This NASM 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 discount on their NASM MVP study materials for my students.

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

Check their website to learn more about their NASM 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 Running Start career course on PTPioneer 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 NASM MVP study package by using my custom discount code **PTPSUB** or by clicking this link.

Trainer Academy NASM Cheat Sheet

3 OPT Training stages:
1: Stabilization
2:strength
3: power
NASM Opt Training phases:
1: Stabilization end
2:strength end
3: hypertrophy
4: max strength
5: power
Phases that have supersets:
2 and 5
Three parts of a neuron:
1: Cell body
2: Axon
3: Dendrites
Three joint motions:
1: Roll
2: Slide
3: Spin
Skeletal system functions:
1: Shape
2: Protection
3: movement
4: blood production
5: store minerals
Layers of muscle:
Epimysium
Perimysium
Endomysium (deepest)
Slow twitch fibers:
1:Increased oxygen
2:Smaller
3: less force
4: Slow fatigue
Fast twitch fibers:
1:Less oxygen
2: larger
3: more force
4: fast fatigue
Muscle spindle:
1: change In length
2: Stretch reflex
3: Cause contraction
Golgi Tendon:
1: attach to tendons
2:Change in muscle tension
3: Cause relaxation
Blood flow in heart:
1: Right A (no O)
2: Right V (no-O)
3: Left A (O)
4: left V (O to body)
Blood vessels:
1:Arteries
2:Arterioles
3: Capillaries
4: Venules
5: Veins
Blood functions:
1: Transport O
2:Transport waste

Blood function continued:
3:Transport hormones
4: Carries heat
5:Regulates temp
6: clotting protects leaving
7: fights disease in Sickness
ATP-PC:
1:10-15 sec
2:Fastest
3: No-O
4: Short
5: High intensity
Glycolysis:
1:30-50 sec
2: Use carbs
3: medium duration
Oxidative system:
1: Oxidative
2: Slow process
3: Long duration
3 oxidative systems:
Aerobic glycolysis
Krebs cycle
Electron transport chain (ETC)
Respiratory quotient
RQ of .7 =100% fat
RQ of 1 = 100% carbs
Sagittal plane:
Motion:
Flexion/extension
Axis: Coronal
Frontal plane:
Motion:
Abduction/adduction, Lateral flexion, E version/inversion
Axis:
Anterior/posterior
Transverse plane:
Motion:
Internal/external rotation, Left/right rotation, Horizontal abduction/adduction
Axis: Longitudinal
Estimated HR:
220 – age
HR training zones:
1: 65% to 75%
2: 76% to 85%
3: 86% to 95%
Which pulse?:
Radial pulse

Postural assessments (Green are almost always tight and yellow are almost always weak)

Pronationdistortion tight muscles:
Gastrocnemius
Soleus
Peroneals
Adductors
Iliotibial head
Hip flexor complex
Bicep femoris (short)
Pronationdistortion weak muscles:
Anterior tibialis
Posterior tibialis
Vastus medialis
Gluteus medius/maximus
Hip external rotators
Lower crossed tight muscles:
Gastrocnemius
Soleus
Hip flexor complex
Adductors
Latissimus dorsi
Erector Spinae
Lower crossed weak muscles:
Anterior tibialis
Posterior tibialis
Gluteus maximus
Lucius Medius
Lower crossed weak muscles cont
Transverse abdominis
Internal oblique
Upper Crossed tight muscles:
Upper trapezius
Levator scapulae
Sternocleidomastoid
Scalene
Latissimus dorsi
Teres major
Subscapularis
Pec major/minor
Upper Crossed weak muscles:
Deep cervical flexors
Serratus Anterior
Rhomboids
Mid trapezius
Lower trapezius
Teres minor
Infraspinatus
OHS feet turn out tight muscles:
Soleus
Lateral gastrocnemius
Biceps femoris (short)
OHS feet turn out weak muscles:
Medial gastrocnemius
Medial hamstring
Grasilis, Sartorius, Popliteus
OHS Knees move in Tight muscles:
Adductor complex
Bicep femoris (short)
Tensor fascia latae
Vastus lateralis

