*Teachers*: Kaylene Chan, Angela Cho

*Grade 10*

*Unit*: Speed, Agility, Quickness, and Weights Training (exercises to do at home)

*Equipment*: exercise ball, shorts and t-shirt, athletic shoes, cones, weight bench, dumbbells, barbells, single or multi-unit weight machine, stop watch, ladder? (maybe hockey sticks), tennis balls

*Safety*: Return equipment back to its original spot, do not do overhead exercises near someone who is doing exercises in a supine position, don’t monopolize equipment, place barbells and dumbbells back to its original spot-do not drop them, don’t be a hero, comfortable weights, start off easy, find what you are comfortable with.

*Resources:*

Baechle, Thomas R. and Roger W. Earle. *Weight Training: Steps to Success*. Human Kinetics, Inc., 2006, 1998. Leisure Press, 1992. Print.

Brown, Lee E. and Vance A. Ferrigno. *Training for Speed, Agility, and Quickness*. Lee E. Brown and Vance A Ferrigno, 2005. Lee E. Brown, Vance A. Ferrigno, and Juan Carlos Santana, 2000. Print.

Chan, Michael. (taught some basic techniques about weights)

***Warm-up:***

Cardiovascular activity: Running, skip, hopping, frog jump, crab walk, high knee, high knee skip. Dynamic stretching: swing your legs around on the wall, high-knees, and arm circles, moving neck and ankles, jumping jacks.

Cool-offs: slow jogs, static stretches.

***Lesson Plans:***

***Lesson 1, Day 1 (weights and strengthening body)***

PLO: Apply muscle-strengthening techniques.

Lesson Objectives: To teach students to understand weight training-its purposes and also learn safeties. Also, how to do exercise your entire body.

Lesson Plan:

 Go over the brief history of weight training (1-2 minutes)

 Warm-up (5-7 minutes)

Go to the weights and teach safeties. (5 minutes)

Explain and demonstrate all stations (6-8 minutes)

Stations-6 stations (biceps, triceps, whole-body exercises, abdominal, legs, and shoulders) (5 minutes at each station around 30 minutes)

Cool-off (2-3 minutes)

Clean-up (2-3 minutes)

*Grips:*

3 grips to use for barbells: overhand, underhand, and alternated

A closed grip is when your fingers and thumbs are wrapped around the bar.

An open grip (false grip) is when the thumbs are not wrapped around the bar, which is dangerous because the bell can easily fall out and injure yourself or others.

*Lifting position:*

Position hands outside the legs. Places feet so that your shins almost touch the bar. Grip a little wider than shoulder width. Feet are flat, toes slightly pointed onward. Hips are low, gorilla position. Arms straight. Shoulders slightly over bar. Head up, eyes straight. Back is flat, no round back because this puts too much stress on the low back, which could cause back pains, injuries on your back. Chest high. BREATHE

*Floor to thighs:*

Inhale. Keep back flat. Begin to straighten your knees, hips low. Elbows straight. Bar is close to shins to knees to thighs. Keep shoulders over bar as knees straighten. BREATHE

Misstep: upward pull not smooth Correction: straighten your elbows, pull slowly.

Misstep: hips rise first during pulling Correction: this creates stress on your back; knees are straightening far too soon, use legs, not back

*Thighs to shoulders (maybe not):*

Keep bar close to the body. Keep elbows straight. Straighten legs and hips entirely. Shrug shoulders, as high as possible. Keep elbows straight. Flex elbows, move upward and sideways. Elbows above wrists. Pull bar as high as possible. Rotate elbows down the up in front of the bar. Catch bar in front of soldiers-flex knees and hips to take all the bar’s impact. Make upper arms parallel to the floor. Gain balance and stand up.

*Spotting for everything to do with weights:*

This is a person who watches the weight trainee to make sure the trainee is being safe and doing exercises properly. Spotters have to be quick and alert to respond if the trainee is in need of help.

*Bicep curls*:

Bring barbell up to waist, elbows facing body, forearms facing outward, bring bar up to your chest and down back to waist, repeat.

Helps bicep strengthening

*Triceps:*

Free weight, or dumbbell legs shoulder width apart, body straight, bring weight up, bend your elbows back, careful not to hit your head, bring it as low as possible, just before you hit your back or your head, repeat it, sets of ten

*Push-ups*

*Legs:*

Squats, back straight, arms out in front, butt is out, like sitting down, knees can’t go past your toes, this isolates your thigh muscles, quadriceps

*Abdominal:*

Sit-ups

Lie down, knees up, feet flat-all the timehands on hand or chest, then sit up. Go up and down

leg raises

Lie down, body straight, leg straight, life your legs to a 45 degree angle, hold for 20-30 seconds (don’tkdont pick up something u can’t do, don’t be cool, be safe, otherwise you will get in trouble, easily break toes and your back

*Shoulders:*

Bar, straight right over your head, at your chest, bring up to your head

-Deltoids strengthening

*Total body*- burpees

***Lesson 2, Day 2 (Speed)***

PLO: Apply speed techniques to future running competitions or for fun.

Lesson Objectives: To learn different techniques to improve running speed.

