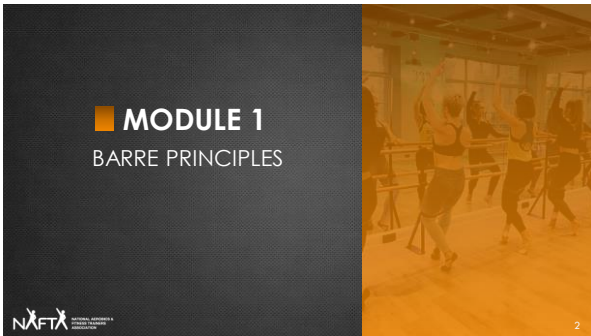
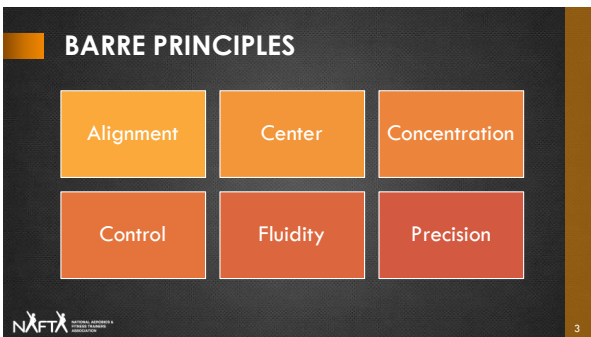




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ALIGNMENT

- Proper alignment is essential to safe and effective movement execution. For proper alignment, gravity pulls down through the vertical axis of our skeletal system rather than stressing muscles and soft tissue. This relationship directly affects the alignment of our head, shoulder girdle, spine, pelvic girdle, knees, ankles and feet (see neutral posture).
- Posture is the position we hold each joint of our bodies in against gravity. The pull of gravity is the primary reason people are misaligned.




4

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CENTER

- The center is the core, powerhouse and the middle. It is the foundation for all other movement.
- Core stability is required to move with control. Spinal and pelvic stabilization are at the heart of core stability, and our core is paramount to alignment.




5

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CONCENTRATION

- Concentrating on each movement of every exercise and connecting the mind to the body.
- Concentration is focusing on the task at hand and not thinking about the problems of the day.




6

6

CONTROL


- Neuromuscular control is simply the mind sending a signal to the muscle, which results in movement. Sloppy movements are controlled by forces of gravity such as momentum while intentional movement requires control.

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FLUIDITY


- Fluid and graceful movements require coordination. Movements should have the appearance of being executed with ease before we progress. One muscle engages and continues to work until the next muscle engages and then flows into the exercise.

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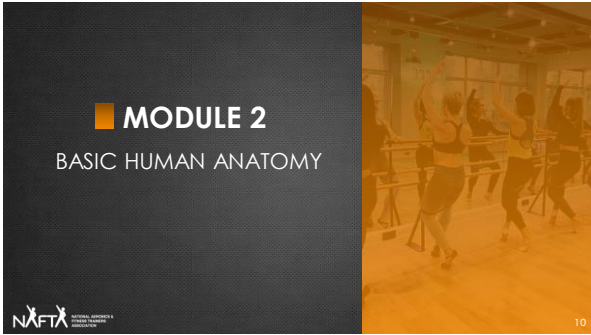
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PRECISION

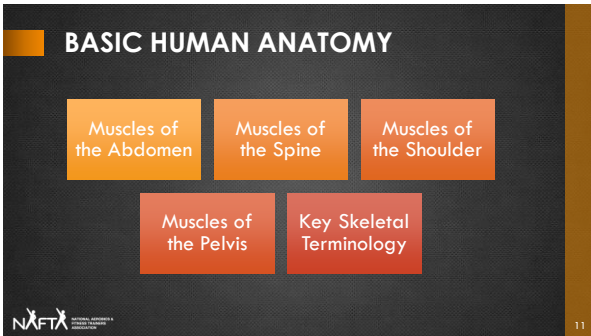
- Precision creates efficient and effective movement. Precision requires focus on perfect technique for every movement of every repetition of every exercise. Pay attention to details to maintain ideal alignment movement with perfections. You must also recover when necessary to continue with form that ensures safety, efficiency and economy of movement.

