

BA GIRLS IN MOTION 12

District Name:	Kamloops
District Number:	SD #73
Developed By:	Sherry Stade
Date Developed:	April, 2005
School Name:	Valleyview Secondary School
Principal's Name:	Laura Graham
Grade Level of Course:	12
Number of Course Credits:	4
Number of Hours of Instruction:	120
Prerequisites:	None
Special Equipment Required:	Stereo, Mats, Skipping ropes, free weights, Swedish balls, tubing, TV
BOARD/AUTHORITY Approval Date:	2005/05/30

BOARD/AUTHORITY Signature:

Course Synopsis:

This course is designed to provide experiences necessary for students to begin and continue a safe and healthy exercise program. Along with providing regular physical activity, this course will examine participant's approach to health, physical well being and nutrition. This course is divided into three areas: aerobic activity, body awareness and nutrition. Cardiovascular units include Aquasize, step and dance aerobics, circuit, kickboxing, tae-bo, hip-hop, running, speed walking, stationary bike and skipping. Body awareness units include Swedish ball movement, yoga, Pilates, and strengthening through free weights and tubing.

Rationale:

We live in a society where technological advances (computers) make it very easy to lead a sedentary lifestyle so it is important we make a conscious effort to exercise. This course offers opportunities for students to experience and explore a wide variety of fitness routines. The exercises and movements covered in this fitness class will enable participants to improve their overall fitness levels by targeting the five components of fitness: Warm-up, cardiovascular endurance, muscular strength and endurance, flexibility, and relaxation. The students will also explore about physiology, kinesiology, nutrition and the latest exercise myths and misconceptions regarding exercise in general. Students will keep a journal to record their goals, and keep a record of their participation as we progress through various fitness routines. The atmosphere in this course will be a comfortable noncompetative atmosphere in which participants enjoy working out at their own pace. This course is about exposure to fitness facilities, exercise formats, and above all to enable students to help themselves to adopt a healthy lifestyle.

Organizational Structure:

Unit	Title	Time
1	Self Awareness	5
2	Cardiovascular Fitness	30
3	Muscular Strength and Endurance	30
4	Body and Mind	27
5	Nutrition	8
6	St. John's First Aid	10
7	Choreography	10
	Total	120

Unit Descriptions:**UNIT 1: Self Awareness****Time 5 Hours**

Achieving a fit, lean body requires a combination of exercise, healthy eating, common sense and dedication. Students will evaluate their current level of fitness as a starting

point to monitor future progress. Students will learn to get motivated by setting short and long term goals to focus on what they would like to achieve.

Curriculum Organizer – Personal Traits

It is expected that students will:

- Develop a positive self-image and develop an understanding of their abilities and limitations.
- Respect other abilities and beliefs
- Demonstrate a commitment to the program by attending regularly and participate in activities
- Understand the benefits of exercise and healthy lifestyles

Curriculum Organizer – Improving Individual Potential

It is expected that students will:

- Take personal responsibility for their own fitness
- Learn to modify exercises to meet their needs.
- Watch for fitness level improvements and increase intensity to keep satisfied and growing
- Set short and long term goals and monitor progress by keeping a fitness journal.
- Develop a strong work ethic, show confidence in new areas and experience new challenges.

Curriculum Organizer – Motivation

It is expected that students will:

- Be self directed learners
- Encourage and support participants in their fitness and health endeavors by recognizing and appreciating individual differences.
- Be aware of the positive effect that getting in shape will have on their mind, body and spirit.
- Understand and appreciate the good feeling that often results from exercise thereby helping them approach other parts of their lives with a positive attitude.
- Keep a fitness journal to self-monitor their goals.

