



12800 Industrial Park Blvd., Suite 220
Minneapolis, MN 55441
763-545-2505
800-237-6242
fax: 763-545-2524
www.NETAfit.org

Dear Personal Trainer Certification Candidate,

NETA's Personal Trainer Certification is accredited by the National Commission for Certifying Agencies (NCCA). NETA received NCCA accreditation of its Personal Trainer certification by submitting an application demonstrating the program's compliance with the NCCA's *Standards for the Accreditation of Certification Programs*. NCCA is the accrediting body of the Institute for Credentialing Excellence. Since 1977, the NCCA has been accrediting certifying programs based on the highest quality standards in professional certification to ensure the programs adhere to modern standards of practice in the certification industry. The process of earning accreditation is extensive, including the input of many subject matter experts (SMEs) to conduct a practice analysis of the personal trainer's role and responsibilities and to develop the certification exam.

NETA's *The Fitness Professional's Manual*, 5th edition (2018) is an excellent resource to help prepare for the exam. In addition to studying the Manual, NETA also recommends completion of *The Fitness Professional's Workbook for Personal Trainers*, which includes a 50-question Personal Trainer Practice Exam. A series of six online *Personal Trainer Review Modules* may also be purchased to supplement your exam preparations. Visit our website for more information about these recommended study resources. NETA also offers live review workshops, both in-person and virtual, intended to serve as a final review of key topics in preparation for the certification exam.

To successfully prepare for the exam, NETA recommends that candidates devote an appropriate amount of time (e.g., at least 30-45 days) and effort toward self-directed study prior to attending a review workshop or attempting the examination. Self-study time may vary depending on the individual's existing knowledge, the quality of time devoted to study, and the rate at which candidates comprehend the information. Sample 30- and 45-day preparation schedule are provided on page 4. **Please Note:** NETA's study materials and/or educational services are *not* required to be eligible to sit for the NETA Personal Trainer certification exam. The use of NETA study materials and/or attendance at a live NETA certification review workshop does *not* guarantee a candidate will pass the exam.

In addition, candidates should also review NETA's Personal Trainer exam content outline. This document serves as the foundation from which the certification exam was constructed. This document is available in the [Exam Candidate Handbook](#) located on NETA's website, and is also provided on pages 6-13 of this study guide. Take some time to familiarize yourself with the exam content outline. Your preparation for the exam should be focused accordingly.

If you have any questions, please feel free to contact us at 1-800-237-6242 or refer to Frequently Asked Questions at www.netafit.org.

Good luck with your preparations for NETA's NCCA-accredited Personal Trainer certification exam!

Sincerely,

NETA's Education Department

February 1, 2023

NETA Personal Trainer Certification

Study Guide for:

The Fitness Professionals Manual, 5th edition (2018)

Chapter 1 – The Role of the Fitness Professional

What you should know:

- ☐ The role of a personal trainer
- ☐ Ideal qualities and characteristics
- ☐ Ethical and professional standards
- ☐ NETA's Professional Code of Ethics
- ☐ Continuing education and credible sources of information

Chapter 2 – Relationship-Building & Communication Skills

What you should know:

- ☐ Strategies to establish rapport
- ☐ How to make a positive first impression
- ☐ The impact of a message
- ☐ Active, verbal, and nonverbal listening skills
- ☐ Asking effective questions (e.g., open, closed)
- ☐ Types of reflective statements

Chapter 3 – Behavior Modification & Motivation

What you should know:

- ☐ Stages of the transtheoretical model
- ☐ The concept of decisional balance
- ☐ Factors that influence self-efficacy
- ☐ Other models of behavioral change
- ☐ Approaches to setting SMART goals
- ☐ Action- versus outcome-oriented goals
- ☐ Strategies to increase motivation and adherence

Chapter 4 – Introduction to Wellness Coaching

What you should know:

- ☐ Motivational interviewing (MI) including the spirit, process, guiding principles and core communication skills of MI
- ☐ Rating rulers

Chapter 5 – Human Anatomy

What you should know:

- ☐ Anatomical location terminology
- ☐ Planes of anatomical movement
- ☐ Functions of the skeletal system
- ☐ Major bones of the skeleton and vertebral column
- ☐ Types of articulations/joints
- ☐ Types of muscle tissue
- ☐ Structure of skeletal muscle
- ☐ The sliding filament theory
- ☐ Major skeletal muscles throughout the body
- ☐ Type of muscle actions and muscle functions

Chapter 6 – Applied Kinesiology & Biomechanics

What you should know:

- ☐ Movement terminology
- ☐ Joint actions throughout the body and the corresponding muscles
- ☐ Newton's three laws of motion
- ☐ Biomechanics of torque
- ☐ Types of lever systems
- ☐ Principles of applied biomechanics

Chapter 7 – Exercise Physiology

What you should know:

- ☐ Components of the cardiorespiratory system
- ☐ Pathway of blood flow through the body/heart
- ☐ Cardiorespiratory variables, the acute responses during exercise, and long-term adaptations to training
- ☐ Variables related to oxygen consumption
- ☐ The three energy systems and their contributions during exercise
- ☐ Anaerobic threshold
- ☐ Characteristics of skeletal muscle fiber types
- ☐ Neuromuscular system and the motor unit

