

Guideline for Ch 3, 9 and 10 Open Book Unit test

All of the quizzes, assignments, and labs are testable material. You will be allowed to use all of the material that was handed in for these chapters on this unit test. **No other outside material is allowed, textbook is not permitted either.**

Chapter 3

- Definitions: Cardiorespiratory endurance, VO_2 max, heart rate/stroke volume/cardiac output, Capillaries, Alveoli, ATP
- Cardiovascular system
 - o Pulmonary circuit (right side pumps oxygen-depleted blood to the lungs)
 - o Systemic circuit (left side pumps oxygen-rich blood to tissues throughout the body)
 - o Arteries
 - o Veins
 - o Capillaries
 - o Blood flow through the cardiorespiratory system
- ATP (what is it, why is it important, where does it come into play in fitness)
- Aerobic versus anaerobic, which exercise uses which energy type?
- Anaerobic → glycolysis → lactic acid
- Response versus adaptation & examples of each
- Evaluation of cardiorespiratory endurance (1.5 mile test, 1 mile walk, step test, laboratory assessment, cycle ergometer) → refer to question package or quiz
- Designing aerobic exercise program (FITT principle)
- Calculating heart rate reserve (HRR), target heart rate (THR) and maximal heart rate (SEE LAB 3.1A/3.1B OR 3.1D and 3.3)
- Borg Rating of Perceived Exertion (RPE)
- Developing an individualized Exercise Prescription (initial conditioning, improvement and maintenance phase)
- Cross training and interval training

Chapter 9

- Calculating desired body weight pg. 258/259 textbook (see lab 9.1)
- Calculating BMI (see lab 9.1)
- Calculate recommended weight
- Understanding energy balance (increased fat storage versus increased fat breakdown)
- Hormones involved in appetite control: ghrelin, leptin, and peptide YY
- Factors that influence weight control: hormones, heredity, lifestyle and environment, physical activity and exercise
- Designing a successful weight-loss program
 - o Calculating daily caloric expenditure (see lab 9.2)
- Some diet fads discussed in class (myths versus facts)
- Disordered eating (anorexia nervosa, bulimia nervosa, binge eating disorder)

Chapter 10

- Definitions: cardiovascular disease, atherosclerosis, arteriosclerosis, heart attack, stroke, hypertension
- Types of cardiovascular disease (CHD): arteriosclerosis, coronary heart disease, stroke, hypertension
- Major risk factors for CHD: smoking, hypertension, high blood cholesterol levels, physical inactivity, diabetes mellitus, overweight and obesity, heredity, gender, increasing age
- Contributing risk factor CHD: stress, alcohol consumption, diet
- How can you reduce risk of heart disease?
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