MPU 34E2/24E2 Gym Workout

Week 1

DEPARTMENT OF STUDENT AFFAIRS
TUNKU ABDUL RAHMAN UNIVERSITY COLLEGE

TOPICS COVER

- INTRODUCTION OF RULES & REGULATIONS
- INTRODUCTION TO HEALTH & WELLNESS

Guidelines for this course

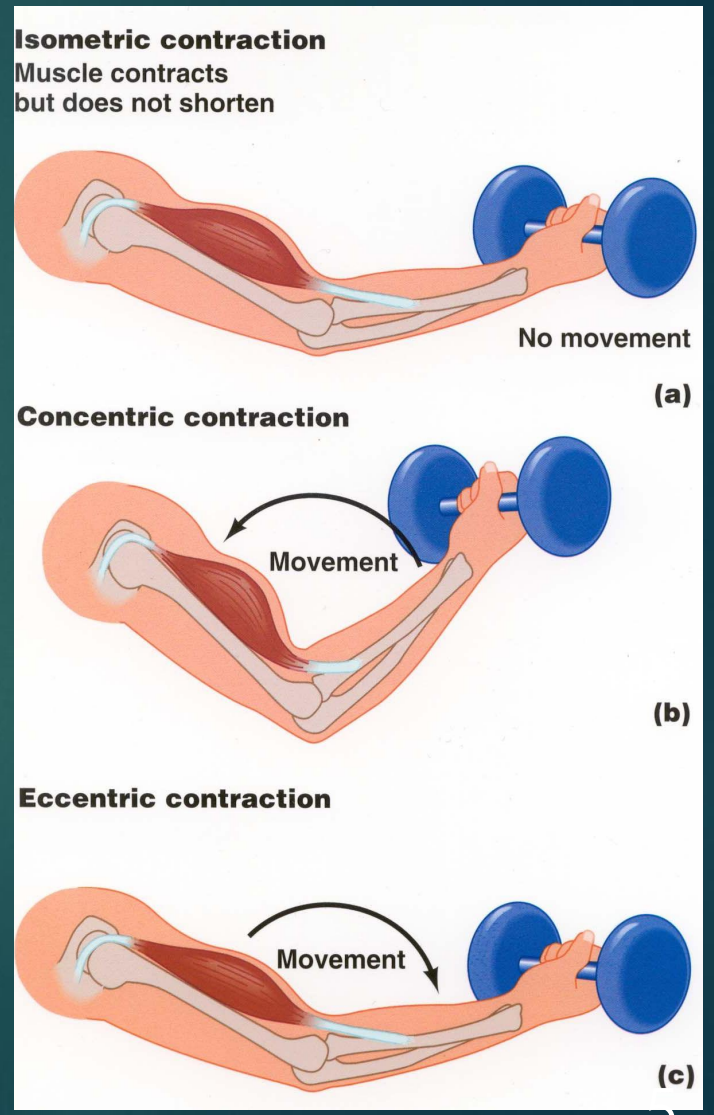
- Attendance & Punctuality (20%)
- Log Book (20%)
- Test 1 (20%)
- Test 2 (20%)
- Co-Cu Day (10%)
- Involvement (10%)

Basic Terminology in Gym Workout

1. Repetition – One complete movement of an exercise (concentric + eccentric).
2. Set – A group of repetition performed continuously without stopping.
3. Repetition Maximum (RM) – Maximum number of repetition per set that can be performed at a given resistance with proper lifting techniques.
4. 1 RM – The maximum resistance that can be used for one complete repetition of an exercise.