Chapter 8 – Essential Nutrients for Health & Performance

What you should know:

- ☐ Structure, function and food sources of carbohydrates, protein, and fat
- ☐ Understand calories and kilocalories
- ☐ Function and food sources of essential vitamins and minerals
- ☐ Understanding of Dietary Reference Intakes (DRIs) the concept of Recommended Dietary Allowances (RDAs), and Acceptable Macronutrient Distribution Ranges (AMDR)
- ☐ Function of water and fluid intake recommendations

Chapter 9 – Dietary Guidelines

What you should know:

- ☐ The concepts of eating pattern and nutrient-dense food
- ☐ The Dietary Guidelines for Americans 2015-2020
- ☐ Key recommendations of the Guidelines
- ☐ Principles of healthy eating patterns
- ☐ Key messages of the MyPlate graphic
- ☐ Interpretation of a Nutrition Facts label
- ☐ How to calculate percent of calories derived from each macronutrient in a food

Chapter 10 – Weight Management

What you should know:

- ☐ Metabolism and energy balance
- ☐ Guidelines for safe weight loss
- ☐ Findings of the National Weight Control Registry
- ☐ How to calculate goal body weight

Chapter 12 – Initial Intake & Pre-Participation Screening

What you should know:

- ☐ Components of the Informed Consent document
- ☐ Physical Activity Readiness Questionnaire (PAR-Q)
- ☐ Elements of a Health & Lifestyle Questionnaire
- ☐ ACSM preparticipation health screening recommendations and algorithm (i.e., logic model)
- ☐ Indications for medical clearance
- ☐ Risk factors for cardiovascular disease (CVD)

Chapter 13 – Health Screening Assessments

What you should know:

- ☐ Normal resting heart rate range
- ☐ Procedures for measuring resting blood pressure
- ☐ Classifications of resting blood pressure
- ☐ Interpretation of body mass index (BMI)
- ☐ Standardized circumference measurements
- ☐ Interpretation of waist-to-hip ratio (WHR)

Chapter 14 – Postural Analysis

What you should know:

- ☐ Postural alignment and the kinetic chain
- ☐ Factors that affect pelvic alignment
- ☐ Characteristics of various spinal misalignments
- ☐ Assessment and interpretation of static posture
- ☐ Assessment and interpretation of dynamic posture
- ☐ Characteristics of upper and lower cross syndrome

Chapter 15 – Health-Related Physical Fitness Assessments

What you should know:

- ☐ Appropriate sequence of fitness testing
- ☐ Standardized procedures for skinfold testing and location of skinfold sites
- ☐ Assessment and interpretation of field tests to measure cardiorespiratory endurance, muscular endurance, and flexibility
- ☐ Normal ranges of fitness for cardiorespiratory endurance, muscular endurance, and flexibility

Chapter 16 – Physical Activity & Health

What you should know:

- ☐ Health benefits of regular physical activity
- ☐ Key recommendations of the 2008 Physical Activity Guidelines for Americans
- ☐ METs and classification of physical activity intensity
- ☐ Definitions of the five components of health-related physical fitness
- ☐ Principles of training and their application to exercise programs

Chapter 17 – Cardiorespiratory Fitness Programming

What you should know:

- ☐ Elements of a cardiorespiratory exercise session
- ☐ Objectives and effects of the warm-up
- ☐ Objectives and effects of the cool-down
- ☐ Guidelines for cardiorespiratory exercise and FITT
- ☐ How to calculate target heart rate using the maximum heart rate method and the Karvonen formula
- ☐ Rating of perceived exertion (RPE)
- ☐ Basic types of cardiorespiratory exercise workouts

Chapter 18 – Programming for Muscular Fitness

What you should know:

- ☐ Benefits of resistance training
- ☐ Types of resistance training exercises
- ☐ Closed-chain versus open-chain exercises
- ☐ General adaptation syndrome
- ☐ Signs and symptoms of overtraining

Chapter 18 – Programming for Muscular Fitness (continued)

- ☐ Guidelines for resistance training programs
- ☐ Resistance training program models
- ☐ Concept and application of periodization
- ☐ Exercise-specific procedures for the execution of various resistance training exercises
- ☐ Identify joint actions and primary muscles during various resistance training exercises

Chapter 19 – Flexibility Programming

What you should know:

- ☐ Understand the sensory receptors and their function in the effect of flexibility training
- ☐ Types of stretching exercises and self-myofascial release
- ☐ Proposed benefits of stretching
- ☐ Guidelines for flexibility training
- ☐ Recommended static stretches for major muscle groups throughout the body

Chapter 24 – Injury Management & Emergency Response

What you should know:

- ☐ Basic etiology, considerations, and precautions related to common exercise-related injuries
- ☐ Immediate care for exercise-related injuries (e.g., PRICE)
- ☐ Strategies to prevent common-exercise related injuries
- ☐ Signs and symptoms of heat-related disorders.
- ☐ Strategies to reduce the risk of heat-related disorders
- ☐ Signs and symptoms of cardiovascular emergencies (e.g., heart attack, stroke)
- ☐ Emergency response procedures