UNIT 2: Cardiovascular Fitness

Time 30 Hours

The Cardio section of the class trains the cardiovascular system by elevating the heart rate into the Target Heart Rate Zone and maintaining it there for a minimum of 15

minutes. The heart rate is raised through vigorous, sustained aerobic exercise which incorporates the use of major muscle groups, especially of the lower body, in rhythmic movements. Exercises may be low impact walking on the spot, high impact, jogging, or a combination of both. Kickboxing will incorporate martial art moves in a high energy style with lots of front, side, and back kicks combined with jab, cross and hook punches. In a step class, students will be up and down on adjustable platforms following a set of maneuvers with arms and legs performing choreographed routines. Students will also have opportunities in the community to go cycling in a studio where they will be guided through an intense cycling journey on stationary bikes pedaling at different speeds and various inclines. Students will also be introduced to old fashioned military training classes called Boot Camp which involves basic exercises such as jumping jacks, push-ups, sit-ups and squats taught in a circuit training format. Students will be introduced to interval training where students will be performing high-intensity work outs in short segments mixed with recovery periods of less intense aerobic work. The Cardio section of the class is the most energetic and physically demanding part of the class.

Curriculum Organizer – Monitoring Heart Rate

It is expected that students will:

- Have an understanding of how the heart propels blood throughout the body to and from muscles.
- Be able to check the intensity of their workout by understanding maximum heart rate and keep it there for a particular period of time.
- Have an understanding of how to progressively raise the heart rate into a target heart rate and keep it there for a particular period of time.
- Be able to take their resting heart rate using a radial pulse check (wrist) or a carotid pulse (neck)
- Understand the difference between the two energy systems – Anaerobic and Aerobic.

Curriculum Organizer – Physiological and Psychological Benefits

It is expected that students will:

- Experience improved cardiovascular and overall fitness: cardiac output, increase in muscle size, and improved breathing capacity.
- Progressively change their program to increased duration and intensity to decrease total body fat and increase lean body muscle.
- Work joints through a complete range of motion with varying intensities to strengthen muscles and connective tissues.
- Become more self-confident in their physical abilities when they perform movements and routines successfully.
- Have a sense of achievement and well being as they achieve their fitness goals.

Curriculum Organizer – Warm-Up

It is expected that students will:

- Use low impact movements for 6-10 minutes to prepare their bodies for the vigorous cardio portion of the class.
- Understand the purpose of a warm-up: to lubricate joints, elevate heart rate, increase blood flow, and increase the temperature of connective tissue.
- Stretch the major muscle groups when their bodies are warmed up adequately: calves, quadriceps, hamstring, hip flexors, and lower back.
- Learn and monitor safety tips regarding body alignment, exercise technique, range of motion, and level of intensity.

Curriculum Organizer – Cool Down

It is expected that students will:

- Bring the training heart rate and respiration progressively down slowly to avoid blood pooling.
- Understand the meaning of recovery heart rate and when to check for it.
- Have an understanding that the cool down portion is the time to remove lactic acid build up by moving joints at a slower pace (reduce muscle soreness).
- Stretch out muscles well utilized in the cardio component: quadriceps, hip flexors, hamstring etc.

UNIT 3: Muscular Strength and Endurance Time 30 Hours

To improve muscular strength and endurance, students will be using free weights, their own body weight, tubing, and the Swedish ball. Training programs will focus more on muscular endurance using low resistance with higher repetitions. To develop muscular strength, exercises will be performed in a smooth, slow controlled manner with special attention to body alignment. Exercises will also be designed to provide muscle pairing-agonist and antagonist muscles will be worked so that strength and endurance is balanced. Correct breathing technique will be emphasized - exhaling during the contraction phase and inhaling during relaxation. The Swedish ball routine in this program will incorporate core stability, mobility, muscle balance, and flexibility to strengthen the back against injury. Students will also be educated on how to correct and maintain posture.

Curriculum Organizer – Technique and Principles

It is expected that students will:

- Demonstrate an understanding of movement mechanics (how movement affects muscles and joints).

- Understand body alignment and detect and correct errors in movement techniques,
- Understand the prime movers responsible for contraction is the agonist and the opposing muscle relaxes and is called the antagonist.
- Understand the difference between isometric (static) and isotonic (dynamic) muscle contractions.
- Understand the function and role that connective tissues play in movement (ligaments and tendons)
- Understand movement such as flexion, extension adduction and abduction.

