, static). (Programming for the Healthy Adult)
- 20. Establishing cardio Respiratory parameters (e.g., frequency, intensity, duration, type, and progression). (Muscular Strength and Endurance)

- 21. Methods for establishing intensity for cardio respiratory conditioning (e.g., frequency, intensity, duration, type, and progression). (Muscular Strength and Endurance)
- 22. Energy cost of exercise (e.g., calorie cost). (Muscular Strength and Endurance)

Skill/Lab in:

- 1. Calculating target heart-rate zone (THRZ) using heart-rate reserve (HRR) and age-predicted formulas. (Muscular Strength and Endurance)
- 2. Explaining and applying RPE scale. (Muscular Strength and Endurance)
- 3. Selecting, integrating, and modifying methods for cardio respiratory endurance, muscular strength and endurance, and flexibility conditioning based on client's needs. (Muscular Strength and Endurance; Strength Training Program Design; Flexibility & Programming for the Healthy Adult)
- 4. Designing a safe, well-balanced comprehensive physical activity program specific to the client's status, special needs, desires, and goals. (Special Populations and Health Concerns)
- 5. Determining energy cost of exercise for different populations. (Muscular Strength and Endurance)
- 6. Determining intensity for cardio respiratory conditioning and appropriate workload for resistance exercise. (Muscular Strength and Endurance; Muscular Strength and Endurance; Strength Training Program Design & Flexibility)

Task D: Address health-risk factors through education, follow up, and referral to qualified resources, as appropriate (e.g., smoking cessation, stress management, weight loss), based on assessment results and goals in order to develop a comprehensive approach and optimize the program.

Knowledge of:

- 1. Qualified health/medical professionals to use as appropriate referral sources (e.g., physicians, mental health professionals, registered dietitians, physical therapists, athletic trainers, clinical exercise physiologists). (Health Screening; Testing and Evaluation; Principles of Adherence and Motivation & Legal Guidelines and Professional Responsibilities)
- 2. Methods and appropriate time frames for follow-up (e.g., interview, phone call, questioning). (Musculoskeletal Injuries)

Skill in:

- 1. Selecting and integrating appropriate educational resources for use in client instruction. (Musuloskeletal Injuries)
- 2. Computer Research

DOMAIN IV: PROGRAM IMPLEMENTATION AND ADJUSTMENT (29%)

Knowledge of:

- 1. Exercise equipment operation (e.g., set-up, use, maintenance, and safety). (Muscular Strength and Endurance)
- Exercise concepts, principles, and techniques related to muscular strength and endurance training, cardio respiratory training, and flexibility training (e.g., overload, specificity, reversibility, progression, frequency, training effect). (Muscular Strength and Endurance; Strength Training Program Design; Flexibility; Programming for the Healthy Adult)
- 3. Proper spotting technique for various activities and equipment (e.g., free weights, selectorized resistance machines, calisthenics). (Biomechanics and Applied Kinesiology; Strength Training Program Design & Flexibility)
- 4. Basic instruction and feedback for various activities (e.g., walking, jogging). (Muscular Strength and Endurance)
- 5. Appropriate exercise equipment selection. (Muscular Strength and Endurance & Special Populations and Health Concerns)
- 6. Methods to adjust exercise intensity. (Muscular Strength and Endurance)
- 7. Exercise progression and modification required for various situations (e.g., plateaus, changes in intensity, compensation for injury or newly diagnosed conditions with physician approval to exercise). (Muscular Strength and Endurance; Strength Training Program Design; Flexibility & Special Populations and Health Concerns)

Skill in:

- 1. Identify postural abnormalities and apply proper technique. (Biomechanics and Applied Kinesiology)
- 2. Using of a variety of exercise equipment correctly. (Muscular Strength and Endurance & Special Populations and Health Concerns)
- 3. Demonstrating safe and effective exercise technique. (Biomechanics and Applied Kinesiology, Muscular Strength and Endurance & Flexibility)
- 4. Assessing the client's understanding of safe and effective exercise Technique. (Biomechanics and Applied Kinesiology, Muscular Strength and Endurance & Flexibility)
- 5.
- 6. Individualizing programs. (Special Populations and Health Concerns & Principles of Adherence and Motivation)
- 7. Identifying unsafe and/or ineffective exercise techniques and facilitating use of proper technique. (Biomechanics and Applied Kinesiology, Strength Training Program Design & Flexibility)
- 8. Applying proper spotting technique. (Biomechanics and Applied Kinesiology, Strength Training Program Design & Flexibility)
- 9. Modifying intensity for cardio respiratory conditioning and appropriate workload for resistance exercise. (Muscular Strength and Endurance, Strength Training Program Design, Flexibility & Special Populations and Health Concerns)

Task B: Teach strategies that promote physical activity using a variety of methods and resources in order to attain desired results.

Knowledge of:

- 1. Public health recommendations on physical activity (e.g., health benefits of short bouts of activity, health benefits of moderate-intensity physical activity) and how to integrate activity into daily routines. (Exercise Physiology & Special Populations and Health Concerns)
- 2. How exercise prescription relates to health and fitness. (Special Populations and Health Concerns)

Skill/Lab in:

- 1. Monitoring and increasing physical activity to improve lifestyle. (Special Populations and Health Concerns)
- 2. Demonstrate proficiency in developing a program utilizing limited or no equipment. (Special Populations and Health Concerns)

Task C: Make appropriate modifications by monitoring the client's progress through ongoing assessment and evaluation in order to support achievement of program goals.