Chapter 25 – Medical Conditions & Special Populations

What you should know:

- ☐ Exercise precautions and recommendations related to common medical conditions including asthma, arthritis, diabetes, hypertension, and osteoporosis.
- ☐ Exercise considerations, precautions and recommendations for special populations including pregnancy, older adults, and youth/adolescents

Chapter 26 – Risk Management for Fitness Professionals

What you should know:


- ☐ Legal concepts such as standard of care and negligence
- ☐ Common liability exposures for fitness professionals
- ☐ Scope of practice limitations with regard to medical considerations and dietetics
- ☐ Risk management strategies for fitness professionals
- ☐ Importance of professional liability insurance

Chapter 27 – Documentation & Record Keeping


What you should know:

- ☐ The importance of confidentiality of client's personal information
- ☐ Purpose of a waiver and release of liability form
- ☐ Documentation recommendations for personal trainer client files
- ☐ Components of a progress note (i.e., SOAP) and guidelines to writing appropriate and effective notes

30-Day Personal Trainer Study Schedule

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 (30) Review NETA's <i>Exam Candidate Handbook</i> . Visit: www.netafit.org Read Chapter 1 of <i>Manual</i>
2 (29) Read Chapter 2 Read Chapter 3 Complete Review Questions	3 (28) Read Chapter 5 Complete Review Questions	4 (27) Read Chapter 6 Complete Review Questions	5 (26) Read Chapter 7 Complete Review Questions	6 (25) Review Section II: Chapters 5-7	7 (24) Read Chapter 8 Complete Review Questions	8 (23) Read Chapter 9 Complete Review Questions Visit: www.choosemyplate.gov Visit: www.dietaryguidelines.gov
9 (22) Read Chapter 10 Complete Review Questions	10 (21) Chapter 11 Complete Review Questions	11 (20) Review Section III: Chapters 8-10	12 (19) Read Chapter 12 Complete Review Questions	13 (18) Read Chapter 13 Read Chapter 14 Complete Review Questions	14 (17) Read Chapter 15 Complete Review Questions	15 (16) Review Section IV: Chapters 12-15
16 (15) Read Chapter 16 Complete Review Questions Visit: www.health.gov/paguidelines	17 (14) Read Chapter 17 Complete Review Questions	18 (13) Read Chapter 18 Complete Review Questions Practice RT Exercises	19 (12) Read Chapter 19 Complete Review Questions Practice Static Stretches	20 (11) Review Section V: Chapters 16-19	21 (10) Read Chapter 24 Complete Review Questions	22 (9) Chapter 25 Complete Review Questions
23 (8) Review Section VII: Chapters 24-25	24 (7) Read Chapter 26 Complete Review Questions	25 (6) Read Chapter 27 Complete Review Questions	26 (5) Review Section VIII: Chapters 26-27	27 (4) Practice Exam (optional) Review as needed	28 (3) Review	29 (2) PT Workshop (Day 1)
30 (1) PT Workshop (Day 2) - Exam						

45-Day Personal Trainer Study Schedule

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 (45) Review NETA's <i>Exam Candidate Handbook</i> . Visit: www.netafit.org Read Chapter 1 of <i>Manual</i>	2 (44) Read Chapter 2 Read Chapter 3 Complete Review Questions
3 (43) Recovery Day	4 (42) Read Chapter 5 Complete Review Questions	5 (41) Read Chapter 6 Complete Review Questions	6 (40) Read Chapter 7 Complete Review Questions	7 (39) Review Section II: Chapters 5-7	8 (38) Recovery Day	9 (37) Read Chapter 8 Complete Review Questions
10 (36) Recovery Day	11 (35) Read Chapter 9 Complete Review Questions	12 (34) Visit: www.choosemyplate.gov Visit: www.dietaryguidelines.gov	13 (33) Recovery Day	14 (32) Read Chapter 10 Complete Review Questions	15 (31) Chapter 11 Complete Review Questions	16 (30) Review Section III: Chapters 8-10
17 (29) Recovery Day	18 (28) Read Chapter 12 Complete Review Questions	19 (27) Administer Preparticipation Screening on a friend.	20 (26) Read Chapter 13 Read Chapter 14 Complete Review Questions	21 (25) Read Chapter 15 Complete Review Questions	22 (24) Administer health/fitness assessment on a friend.	23 (23) Review Section IV: Chapters 12-15
24 (22) Recovery Day	25 (21) Read Chapter 16 Complete Review Questions	26 (20) Visit: www.health.gov/paguidelines	27 (19) Recovery Day	28 (18) Read Chapter 17 Complete Review Questions	29 (17) Read Chapter 18 Complete Review Questions	30 (16) Practice RT Exercises
31 (15) Recovery Day	32 (14) Read Chapter 19 Complete Review Questions	33 (13) Practice Static Stretches and SMR with Foam Roller	34 (12) Review Section V: Chapters 16-19	35 (11) Read Chapter 24 Complete Review Questions	36 (10) Chapter 25 Complete Review Questions	37 (9) Review Section VII: Chapters 24-25
38 (8) Recovery Day	39 (7) Read Chapter 26 Complete Review Questions	40 (6) Read Chapter 27 Complete Review Questions	41 (5) Review Section VIII: Chapters 26-27	42 (4) Practice Exam (optional) Review as needed	43 (3) Review as needed	44 (2) PT Workshop (Day 1)
45 (1) PT Workshop (Day 2) - Exam						