Curriculum Organizer – Physiology and Weight Training Benefits

It is expected that students will:

- Recognize and name major muscle groups and bones in the body.
- Improve joint stability as their muscles, tendons and ligaments become stronger.
- Challenge themselves to perform at the top of their level and continue to increase intensity.
- Increase the strength of muscle through isometric and isotonic exercises using resistance.
- Increase tone of muscle through endurance isotonic exercises.
- Understand the following training principles: adaptation, cross training and progressive overload.

Curriculum Organizer – Swedish ball

It is expected that students will:

- Improve core stability to brace and support the spine, shoulders and pelvis
- Improve posture by balancing from four points to two points on the ball.
- Improve back health by strengthening the spinal stabilizers (deep abdominal transverses abdominus and lower back muscles).
- Improve mobility of the joints and flexibility of muscles by using the unstable base of support from the ball to draw on extra muscles to develop new skills.
- Demonstrate strength exercises in the following positions with the ball: seated on, standing with, supine on, abs on, sideway on, prone on, forward prone on, supine on the floor, and mobility and flexibility on the ball.

UNIT 4: Body and Mind

Time 27 Hours

Students will be introduced to two flexibility, strength, and relaxation exercise programs that focus on specialized sequencing of postures and focused breathing techniques. The practice of Ashtanga Vinyasa Yoga is a form of Hatha yoga which focuses on asana (posture), pranayama (breath control), and vinyasa (the linking of postures by breath and movement). Each session will begin with Suryanamaskara (Sun Salutation) to prepare for

the asanas, heat up the body, tone the muscles, increase respiration and heart beat. Students will learn to concentrate on their practice as they focus on their deep Ujjayi breathing and Drishti (gaze). Students are introduced to pilates which is a meditative exercise program that focuses on core strength. Students will learn how to control their powerhouse (abdominal and erector spinae) as a center point to perform all other poses. The pilates routine will start with exercise that focuses on the back, stretching, and then onto poses that work abdominals, hip flexors, arms and legs. Both Ashtanga Yoga and Pilate exercise programs require an incredible amount of concentration on specific breathing techniques to execute the exercise properly and focus on maintaining proper form with movement they will create a meditative practice.

Curriculum Organizer – Ashtanga Vinyasa Yoga

It is expected that students will:

- Learn the physical location of the three Bandhas (energy locks) and Prana (breathing) (Ujjayi breathing is produced when students breathe through their noses with their mouth closed).
- Understand the eight limbs of Ashtanga Yoga: ethical discipline, self-observation, postures, breath control, sense withdrawal, concentration, meditation, and absorption.
- Develop a thorough understanding of the Vinyasana flow.
- Become familiar with the dristis (gaze) in each position and the corresponding breathing.
- Learn the steps of the Suryanamaskara (Sun Salutation) A and B using directions for posture, breathing and gaze.
- Learn the various modifications of the standing poses and seated postures.

Curriculum Organizer – Pilates

It is expected that students will:

- Learn to concentrate on stabilizing their powerhouse (transverse abdominals and erector spinae).
- Initiate all pilates movement starting in the core, staying in the core, and ending in the core (pull abdominal muscles up and inward bringing your belly button toward your spine)
- Breathe correctly by expanding their rib cage through their mid-back.
- Combine exercises with mental concentration and the appropriate breathing technique (match your inhaling and exhaling with body movements).
- Strengthen their powerhouse to improve posture.
- Learn abdominal strengtheners, arm and leg series, warm-up and back stretches.

UNIT 5: Nutrition

Time 8 Hours

In this unit students will learn about their energy sources: energy in the food they eat, energy stored in their bodies, and energy expended throughout the day. Students will learn the difference between simple and complex carbohydrates and the function each has in their body. Students will be learning how to make the most out of carbohydrates as their energy sources, learn about ways to keep hydrated, and learn what and when to eat before, during and after workouts. Because water is one of the most important nutrients in the body, students will learn how water works in the blood, urine, sweat, saliva, and throughout the entire body. Students will also be examining the effectiveness of sports drinks and nutritious bars in the role of recovering electrolytes and enhancing carbohydrate absorption. Students will get hands on experience making their own sports drinks, protein shakes, and nutritious snacks.