Basic Terms

5. Strength – Maximum amount of force a muscle or muscle group can generate in a specific movement pattern
6. Isometric contraction - Develops force but NO movement at a joint occurs
7. Concentric Contraction– Muscle is shorten to generate force for lifting a weight
8. Eccentric Contraction – Muscle is lengthen as it contracts



Fitness Components

Health-related Components

- Cardiovascular endurance
- Flexibility
- Muscular strength
- Muscular endurance
- Body composition

Skill-related Components

- Speed
- Power
- Agility
- Coordination
- Balance
- Reaction time

GENERAL BENEFITS OF RESISTANCE TRAINING

- Increased muscular strength
- Increased muscular power
- Increased muscular endurance
- Increased muscle size
- Reduced body fat
- Increased balance, coordination, and flexibility
- Enhanced speed and jumping ability
- Enhanced motor performance and ability to perform activities of everyday living

GENERAL BENEFITS OF RESISTANCE TRAINING

- Increased bone mineral density
- Increased basal metabolic rate
- Lower blood pressure
- Reduced cardiovascular demands to exercise
- Greater insulin sensitivity and glucose tolerance
- Improved blood lipid profiles
- Reduced risk for injury and disease (i.e., osteoporosis, low back pain, etc.)
- Enhanced well-being and self-esteem

Warming up & Cooling down

Why Warm Up?

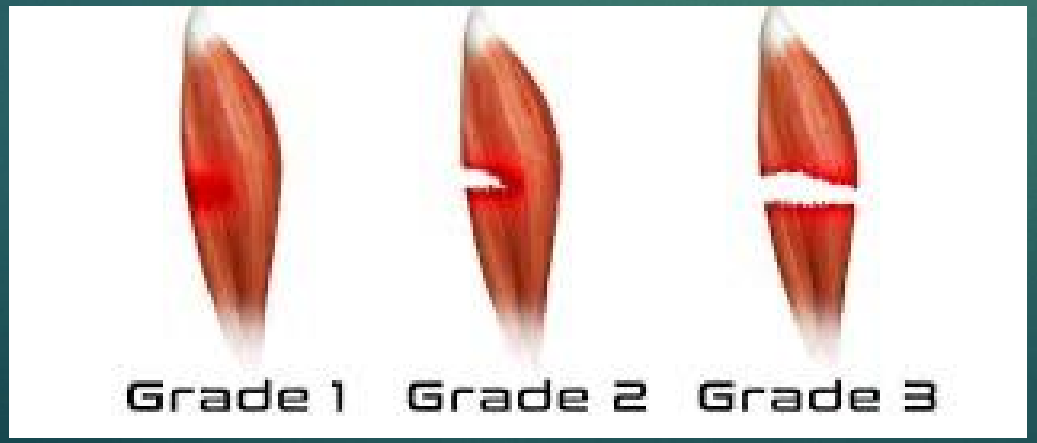
- The main purpose of warming up is to increase your heart rate slightly.
- This has two benefits:

1) it raises your core body temperature
2) it increases the blood (oxygen) flow to your muscles to prepare your body for more vigorous physical activity.

Warming up & Cooling down

Why Warm Up?

- Your muscles and tendons (which attach your muscles to your bones) will be more flexible for stretching after mild movement has raised your core body temperature.
- This flexibility helps you increase the range of motion of your joints and may help you avoid injuries such as muscle tears and pulls.



Warming up & Cooling down

Duration of Warm Up?

- It takes your body approximately 3 minutes to realize it needs to pump more blood to your muscles.

- Warm ups should last approximately 15 - 20 minutes and they should incorporate stretching of large muscle groups (i.e. quadriceps, calves, hamstrings, hip flexors, shoulders etc...)

Warming up & Cooling down

Cool Down

- The cool down serves two purposes:

1) it reduces your pulse / heartbeat
2) it returns the blood to your heart in sufficient quantities to get rid of lactic acid (a chemical result of muscular fatigue).

- Dizziness, nausea and a "worn out" feeling and even blood pooling are common symptoms of an improper cool down.
- Blood Pooling effect - the blood will pool in legs instead of returning to heart.

Warming up & Cooling down

Duration of Cool Down?

- It takes your body approximately 3 minutes to realize it does not need to pump all the additional blood to your muscles.
- A safe cool down period is at least 3 minutes, preferably 15-20 minutes.
- All cool downs should be followed by stretching of the muscles to avoid soreness and tightness.