Additional Recommended Readings:

- ☐ American Council on Exercise (2021). *Taking Action with ACE: Practicing Equity, Diversity and Inclusion as an Exercise Professional*. Online course.
- ☐ Clifford, D. & Curtis, L. (2016). *Motivational Interviewing in Nutrition and Fitness*. New York, NY: The Guilford Press.
- ☐ Fleck, S.J. & Kraemer, W.J. (2014). *Designing Resistance Training Programs*, 4th edition. Champaign, IL: Human Kinetics.
- ☐ Liguori, G. (SrEd) (2022). *ACSM's Guidelines for Exercise Testing and Prescription*, 11th edition. Philadelphia, PA: Wolters Kluwer.
- ☐ Lox, C.L, Martin-Ginis, K.A., Gainforth, H.L., & Petruzzello, S.J. (2020). *The Psychology of Exercise: Integrating Theory and Practice*, 5th edition. New York, NY: Taylor and Francis Group.
- ☐ McArdle, W.D., Katch, F.I., & Katch, V.L. (2015). *Exercise Physiology: Nutrition, Energy, and Human Performance*, 8th edition. Philadelphia, PA: Wolters Kluwer.
- ☐ Miller, W.R. & Rollnick, S. (2013). *Motivational Interviewing: Helping People Change*, 3rd edition. New York, NY: The Guilford Press.
- ☐ Riebe, D., Franklin, B.A., Thompson, P.D., Garber, C.E., Whitfield, G.P., Magal, M., & Pescatello, L.S. (2015). Updating ACSM's Recommendations for Exercise Preparticipation Health Screening. *Medicine & Science in Sports & Exercise*, 47(11), 2473-2479.
Available at: [doi: 10.1249/MSS.0000000000000664](https://doi.org/10.1249/MSS.0000000000000664)
- ☐ Sanders, M.E. (SrEd) (2019). *ACSM's Health/Fitness Facility Standards and Guidelines*, 5th edition. Champaign, IL: Human Kinetics.
- ☐ U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2020-2025 Dietary Guidelines for Americans*. 9th Edition. December 2020.
Available at: <https://www.dietaryguidelines.gov/>.
- ☐ U.S. Department of Health and Human Services. (2018). *Physical Activity Guidelines for Americans*, 2nd edition. Washington, DC: U.S. Department of Health and Human Services.
Available at: <https://health.gov/paguidelines/second-edition/>

Note: Internet addresses cited in this document were current as of February 1, 2023.

Personal Trainer Job Task Analysis/Exam Content Outline:

A job task analysis (i.e., practice analysis, role delineation) is conducted every five to seven years to ensure the certification examination continues to represent the current role of a group exercise instructor as well as updated industry guidelines, best practices, and evolving knowledge of exercise science research.

As such, NETA conducted an updated job task analysis study in 2022, which resulted in a new exam content outline for NETA's NCCA-accredited Personal Trainer Certification Exam. The exam content outline lists the areas of responsibility (formerly known as domains), tasks, and knowledge statements representing the knowledge and skills necessary for a NETA-Certified Personal Trainer. The exam content outline serves as the foundation from which the NETA Personal Trainer Certification Exam is developed.

The exam content outline provided on pages 6-13 is the basis for NETA's Personal Trainer Certification Exam administered on or after June 1, 2023. Candidates preparing for NETA's Personal Trainer Certification Exam should be familiar with and understand all subject matter identified on the exam content outline.

Target Audience Statement

Personal trainers are fitness professionals who promote wellness through healthy lifestyle behaviors. They accomplish this by developing and implementing safe, effective exercise programs. These programs are designed to meet the individual goals of clients they serve within NETA's Code of Ethics.

Personal Trainer Exam Content Outline (Effective 6/1/2023)

Personal Trainer Certification Exam Specifications	
Area of Responsibility	Number of Items*
I. Communication and Engagement	20
II. Client Intake and Assessments	17
III. Program Design	23
IV. Program Implementation and Modification	25
V. Ethics and Professional Responsibility	15
Total Scored Exam Items	100

* Does not include the 20 'pre-test' (i.e., unscored) items on the exam.