Lesson Plan:

 Quick history of running (3-5 minutes)

Active warm-up (5-7 minutes)

 Explain why we’re doing it (1-2 minutes)

 Teach, explain and make the class try out all techniques (3-5 minutes each), maybe a quick run at the end

 Cool down (2-3 minutes)

 Clean-up (2-3 minutes)

*Standing stationary arm swings:*

Put weights on your arms to make it more difficult, elbows bent at 90 degrees, keep hands relaxed

This is improving mechanics for upper-body motions.

*Ankling:*

jog with short steps, keep feet quiet and quick, and try to do as little ground contact

This is to improve foot speed and elastic ankle strength

*A March walk:*

march while keeping perfect posture and arm action, don’t slam feet on the ground. Then skip using this technique. Keep ankles emphasized, but quiet.

To increase foot speed, hip extension, flexion strength and ankle-muscle stiffness.

*Ladder speed run:*

Run through ladder (46cm apart) as fast as possible, lift knees as high as able and quickly landing

To enhance timing and stride frequency

*Wall drills:*

Lean against wall at a 45-60 degree angle, stay on balls of feet, and bring one knee up at an acceleration position.

This is to enhance muscle stiffness and improve elastic strength of lower body

*Falling starts:*

Stand with feet together and lean forward as far as possible, when you can’t balance accelerate at full speed and run

This is to teach proper acceleration lean

*Gears:*

Put 5 cones 20m apart from each other, accelerate at different speeds between cones, like a bicycle

This is to improve transitional acceleration and ability to change speeds

*Partner-resisted starts:*

Partner is either in front or behind you, you are being resisted for 8-10 strides

This is to improve starting power and stride length

*Skip for height:*

Skip with driving knee upward as fast and aggressively as possible, with dramtic arms too, skip as high as possible

This is to improve leg power, ankle-muscle stiffness, and hip extension

*Uphill acceleration run:*

Go to a hill. Run for 4-8 seconds, count strides and mark spot, try to improve in fewer strides

This is to enhance starting power and stride length

*Make them run and use these skills.*

***Lesson 3, Day 3 (Agility and balance)***

PLO: Apply graceful skills and improve balance.

Lesson Objectives: to improve and achieve balance and gracefulness (agility)

Lesson Plan:

 Explain why we’re doing this (1-2 minutes)

Warm –up (5-7 minutes)

 Teach, explain all techniques and make them try (40-45 minutes)

 Cool-down and clean-up (5-7 minutes)

*Carioca:*

Get in a 2-point stance, bring your left leg over the right leg, then bring your right leg over the left, repeat.

This is train your balance, flexibility in hips, and footwork.

*Crossover skipping:*

Start in 2-point stance. Skip left leg in front of right leg, repeat this in the opposite with the right leg, repeat.

This is to develop crossover mechanics for changing directions

*Shuttle:*



This is to improve changing direction, footwork and reaction timing

*T-Drill:*



*Sprint:*

(similar to shuttle)

This is develop gracefulness (agility)

*Sprint-Backpedal:*

Sprint 10 yards, backpedal 5 yards (repeat 3 times)

To develop acceleration and practicing stopping

*The Square:*

Shuffle left, sprint forward, shuffle right, and backpedal back to the start

This is to improve changing directions, body positioning, and transitioning between skills

*Bear Crawl:*

Sprint forward, bear crawl to the left, back pedal, bear crawl to the right.

This is to improve changing of directions, body positioning, transitioning between skills

*Single-Leg hop:*

Sprint forward, hop on left food to the left, backpedal, and hop on right foot to the right

This is to improve changing of directions, body positioning, transitioning between skills

*Forward roll Over Shoulder:*

Start in 2-point stance, bend over and fall forward, as you are about to hit the ground roll to the left shoulder and come back to your feet

This is to develop whole-body agility

*Cartwheel:*

Get a running start then cartwheel, repeat on the other side

This is for whole-body agility

*Lunge Pattern:*

Lunge to the front, then to the side, then backwards while closings your eyes and shaking your head “no”

This is increase strength in motion, increase range in hips and improve dynamic balance

***Lesson 4, day 4 (Quickness)***

PLO: to apply quick and reaction time skills

Lesson Objective: to better your quickness and reaction time

Lesson Plan:

Write the test.

Do a quick warm-up (2-4 minutes)

Do all drills and exercises (20-25 minutes)

Cool-down and clean-up (3-5 minutes)

*Wheelbarrow Drill:*

Wheelbarrow, do as quickly as possible

This is to improve upper-body and core

*Scissor Jumps:*

Hands on head, kick one leg forward as high as possible, as it is returning to the ground, kick the other leg up, repeat

This is to enhance balance and improve quickness

*Lateral skaters:*

Feet together, then one foot pushes off to the side after landing immediately push the other leg in opposite direction, repeat

This is to improve cutting ability and quickness

Step into a lunge, put weight onto your front leg, spring forward on front leg and then land on two feet, repeat using opposite leg

This is to improve quickness and lower-body power

*Sequence Jumping Jacks:*

Do jumping jacks (sideways movements) then do the same thing except in front and back motions

This is to improve lower-body power and quickness

*Four-Point Pop-up:*

Start on the floor on your hands and knees, wait for signal and then pop up and land on two legs as fast as possible

This is to improve mental processing speed, total-body agility and quickness

*Lying-to-stand-up Pop-up*

Same thing as the four-point pop-up except you’re in a lying position on the ground (push-up position)

This is to improve mental processing speed, total-body agility and quickness