Knowledge of:

- 1. How to determine appropriate intervals for reassessment. (Communication and Teachings Techniques)
- 2. Use of quantitative (i.e., objective) data (e.g., frequency, intensity, duration) to guide program implementation and modification. (Communication and Teachings Techniques)
- 3. Use of qualitative (i.e., subjective) data (e.g., mood, well-being, quality of life) to guide program modification. (Communication and Teachings Techniques)
- 4. How changes in health status may require modification of a program. (Communication and Teachings Techniques)

Skill in:

- 1. Eliciting open and honest feedback from clients. (Communication and Teachings Techniques)
- 2. Selecting optimal methods for self monitoring. (Communication and Teachings Techniques)
- 3. Problem solving. (Musculoskeletal Injuries)
- 4. Recognizing the need for program adjustments. (Muscular Strength and Endurance, Strength Training Program Design, Flexibility & Special Populations and Health Concerns)

Task D: Promote exercise adherence by applying the principles of motivational theory in order to maintain interest in physical activity and achievement of program goals.

- 1. Motivation theory as applied to exercise adoption and adherence. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 2. Factors that facilitate short- and long-term adherence. (Communication and Teachings Techniques & Musculoskeletal injuries)
- 3. How readiness and timing impact exercise adherence. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 4. Goal-setting theory. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 5. Effective problem-solving strategies. (Communication and Teachings Techniques & Musculoskeletal Injuries)

- 6. Methods to enhance exercise self-efficacy. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 7. Effective counseling and coaching strategies. (Basics of Behavior Change and Health Psychology)
- 8. Methods to enhance communication. (Basics of Behavior Change and Health Psychology)

Skill in:

- 1. Identifying the client's readiness to change behaviors. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 2. Selecting and applying individual components of motivation theory to exercise adoption and adherence. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 3. Identifying barriers to exercise adherence. (Communication and Teachings Techniques)
- 4. Generating strategies to overcome barriers to exercise. (Communication and Teachings Techniques)
- 5. Teaching clients effective problem solving strategies. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 6. Examining the ongoing appropriateness of established goals and modifying as necessary. (Communication and Teachings Techniques & Musculoskeletal Injuries)
- 7. Communicating appropriate messages effectively. (Basics of Behavior Change and Health Psychology)
- 8. Providing encouragement, support, and reinforcement through coaching techniques. (Basics of Behavior Change and Health Psychology)

DOMAIN V: PROFESSIONAL ROLE (15%) Topic A: Emergency Policy, Plan, and Procedure

Knowledge of:

- 1. Accepted healthcare provider CPR procedures as established by the AHA, American Red Cross (ARC), and other appropriate organizations. (Legal Guidelines and Professional Responsibilities & App. C)
- 2. Accepted first aid procedures as established by the AHA and ARC. (Legal Guidelines and Professional Responsibilities)
- 3. Emergency medical system activation.(Legal Guidelines and Professional Responsibilities & App. C)
- 4. Accepted first aid principles (e.g., RICE). (Emergency Procedures)
- 5. Components of an emergency action plan and its application. (Legal Guidelines and Professional Responsibilities)
- 6. Warning signs that require intervention (e.g., shortness of breath, dizziness, complaints of pain). (Legal Guidelines and Professional Responsibilities)
- 7. Scope of practice with respect to advice given to injured client. (Chap. 18)
- 8. OSHA guidelines (e.g., blood-bornepathogen rule). (Chap. 18)
- 9. Risk management. (Chap. 18)

Topic B: Scope of Practice

Knowledge of:

- 1. The characteristics and/or qualities of potential (current) clients recognized as the target audience. (Chap. 18 & App. A)
- 2. The characteristics and/or qualities of potential (current) clients recognized as outside the target audience. (Chap. 18 & App. A)
- 3. The recognized scope of practice and personal bounds of competence (e.g., education, training, experience, knowledge and skill). (Chap. 18 & App. A)
- 4. Collaboration with and contribution of other health and fitness professions to the personal training client. (Chap. 18 & App. A)

Topic C: Legal Responsibilities

- 1. Negligence laws, both comparative and contributory, as they pertain to personal training. (Chap. 18)
- Intellectual property laws as they apply to music, video, written materials, Internet, and trademark use. (Chap. 18)
- 3. Currently accepted standards of care for personal training. (Chap. 18)
- 4. Selection and use of informed consent, waivers, and other such documents. (Chap. 18)
- 5. Limitations of waivers and informed consent. (Chap. 18)

Characteristics, types of coverage, and appropriate units for professional and general liability insurance. (Chap. 18)

Topic D: Ethical Responsibilities

Knowledge of: 1. ACE Code of Ethics. (App. A)

Topic E: Documentation

- 1. Laws and governmental regulations regarding reporting and confidentiality. (Emergency Procedures)
- 2. Acceptable practices and procedures for acquiring, recording, and securing all client information to ensure confidentiality. (Emergency Procedures)