I. Communication and Engagement

A. Facilitate a welcoming, trusting, and inclusive environment.

Knowledge of:

1. Effective verbal and non-verbal communication strategies, including active listening
2. Interpretation of body language
3. Strategies for creating and maintaining a professional impression (e.g., being on time, appropriately dressed, well groomed, organized)
4. Strategies for creating a fun and welcoming environment
5. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
6. Principles of diversity, equity, and inclusion

B. Develop rapport and a professional relationship with the client.

Knowledge of:

1. Effective verbal and non-verbal communication strategies, including active listening
2. Interpretation of body language
3. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
4. Strategies for accommodating various learning styles (e.g., visual, auditory, kinesthetic)
5. Strategies for creating and maintaining a professional impression (e.g., being on time, appropriately dressed, well groomed, organized)
6. NETA Code of Ethics
7. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
8. Principles of diversity, equity, and inclusion

C. Employ effective communication and coaching skills throughout the client relationship.

Knowledge of:

1. Effective verbal and non-verbal communication strategies, including active listening
2. Interpretation of body language
3. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
4. Aspects of motivation and techniques to enhance motivation (e.g., intrinsic, extrinsic) and promote adherence to healthy lifestyle behaviors
5. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
6. Considerations for engaging clients in a virtual environment

D. Encourage the client's engagement to facilitate adherence and enjoyment.

Knowledge of:

1. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
2. Effective verbal and non-verbal communication strategies, including active listening
3. Aspects of motivation and techniques to enhance motivation (e.g., intrinsic, extrinsic) and promote adherence to healthy lifestyle behaviors
4. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
5. Strategies for creating a fun and welcoming environment
6. Considerations for engaging clients in a virtual environment
7. Strategies for accommodating various learning styles (e.g., visual, auditory, kinesthetic)
8. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
9. Types of goals (e.g., action oriented, long-term) and collaborative goal-setting strategies (e.g., SMART, SWOT)

II. Client Intake and Assessments

A. Establish the client's desired outcomes and expectations.

Knowledge of:

1. Strategies for determining and accommodating participants' knowledge, skills, abilities, and interests
2. Effective verbal and non-verbal communication strategies, including active listening
3. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
4. Strategies for accommodating various learning styles (e.g., visual, auditory, kinesthetic)
5. Types of goals (e.g., action oriented, long-term) and collaborative goal-setting strategies (e.g., SMART, SWOT)

6. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
7. Principles of diversity, equity, and inclusion

B. Obtain the client's health, lifestyle, and physical activity history using interviews and questionnaires.

Knowledge of:

1. Preparticipation screening tools and components of a health and lifestyle questionnaire
2. ACSM preparticipation screening recommendations
3. Risk factors for prevalent chronic disease (e.g., diabetes, cardiovascular disease, osteoarthritis, metabolic syndrome)
4. Effective verbal and non-verbal communication strategies, including active listening
5. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
6. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
7. Time management strategies

C. Conduct an appropriate health screening and fitness assessment to gather objective data about the client's current health, risk factors, and baselines for measuring future progress.

Knowledge of:

1. Considerations in the selection and use of health screening and fitness assessment protocols (e.g., safety, contraindications, effect of common medications on response to exercise)
2. Static and dynamic postural assessment
3. Effective verbal and non-verbal communication strategies, including active listening
4. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
5. Exercise-related anatomy, kinesiology, biomechanics, and physiology
6. Components and administration of Informed Consent
7. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
8. Time management strategies
9. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
10. Recognition of and appropriate response to exercise-related medical conditions and emergencies (e.g., myocardial infarction, stroke, heat-related illness)
11. Signs and symptoms of and immediate care (e.g., PRICE) for acute injuries (e.g., sprain, strain, fractures)
12. Written emergency response procedures (e.g., activation of emergency medical services (i.e., 911), facility emergency response plan, pre-emergency preparation strategies)
13. Elements of health, wellness, lifestyle, exercise, and physical activity history and current states
14. Components of health- and skill-related physical fitness

D. Analyze the client's subjective and objective information to determine the need for medical clearance and support program design.

Knowledge of:

1. Considerations and procedures for referring clients to healthcare providers
2. ACSM preparticipation screening recommendations
3. Interpretive guidelines for preparticipation screening tools and health and lifestyle questionnaires
4. Health and injury risk factors and contraindications
5. Exercise-related anatomy, kinesiology, biomechanics, and physiology
6. Acute and chronic responses to exercise in asymptomatic and symptomatic populations

7. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
8. Legal considerations, risk management, and scope of practice (e.g., nutrition, medicine, rehabilitation, therapy)

III. Program Design

A. Interpret the assessment results using professional guidelines and normative data.

Knowledge of:

1. Interpretive guidelines for health screening and fitness assessment results
2. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
3. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
4. Credible sources of information, education providers, and professional organizations

B. Develop short- and long-term goals with the client that relate to desired outcomes.

Knowledge of:

1. Types of goals (e.g., action oriented, long-term) and collaborative goal-setting strategies (e.g., SMART, SWOT)
2. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
3. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
4. Principles of diversity, equity, and inclusion
5. Strategies for promoting holistic lifestyle choices
6. Basic principles of nutrition, *Dietary Guidelines for Americans*, recommended healthy eating patterns, and food guidance graphics
7. Principles and guidelines (e.g., ACSM, Academy of Nutrition and Dietetics, National Weight Control Registry) of safe and effective weight management
8. Physical activity recommendations (e.g., *Physical Activity Guidelines for Americans*; ACSM, AHA, and CDC Consensus Statements) for improving overall health
9. Principles of motivation and exercise adherence
10. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
11. Elements of health, wellness, lifestyle, exercise, and physical activity history and current states
12. Components of health- and skill-related physical fitness

C. Select the appropriate exercises and physical activities necessary to achieve client goals, taking into consideration their health status, preference for training (e.g., virtual, in-person, group), and access to exercise equipment.