OHS Knees move in weak muscles:
Gluteus Medius/Maximus
Vastus Medialis oblique
OHS LPHC leans forward tight muscles:
Soleus
Gastrocnemius
Hip flexor complex
Abdominal complex
OHS LPHC leans forward weak muscles:
Anterior tibialis
Gluteus maximus
Erector Spinae
OHS low back arches tight muscles:
Hip flexor complex
Arrector Spinae
Latissimus dorsi
OHS low back arches weak muscles:
Gluteus maximus
Hamstring complex
Intrinsic core stabilizers
OHS arms fall forward tight muscles:
Latissimus dorsi
Teres major
Pec major/minor
OHS arms fall forward weak muscles:
Mid/lower traps
Rhomboids
Rotator cuffs
OHS what to view:
Anteriorly:
Feet, ankles and knees
Laterally:
LPHC, , shoulder and cervical complex
BMI for overweight/Obese:
Overweight:25.0 - 29.99
Obese: 30.0 - 34.99
Cumulative injury cycle:
1:tissue trauma
2: inflammation
3: muscle spasms
4: adhesions
5: Altered neuromuscular control
6: Muscle imbalance
7: repeat
Integrated flexibility continuum:
Corrective (SMR and static stretching)
Active (SMR and active isolated stretching)
Functional (SMR and dynamic stretching)
Recommended exercise for adults:
150 minutes of moderate intensity or 75 minutes of vigorous aerobic exercise.
Cardiovascular training for general health:
60% of Max O consumption.
FITTE Principles:
Frequency
Intensity
Time
Type
Enjoyment
Local stabilization system muscles (type I slow twitch)
Transverse of Dominis
Internal oblique
Lumbar multi fidus
Pelvic floor muscles
Diaphragm
Best core exercise for beginner: Prone iso ab
Core musculature:
Local stabilization system
Global stabilization system
Movement system
Stabilization exercises:
1:Involve no lower body joint movement
2:Balance power include a "hop"
3: Balance strength involve bending at hip or knee
Proprioceptively challenging equipment:
1: Floor
2: Balance beam
3: Half foam roll
4: Foam pad
5: Balance disk
6: Wobble board
7: Bosu ball
Three phases of plyometric training:
1: Eccentric
2:amortization
3:Concentric/loading
Three phases general adaptation syndrome:
1:Alarm reaction
2:Resistance development
3:Exhaustion
5 resistance training adaptations:
1: stabilization
2: muscular endurance
3: muscle hypertrophy
4: Strength
5: Power
Resistance training systems:
Single set
Multiple set
Pyramid
Superset
Drop set
Circuit training
Peripheral heart action
Split routine
A vertical loading
Horizontal loading
Acute variables of training:
Repetition
Set
Training intensity
Rep tempo
Rest interval
Training volume
Training frequency
Training duration
Exercise selection
ATP recovery:
20-30 sec = 50%
40 sec = 75%
60 sec = 85%
3 min = 100%
Program design Continuum:
Muscle endurance/stabilization:
Reps: 12 to 20
Sets: 1-3
Intensity: 50% to 70%
Tempo: slow (4/2/1)
Rest: 0-90 sec
Hypertrophy:
Reps: 6 to 12
Sets: 3 to 5
Intensity: 70% to 85%
Tempo: moderate (2/0/2)
Rest: 0-60 sec
Max strength:
Reps: 1-5
Sets: 4-6
Intensity: 85% to 100%
Tempo: fast
Rest: 3 to 5 min
Power:
Reps: 1-10
Sets: 3-6
Intensity: 35% to 45%
Tempo: fast
Rest: 3-5 min

Exercise tools:
Free weights
Machines
Cable machines
Elastic bands
Medicine balls
Kettle bells
Body weight
TRX
Bosuball
Stability ball
Protein intake:
Sedentary = .4g/lb
Strength = .5=.8g/lb
Endurance = .5-.6g/lb
Amino acids:
20 total
8 essential
Recommended macros:
Pro: 10% to 35%
Cho: 45% to 65%
Fat: 20% to 35%
Macro calories:
Pro: 4 cal/gram
Cho: 4 cal/gram
Fat: 9 cal/gram
Alcohol: 7 cal/gram
Fluid recommendations:
6-12 oz every 15-20 min Of exercise
16-24 oz / lb lossed during exercise.
Common vitamins with adverse effects when consumed in excess:
Zinc
Iron
Vitamin D
Vitamin A
5 stages of change:
Precontemplation
Contemplation
Preparation
Action
Maintenance
Barriers to exercise:
Not enough time
Unrealistic goals
Lack of support
Social physique anxiety
Convenience
SMART goals:
Specific
Immeasurable
Attainable
Realistic
Timely