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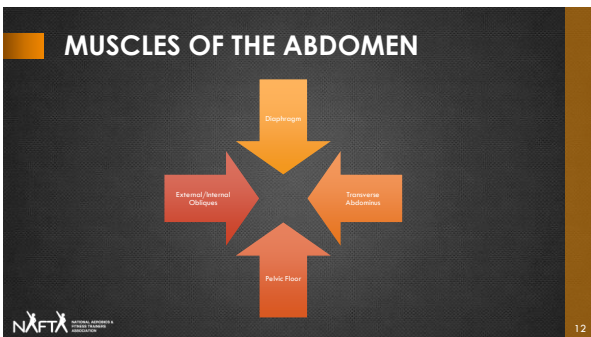
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MUSCLES OF THE SPINE

Erector Spinae	Quadratus Lumborum	Multifidus
Trapezius		Rhomboids

NAFTA logo and page number 13

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MUSCLES OF THE SHOULDER

Serratus Anterior	Pectoralis Major and Minor	Deltoids
Teres Major		Rotator Cuff Muscles

NAFTA logo and page number 14

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MUSCLES OF THE PELVIS

• Obturators	• Adductors	• Obturators
• Hamstrings Group	• Pectineus	• Hamstrings Group
• Quadriceps Group	• Gracilis	• Quadriceps Group
• Tensor Fascia Latae	• Psoas	
• Sartorius	• Iliacus	
• Piriformis	• Gemellus	

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KEY SKELETAL TERMINOLOGY

Spine – Cervical, Thoracic, Lumbar

Sacrum


Coccyx

Scapula

Pelvis

Pubic Bone


Sit Bones (Ischial Tuberosity)




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MOVEMENT TERMINOLOGY




PLANES OF MOTION




MOVEMENT TERMINOLOGY



MUSCLE FUNCTION TERMINOLOGY



TYPES OF MUSCULAR CONTRACTIONS

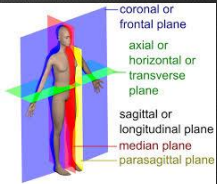


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PLANES OF MOTION

- **Sagittal** – divides the body into right and left halves (associated with flexion and extension)
- **Frontal** – divides the body from front to back (associated with abduction and adduction)
- **Transverse** – divides the body from top to bottom (associated with rotation)




coronal or frontal plane

axial or horizontal or transverse plane

sagittal or longitudinal plane

median plane

parasagittal plane



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MOVEMENT TERMINOLOGY

Flexion – decrease the angle between two bones of a joint	Extension – increase the angle between two bones of a joint	Rotation – the process of turning around the center or an axis	Lateral Flexion – lateral movement away from the midline of the trunk
Medial Rotation – rotation towards the center	Lateral Rotation – rotation away from the center	Abduction – movement away from the midline of the body	Adduction – movement towards the midline of the body
Transverse Abduction – lateral movement away from the midline of the body in a horizontal plane		Transverse Adduction – lateral movement towards the midline of the body in a horizontal plane	

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MOVEMENT TERMINOLOGY

Elevation – refers to the movement in a superior direction	Depression – refers to movement in an inferior direction	Protraction – refers to movement in an anterior direction	Retraction – refers to movement in a posterior direction
Pronation – rotation of the hand or forearm so that the surface of the palm is facing downward	Supination – rotation of the hand or forearm so that the surface of the palm is facing upward	Plantar Flexion – movement of the toes away from the shin	Dorsi Flexion – movement of the toes towards the shin

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MUSCLE FUNCTION TERMINOLOGY


<p>Agonist – muscle that causes a specific movement at a joint also known as the prime mover</p>	<p>Antagonist – muscle that causes the movement opposite of the agonist</p>
<p>Synergist – muscles that assist the agonist to produce movement at a joint</p>	<p>Stabilizer – muscles that stabilize a joint so the agonist can move efficiently</p>

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TYPES OF MUSCULAR CONTRACTIONS

- CONCENTRIC**
SHORTENING OF THE MUSCLE FIBERS
- ECCENTRIC**
LENGTHENING OF THE MUSCLE FIBERS
- ISOMETRIC**
MUSCLE FIBER LENGTH REMAINS THE SAME



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MODULE 3

ALIGNMENT & POSTURE




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ALIGNMENT

- Scoop**
- Rib Cage Position**
- Shoulder and Scapula Position**
- Neck Lengthened**



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PELVIC SCOOP

- Engaging the pelvic floor muscles (this means engaging the sling of muscles that connects from the pubic bone to the tailbone while squeezing them front-to-back, side-to-side and lifting them into the abdomen, the pelvic floor engagement naturally occurs in most individuals).
- Draw the navel in and up into the abdomen to flatten the abdominal area between the pubic bone and navel. This conscious "drawing in" or hollowing creates intra-abdominal pressure, which results in an unconscious engagement of the multifidus that increases stability of the lumbar spine. Since the pelvic floor muscles are connected to the transverse abdominus, a co-contraction of the two muscles will make the SCOOP most effective. Scooping should be maintained throughout all movement with breathing.
- Cue: Engage pelvic floor and flatten abdominals below navel.