Knowledge of:

1. Demographic-specific considerations (e.g., age, gender, culture, fitness level)
2. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
3. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)

4. Exercise-related anatomy, kinesiology, biomechanics, and physiology
5. Principles of exercise training (e.g., overload, specificity, progression, variation) and ACSM guidelines for exercise program design (e.g., cardiorespiratory, muscular fitness, flexibility training, balance)
6. Appropriate selection and use of exercise equipment
7. Safe and effective exercise technique (e.g., joint alignment, range of motion, breathing pattern)
8. Strategies for recovery and restoration (e.g., stretch, self-myofascial release, rest, sleep)
9. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
10. Aspects of motivation and techniques to enhance motivation (e.g., intrinsic, extrinsic) and promote adherence to healthy lifestyle behaviors
11. Corrective exercises for muscle imbalances
12. Elements of health, wellness, lifestyle, exercise, and physical activity history and current states
13. Components of health- and skill-related physical fitness

D. Determine acute training variables (e.g., frequency, intensity, volume, duration, recovery).

Knowledge of:

1. Principles of exercise training (e.g., overload, specificity, progression, variation) and ACSM guidelines for exercise program design (e.g., cardiorespiratory, muscular fitness, flexibility training, balance)
2. Training systems and strategies (e.g., periodization, high intensity interval training (HIIT), circuit training)
3. Methods for measuring and monitoring exercise intensity (e.g., target heart rate, rating of perceived exertion, METs)
4. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
5. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
6. Environmental considerations (e.g., cold, hot, high altitude) for exercise program design
7. Physical activity recommendations (e.g., *Physical Activity Guidelines for Americans*; ACSM, AHA, and CDC Consensus Statements) for improving overall health
8. Principles and guidelines (e.g., ACSM, Academy of Nutrition and Dietetics, National Weight Control Registry) of safe and effective weight management

E. Evaluate the program with the client to obtain feedback, determine feasibility, and ensure understanding of benefits and risks.

Knowledge of:

1. Effective verbal and non-verbal communication strategies, including active listening
2. Interpretation of body language
3. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
4. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
5. Types of goals (e.g., action oriented, long-term) and collaborative goal-setting strategies (e.g., SMART, SWOT)
6. Principles and guidelines (e.g., ACSM, Academy of Nutrition and Dietetics, National Weight Control Registry) of safe and effective weight management
7. Relationship-building strategies to engage, establish rapport, and demonstrate empathy in a non-judgmental manner
8. Acute and chronic responses to exercise in asymptomatic and symptomatic populations
9. Appropriate progressions, regressions, and modifications

10. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
11. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)

IV. Program Implementation and Modification

A. Instruct the client on proper exercise execution and technique.

Knowledge of:

1. Exercise-related anatomy, kinesiology, biomechanics, and physiology
2. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
3. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
4. Effective verbal and non-verbal communication strategies, including appropriate cueing and feedback
5. Appropriate spotting techniques and safety precautions during resistance training exercise
6. Appropriate progressions, regressions, and modifications
7. Safe and effective exercise technique (e.g., joint alignment, range of motion, breathing pattern)
8. Strategies for accommodating various learning styles (e.g., visual, auditory, kinesthetic)
9. Strategies for improving form and technique in a non-judgmental manner
10. Credible sources of information, education providers, and professional organizations

B. Conduct ongoing evaluations of the client's performance and response to the program using observation, feedback, and reassessments.

Knowledge of:

1. Considerations in the selection and use of health screening and fitness assessment protocols (e.g., safety, contraindications, effect of common medications on response to exercise)
2. Elements of and guidelines for writing progress notes (i.e., SOAP notes)
3. Elements of and guidelines for maintaining client records
4. Methods for measuring and monitoring exercise intensity (e.g., target heart rate, rating of perceived exertion, METs)
5. Acute and chronic responses to exercise in asymptomatic and symptomatic populations
6. Interpretive guidelines for health screening and fitness assessment results
7. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
8. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
9. Theoretical models of behavior change (e.g., transtheoretical model, self-efficacy theory)
10. Interpretation of verbal and nonverbal client responses
11. Principles of motivation and exercise adherence

C. Educate the client about factors related to the program (e.g., nutrition, recovery strategies, healthy living strategies).