Curriculum Organizer – Carbohydrates

It is expected that students will:

- Learn the difference between simple and complex carbohydrates.
- Understand the different abilities that sugars and starches have in fueling their muscles.
- Know and understand the role that glucose plays in muscle glycogen storage.
- Learn how to activate glycogen storage after exercising.
- Know the symptoms of depleted muscle glycogen.
- Understand proper eating habits to promote peak athletic performance.

Curriculum Organizer – Hydration, Sports Drinks, Snacks

It is expected that students will:

- Learn the role of water during physical activity and how to prevent dehydration
- Learn how water works in their bodies
- Examine the difference in nutritional value between traditional carbohydrates and store-bought sports drinks and energy bars.
- Make sports drinks using unsweetened fruit juices, salt and sugar.
- Make protein drinks and nutritious snacks.

UNIT 6: St. John First Aid

Time 10 Hours

Students will be provided with specific knowledge, skills and confidence that will enable them to recognize when first aid is needed and be able to give first aid at an emergency scene. Students will be certified in Emergency Level 1 First Aid. The compulsory components are: Emergency Scene Management, Shock, Unconsciousness and Fainting, Artificial Respiration, One-Rescuer CPR, Choking, and Severe Bleeding. First Aid Skills

will be taught with hands on practical experience, simulations, videos and work book activities. To be certified, students must have a minimum of 70% on the written exam and a *Satisfactory* on the practical sessions.

Curriculum Organizer – Emergency Scene Management

It is expected that students will:

- Apply the knowledge of terms used in first aid.
- Apply the principles of safety when giving first aid.
- Perform a scene survey.
- Perform a primary survey.
- Perform ongoing casualty care until hand over.

Curriculum Organizer – Shock, Unconsciousness and Fainting

It is expected that students will:

- Recognize and provide first aid for shock
- Recognize and provide first aid for unconsciousness
- Recognize fainting and provide first aid for fainting

Curriculum Organizer – Artificial Respiration and One-Rescuer CPR

It is expected that students will:

- Apply the basic knowledge of the respiratory system.
- Recognize breathing emergencies
- Perform mouth to mouth artificial respiration on an adult casualty.
- Perform one-rescuer Cardiopulmonary resuscitation (CPR) on an adult casualty

Curriculum Organizer – Choking (Adult)

It is expected that students will:

- Take measures to prevent choking.
- Recognize choking and provide first aid for a choking adult casualty.
- Provide ongoing casualty care until hand over for a casualty whose airway has been cleared.

Curriculum Organizer – Severe Bleeding

It is expected that students will:

- Use dressings and bandages in first aid procedures.
- Recognize severe external and internal bleeding.

- Provide first aid for wounds with severe external bleeding
- Provide first aid for amputations and care for amputated tissue.
- Recognize inadequate circulation to the extremities and provide the appropriate first aid.
- Provide first aid for internal bleeding.

UNIT 6: Choreography

Time 10 Hours

In groups students will choreograph a balanced 60 minute fitness class including warm-up, cardiovascular fitness, cool-down, muscular strength and endurance, and flexibility/relaxation. In their class, they must also include tips on correct alignment, posture, and mini-lecture that focuses on pertinent physiological, kinesiological, or nutritional information. Students must create a hard copy of their routine listing the purpose of each strength and flexibility exercise used and know the purpose and benefits of each exercise.

Curriculum Organizer – Warm-up

It is expected that students will:

- Prepare the body's systems for the upcoming workout
- Include 5 to 10 minutes of active but light large muscle movements through their full range of motion done at a moderate pace.
- Understand the “rehearsal effect” using similar exercises used in the cardiovascular portion of their routine (enhances performance and reduces chance of injury)
- Include stretching (only after muscles have been warmed up) focusing on muscles to be challenged the most in the cardiovascular portion: gastrocnemius, soleus, hamstrings, quadriceps, hip flexors, and lower back muscles.

Curriculum Organizer – Cardiovascular

It is expected that students will:

- Create a routine involving continuous movement of large muscle groups to raise the heart rate and maintain it in the target training zone.
- Create a routine lasting between 15 to 30 minutes to achieve conditioning benefits.
- Go through the three cardiovascular progressions for intensity variations: aerobic, warm-up, peak intensity aerobics, and the aerobic cool-down.
- Balance exercise combinations – opposing muscle groups, balance between stationary and traveling movements, primary joints should be working in all direction, limit the number of repetitions, and cue participants to monitor intensity of their movement.

