This ACE CPT cheat sheet is provided for my students of PT Pioneer courtesy of Traineracademy.org. They are the team that develops awesome study materials for certifications in the fitness industry.

In addition to this awesome cheat sheet, they are providing an incredible \$100 off discount on their MVP study materials for my students.

My students that have used this package have a 99% pass rate on the ACE final exam. They even provide an exam pass guarantee or your money back.

<u>Check their website</u> to learn more about their ACE study materials.

Or, check out my full review of them here.

In addition to getting a discount, you will also get free access to my <u>Running Start career course on PTPioneer</u> with the purchase of the MVP study package. This is a limited time deal I have with Trainer Academy.

You can save \$100 on their ACE MVP study package by using my custom discount code **PTPSUB** or by <u>clicking this link.</u>

www.ChooseMyPlate.com **RPE Scale**

6-20 or 1-10

Factors influencing exercise participation and adherence

Personal attributes Environmental factors

Physical activity factors -Activity history is the most

- important personal attribute, past history is the best predictor
- -Time is the most common excuse for not exercising -Goal setting for exercise
- adherence, revisit, reassess, and reset often
- -Process goal ex: number of workouts in a week -Product goal ex: hitting a new PR weight

Good non-verbal cues:

Voice quality

- Eye contact Facial expressions
- Hand gestures
- Body positioning
- S specific

M - measurable

A - attainable R - relevant

T- time bound

-Visual, auditory,

kinesthetic -Functional movement and

res. Training: - Phase 1: stability/mobility

- Phase 2: movement
- Phase 3: Load
- Phase 4: Performance

Three main posture imbalances:

- Kyphosis-lordosis
- Flat-back
- Sway-back

scoliosis = lateral spinal curve with vertebral rotation

Fluid intake recommendations during exercise:

- 2 hours before exercise, drink 500-600 mL
- Every 20-30 min. during exercise, drink 250-300 mL
- Post exercise, drink 450-675 mL for every kg of body weight lost

Stages of learning

Cognitive

- *requires the most feedback*
 - Associative
 - Autonomous

Stages of change

- Precontemplation
- Contemplation Preparation
- Action
- Maintenance

Four TTM components

- Stages of change
- Processes of change
- Self-efficacy
- Decisional balance

Positive reinforcement: positive stimulus increases the likelihood of future behavior

Negative reinforcement:

Subtraction of stimulus following bad behavior and it increases chances of future behavior

Four cognitive behavioral components:

- Goal setting
 - Feedback
 - Intrinsic/extrinsic
- Decision making
- Self-monitoring

-Cardiorespiratory training:

- Phase 1: Aerobic base
- Phase 2: Aerobic efficiency
- Phase 3: Anaerobic endurance
- Phase 4: Anaerobic power

-Passive straight leg test assess hamstring length

-Hurdle step screen examines mobility of one limb and stability of the collateral limb.

-Muscle spindles:

- Changes in length - Stretch reflex
- Causes contractions

-Golgi tendons:

- Causes muscle relaxation
 - Attaches to tendons
- Senses changes in muscle tension

Adaptations from resistance training:

- Stabilization
- Hypertrophy
- Strength
- Power
- Muscular endurance

Anatomical Planes:

- Sagittal: left/right, Flexion/extension
- Transverse:

top/bottom, internal/external rot., left/right rot., horizontal abd/add Frontal: front/back, abd/add,

eversion/inversion

Positive Risk Factors:

Age: men <u>></u>45

Women <u>> 55</u>

Family history

Myoinfarc/cororevascularizaion in dad < 55 mom < 65

- Cigarette smoking Current smoker or quit within 6 months
- Sedentary life:Less than 30 min. of moderate act. > 3 days/ week last 3 months
- Obesity: BMI > 30
- Hypertension: syst BP ≥140, diast BP > 90
- Dyslipidemia: LDL chol. > 130 or HDL \leq 40. Total serum chol.
- Prediabetes: fasting plasma glucose \geq 100 but \leq 125

Negative Risk Factors:

HDL chol> 60 mg/dL

Moderate Risk = 2 or more risk factors **High risk =** symptomatic or known CV,

pulmonary, renal or met. Disease. Normal BP = syst< 120, diast<

Prehypertension = syst of 120-139, diast.

Stage 1 hyper = syst 140-159, diast 90-99 Stage 2 hyper = syst> 160, Diast> 100Five parts of the spinal column:

- Cervical curve=7 vertebrae
- Thoracic curve=12 vertebrae
- Lumbar curve=5 vertebrae
- Sacrum=5 fused vertebrae
- Coccyx=5 fused vertebrae

Total of 33 vertebrae Business types are:

- Sole proprietorship
- Partnership
- Corporation
- Independent contractor

Three types of corporations are:

- Subchapter S corporation
- Limited liability Companies and the Limited Liability Partnerships
- C Corporation

BMI reference chart:

Underweight=<18.5 Normal=18.5-24.9

Overweight=25-29.9 Grade1 obese=30-34.9

Grade2 obese=35-39.9

Grade3 obese=>40 Male skinfold sites:

- Chest
- Thigh
- Abdominal

Female skinfold sites:

- Triceps
- Thigh

Suprailium BF percent formula=

$\{(TW - LW) / TW \}X100$ Prime mover examples:

- Squat: glute max, and quads
- Bench: pec major and deltoids
- Pull up: Lats and teres major
- Shoulder press: three heads of the deltoids
- Machine row: the lats
- Calf raise: gastrocnemius

Stance Progressions:

- Narrow stance and 1. hip width stance
- 2. Split stance and staggered stance
- 3. Tandem stance and single leg

Four progressions for pushing movements:

- Standard seated 1.
- 2. Standing press 3. Single arm press with contralateral
- stance 4. Single arm press with ipsilateral stance

Macronutrients:

- Protein has 4 cals
- Carbs have 4 cals
- Fat has 9 cals Alcohol has 7 cals

Phases of training:

Need's assessment Training frequency Selection and order Training volume

Training intensity Training tempo Rest intervals

Slow twitch muscle fibers:

Type 1, increased oxygen, smaller, less force, slow fatigue

Fast twitch muscle fibers:

Type IIa and type IIb, less oxygen, larger, more force,

faster fatigue FITTE:

Frequency Intensty

Time

Type Enjoyability

Karvonen method:

 $THR = (HRR \times \%int) +$ RHR

5 Metabolic syndrome characteristics:

- Elevated waist circumference
- Elevated triglycerides
- Reduced HDL cholesterol
- Elevated blood pressure Elevated fasting
- blood glucose -Recommended calorie deficit is 500 to 1000 kcals per day or 1-2 lbs per

day.

-Pregnant women

- recommendations:
- Mode - Intensity
- Duration

- Frequency **Professional services** personal trainers should

- take into account: Attorney
 - Accountant
 - Web developer or graphic designer Insurance broker Real-estate
 - broker Contractor