Knowledge of:

1. Basic principles of nutrition, *Dietary Guidelines for Americans*, recommended healthy eating patterns, and food guidance graphics

2. Principles and guidelines (e.g., ACSM, Academy of Nutrition and Dietetics, National Weight Control Registry) of safe and effective weight management
3. Physical activity recommendations (e.g., *Physical Activity Guidelines for Americans*; ACSM, AHA, and CDC Consensus Statements) for improving overall health
4. Legal considerations, risk management, and scope of practice (e.g., nutrition, medicine, rehabilitation, therapy)
5. Credible sources of information, education providers, and professional organizations
6. Interpretation of body language
7. Elements of health, wellness, lifestyle, exercise, and physical activity history and current states
8. Components of health- and skill-related physical fitness
9. Strategies for recovery and restoration (e.g., stretch, self-myofascial release, rest, sleep)
10. Strategies for promoting body awareness (e.g., mirror, biofeedback) and mindfulness (e.g., meditation, breathing techniques)
11. Signs and symptoms of overtraining and overuse (repetitive strain injury) syndromes

D. Modify the program as needed to enhance effectiveness, efficiency, and safety.

Knowledge:

1. Exercise-related anatomy, kinesiology, biomechanics, and physiology
2. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
3. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)
4. Principles of exercise training (e.g., overload, specificity, progression, variation) and ACSM guidelines for exercise program design (e.g., cardiorespiratory, muscular fitness, flexibility training, balance)
5. Methods for measuring and monitoring exercise intensity (e.g., target heart rate, rating of perceived exertion, METs)
6. Effective verbal and non-verbal communication strategies, including appropriate cueing and feedback
7. Coaching methods (e.g., motivational interviewing, appreciative inquiry)
8. Appropriate spotting techniques and safety precautions during resistance training exercise
9. Appropriate progressions, regressions, and modifications
10. Safe and effective exercise technique (e.g., joint alignment, range of motion, breathing pattern)
11. Strategies for improving form and technique in a non-judgmental manner
12. Strategies for accommodating various learning styles (e.g., visual, auditory, kinesthetic)
13. Credible sources of information, education providers, and professional organizations
14. Corrective exercises for muscle imbalances
15. Environmental considerations (e.g., cold, hot, high altitude) for exercise program design

V. Ethics and Professional Responsibility

A. Adhere to industry and facility guidelines, legal requirements, and professional ethics to protect the interest of clients and other interested parties.

Knowledge of:

1. Activity- and exercise-specific benefits, indications, contraindications, risks, and precautions for the general population
2. Exercise guidelines, contraindications, and considerations for special populations (e.g., pregnancy, older adults, youth/adolescents) and medical conditions (e.g., arthritis, hypertension, diabetes, asthma, osteoporosis, orthopedic and other injuries)

3. Principles of exercise training (e.g., overload, specificity, progression, variation) and ACSM guidelines for exercise program design (e.g., cardiorespiratory, muscular fitness, flexibility training, balance)
4. ACSM Health/Fitness Facility Standards and Guidelines
5. Requirements for the renewal of professional and safety (e.g., CPR) certification(s)
6. NETA Code of Ethics
7. Rules, regulations, and guidelines regarding privacy of personal health information (i.e., HIPAA) and personally identifiable information (PII)
8. Legal considerations, risk management, and scope of practice (e.g., nutrition, medicine, rehabilitation, therapy)
9. Considerations related to media selection and licensing
10. Credible sources of information, education providers, and professional organizations

B. Respond to emergencies, incidents, and injuries.

Knowledge of:

1. Recognition of and appropriate response to exercise-related medical conditions and emergencies (e.g., myocardial infarction, stroke, heat-related illness)
2. Requirements for the renewal of professional and safety (e.g., CPR) certification(s)
3. Written emergency response procedures (e.g., activation of emergency medical services (i.e., 911), facility emergency response plan, pre-emergency preparation strategies)
4. Legal considerations, risk management, and scope of practice (e.g., nutrition, medicine, rehabilitation, therapy)
5. Signs and symptoms of and immediate care (e.g., PRICE) for acute injuries (e.g., sprain, strain, fractures)

C. Maintain required professional and safety certifications through appropriate continuing education.

Knowledge of:

1. Requirements for the renewal of professional and safety (e.g., CPR) certification(s)
2. Credible sources of information, education providers, and professional organizations
3. NETA Code of Ethics

D. Abide by scope of practice and other limitations based on education, credentials, training, skill, and experience.

Knowledge of:

1. Legal considerations, risk management, and scope of practice (e.g., nutrition, medicine, rehabilitation, therapy)
2. NETA Code of Ethics
3. Credible sources of information, education providers, and professional organizations

E. Maintain accurate, secure, and comprehensive client records.

Knowledge of:

1. Rules, regulations, and guidelines regarding privacy of personal health information (i.e., HIPAA) and personally identifiable information (PII)
2. Legal considerations, risk management, and scope of practice (e.g., nutrition, medicine, rehabilitation, therapy)
3. Elements of and guidelines for maintaining client records
4. Elements of and guidelines for writing progress notes (i.e., SOAP notes)
5. ACSM Health/Fitness Facility Standards and Guidelines

Definition of Terms

The following list defines and/or describes key terms, concepts, and acronyms that appear in NETA's Personal Trainer Practice Analysis. Candidates should refer to this list of terms to gain greater understanding of the Practice Analysis and subject matter that may appear on the Personal Trainer Certification Exam.

ACSM – American College of Sports Medicine. Establishes industry standards and guidelines (e.g., *ACSM's Guidelines to Exercise Testing and Prescription*, *ACSM's Health/Fitness Facility Standards and Guidelines*), as well as [position stands and consensus statements](#).