Curriculum Organizer – Cool-Down

It is expected that students will:

- Bring the heart rate and respiration down to avoid blood pooling.
- Create a cool-down lasting 3 to 5 minutes consisting of gradually less intense exercises similar to those in the warm-up.
- Bring heart rate down to the low end of the target heart rate zone.

Curriculum Organizer – Strength and Endurance Exercise

It is expected that students will:

- Design resistance training program for muscular endurance to be repeated 8 to 12 times.
- Demonstrate proper technique and be aware of correct body alignment.
- Plan the routine so that opposing muscle groups are exercised.

Curriculum Organizer – Flexibility/Relaxation

It is expected that students will:

- Create a very relaxed atmosphere for participants.
- Perform stretches to improve flexibility for approximately 30 seconds.
- Stretch muscles that were primarily used during the class and muscles relating to good health and posture (deltoids, pectorals, lower back, hamstrings, calves, hip flexors, quadriceps, hip flexors, hip abductors, and adductors).

Instructional Component:

To promote enthusiasm, cooperation, motivation, and inclusion a variety of teaching styles will be incorporated into effectively presenting class activities.

Command Style:

This pattern of class organization the teacher stands at the front of the room and participants face the instructor. Students will follow the instructor's directions and movements regarding posture, rhythm, and duration of activities. This method is particularly effective for students learning new routines and exercises.

Practice Style:

The practice style of teaching provides opportunities for individualization and includes practice time and private feedback for each participant. While all students are working on the same task, individual participants can choose their own pace and rhythm. Once the task has been determined, the instructor can move around and give individual feedback where necessary.

Reciprocal Style:

This style involves the use of a partner to provide individual feedback to each participant. This style is very effective for fitness assessment: evaluating posture, body alignment, and partners can assist with strength and flexibility exercises. This style encourages social interaction which makes exercising fun.

Self-Check Style:

The self-check style of teaching relies on participants to provide their own feedback. Participants perform a task and can compare their performance against past performances. This style is great for recording target heart rate, and number of floor-exercise repetitions.

Inclusion Style:

This technique is very important to allow multiple levels of difficulty to be taught with in the same activity. All classes will be designed to incorporate modified exercise options for students with different fitness levels so that each participant can achieve maximum success. Students will be offered alternate positions for the different levels during stretching and strengthening exercises. In the aerobic segment of a routine, beginners can perform marches while the more advanced students can run. It is very important the all levels are demonstrated so everyone can have success.

Assessment Components:

Assessment of students in this course will fall into three categories.

Affective Domain	70%
Cognitive Domain	10%
Psychomotor Domain	<u>20%</u>
Total	100%

Learning Resources:

Valuable Books: Ashtanga Yoga, David Swenson, 1996
Yoga, The Path to Holistic Health, Dorling Kindersley, 2001
Secrets of Yoga, Dorling Kindersley, 2000
Swiss Ball, Maureen Flett, PRC Publishing, 2003
Get on the Ball, Marlowe & Company, 2002
Abs on The Ball, Healing Arts Press, 2003
Sport Stretch, Human Kinetics, 1997
Stretching, Sterling Publishing, 2002
Plyometric Exercises, Bitterseet Publishing, 1988
Women's Strength Training Anatomy, Delavier, 2003
Banish Your Belly, Butt, and Thighs, Rodale, 2000
Peak Conditioning, Rodale, 1997
Fitness Facts, Franks & Howley, 1989
The Power of Superfood, Prentice Hall, 1997
Sports Nutrition Guide Book, Human Kinetics, 1997
Pilates for Everyone, Rodale, 2002
The Pilates Body, Brooke Siler, 2000

Videos:

Target Specifics, Stability Ball

Winning Sports Nutrition 2000

Swiss Ball Athletics

Ashtanga Yoga "The Practice"

Core Balance

Windsor Pilates

Stott Pilates