Active listening techniques: A set of verbal techniques representing a mode of listening in which the listener is engaged in the conversation to gain greater understanding of the content, motivation, and feelings associated with the message being communicated. Active listening techniques include asking open-ended questions and the use of minimal encouragers, summarizing statements, and reflections of content, feeling, and meaning.

Acute training variables: Refers to the fundamental components that may be manipulated for an exercise or within an exercise program to elicit a desired adaptation. These variables may include: intensity (i.e., workload), repetitions, sets, rest periods, tempo (i.e., speed of movement), and volume.

Coaching methods: Refers to a collaborative conversation through which one empowers an individual to discover their own solutions, encouraging and supporting them toward the adoption and maintenance of health lifestyles, using techniques such as motivational interviewing and appreciative inquiry.

DASH Eating Plan: Dietary Approaches to Stop Hypertension is a flexible and balanced eating plan that is based on research studies sponsored by the National Heart, Lung, and Blood Institute (NHLBI). <https://www.nhlbi.nih.gov/health/health-topics/topics/dash>

Dietary Guidelines for Americans: Evidence-based food and beverage recommendations for Americans ages 2 years and older, published every five years by the U.S. Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA). <http://health.gov/dietaryguidelines/>

Exercise-related injuries: Includes both acute and chronic conditions such as sprains, strains, fractures, tendonitis, and wounds (e.g., lacerations, abrasions).

Exercise technique: The manner in which an exercise is performed. Includes considerations such as posture, joint alignment, range of motion, base of support, tempo, and breathing.

Fitness assessments: refers to various methods and protocols to quantify and/or qualify health-related components of physical fitness (e.g., cardiorespiratory endurance, body composition, flexibility, muscular strength and endurance).

Health screening: Refers to non-diagnostic assessments and measurements (e.g., resting heart rate, resting blood pressure, body mass index, waist-to-hip ratio) used to identify indicators of increased risk for disease that may require additional evaluation and treatment by a health care provider.

HIPAA: Health Insurance Portability and Accountability Act of 1996
<http://www.hhs.gov/ocr/privacy/hipaa/understanding/index.html>

Interpretive guidelines: Refers to classification criteria and normative charts used to interpret information and data obtained from health screening and fitness assessments.

Learning styles: Refers to the various methods through which people take-in, process, and retain information including visual, auditory, read/write, and kinesthetic learners (i.e., VARK). May also refer to learning styles identified as converging, diverging, assimilating, and accommodating (Kolb & Fry).

Legal considerations: Refers to concepts such as liability, negligence, standard of care, liability exposures, scope of practice, and professional liability insurance.

Medical conditions: Refers to common diseases and chronic conditions often encountered with personal training clients including asthma, arthritis, diabetes, hypertension, cardiovascular disease, and osteoporosis.

NWCR: National Weight Control Registry. <http://www.nwcr.ws/>

PAR-Q: The Physical Activity Readiness Questionnaire is a 1-page form to see if you should check with your doctor before becoming much more physically active. <http://www.csep.ca/view.asp?ccid=517>

Personally identifiable information (PII): Any representation of information (e.g., name, address, social security number or other identifying number or code, telephone number, email address, etc.) that permits the identity of an individual to whom the information applies to be reasonably inferred by either direct or indirect means.

Physical activity: Any movement of the body that increases energy expenditure above resting levels. Includes domestic physical activity, transportation physical activity, occupational physical activity and leisure time physical activity. In the context of personal training, the focus is most often on leisure-time physical activities including structured exercise, recreation, and sports.

Physical Activity Guidelines for Americans: The U.S. Department of Health and Human Services (HHS) issues the *Physical Activity Guidelines for Americans*. The 2018 *Physical Activity Guidelines for Americans*, 2nd edition provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity. <http://health.gov/paguidelines/>

Prevalent chronic diseases: Includes cardiometabolic diseases including cardiovascular disease (e.g., heart disease, stroke) and type 2 diabetes.

P.R.I.C.E.: An acronym representing *protection, rest, ice, compression, and elevation*, used in reference to immediate care of exercise-related injuries.

Principles of exercise training: Refers to the principles of overload, specificity (i.e., SAID-specific adaptations to imposed demands), progression, reversibility, and variation.

Risk management: A proactive approach to minimize liability exposures that may affect exercise professionals and their employers.

SOAP notes: An acronym representing *subjective, objective, assessment, and plan*, used as an organized method of documenting client response to and progress with exercise sessions and programs.

Special Populations: Refers to sub-groups including women who are pregnant, older adults, and youth and adolescents.

Theoretical models of behavioral change: Any number of theories or models used to describe behavioral change, the most common of which is the Transtheoretical Model (Prochaska & DiClemente). Others include the Self-Efficacy Theory (Bandura), the Self-Determination Theory (Deci & Ryan), and the Health Belief Model (Hochbaum et al.)

USDA Food Guidance System: Provides practical information to individuals, health professionals, nutrition educators, and the food industry to help consumers build healthier diets with resources (e.g., MyPlate) and tools for dietary assessment, nutrition education, and other user-friendly nutrition information. <http://www.choosemyplate.gov/about>