Pelvis Arched
Inhale and rock your pelvis towards your tailbone.

Pelvis Neutral

Pelvis Tucked
Exhale and rock your pelvis towards your belly button.

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RIB CAGE POSITION

- The abdominals, including the obliques, transverse abdominus and rectus abdominus connect the rib cage to the hips.
- To prevent the ribs from popping or protruding up and to prevent the back bottom rib from lifting off the mat, we pull the bottom of the ribs towards the hips using the internal obliques (right rib to right hip and left rib to left hip). Remember when breathing, our rib cage naturally expands and lifts up during inhalation. This can result in a complete relaxation of the abdominals, which leads to a loss of core stability.
- Focus on lateral breathing – breathing into the back, bottom ribs. This allows us to maintain the abdominal engagement and core stability throughout each movement.
- Cue: Squeeze front ribs in and down and imprint back of ribs.

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SHOULDER AND SCAPULA POSITION

- Stabilizing the scapulae to ribcage is a result of multiple actions. The latissimus dorsi and middle and lower trapezius depresses the scapula to prevent the shoulders from straggling (elevation) thereby releasing tension from the neck and upper trapezius.
- The scapulae should remain flat on the back of the ribcage and move without protruding or winging.
- Cues: Squeeze underarms towards hips while moving the shoulders away from the ears. Additionally, reach your arms long beside the body.

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NECK LENGTHENED

- Chin remains slightly tucked for all movements to keep the back of the neck lengthened. When lying supine the neck retains its natural lordotic curve.
- Avoid over-flexion of the cervical spine by jamming the chin into the chest and avoid looking up at the ceiling when supine. When sitting with the spine vertical, focus on the spine getting longer and the crown of the head lifting towards the ceiling. When lying prone, avoid over-extension of the cervical spine.
- Cues lengthen the back of the neck and tuck the chin. Additionally, set your gaze on the knees and body. The chin remains a fist-width away from the chest.



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POSTURE

Neutral Posture

Spinal and Joint Alignment

Imprint

C-Curve

Ankle and Foot Alignment

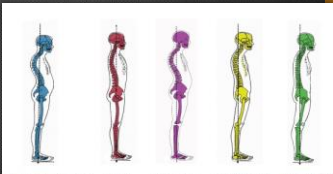
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NEUTRAL POSTURE

- Healthy spines have four natural curves – cervical lordosis, thoracic kyphosis, lumbar lordosis and sacro-coccygeal kyphosis (creates an S-curve from a side view). The natural curves of our spine provide us with shock absorption. The spine also reduces stress and fatigue on the muscles and joints. Neutral joints including the spine and pelvis provide the greatest functional core stability (spinal and pelvic stability); we are in the strongest and safest position for most movement.



Kyphosis-Lordosis Ideal Lordosis Sway Back Flat Back

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SPINAL AND JOINT ALIGNMENT

- Optimal posture and alignment minimizes stress on soft tissue and joints during static positions and dynamic movement. It also uses greater economy of movement requiring less energy. Imagine a line passing through the center of our body or our center of gravity. The body counterbalances load equally front to back and side to side. Gravity is always pulling us downward and contributing to misalignment and dysfunction. Since posture is habitual, increased body awareness by students, attention to these issues by the instructor and student and utilizing visual, verbal and tactile cues by the instructor to make alignment corrections is imperative to ensure the effectiveness and safety of barre movements.



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IMPRINT



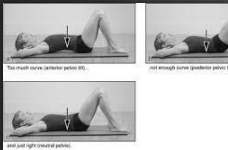
- Imprinted pelvis and spine refers to a slight posterior tilt of the pelvis where the natural lordotic curve of the lumbar spine is lengthened by engaging the internal obliques and abdominals. When lying supine, the lumbar spine will be in contact with the mat. An imprinted spine is not achieved by overextending the hips (engaging the gluteus maximus) and overusing the rectus abdominus. It is not necessary to lift the tailbone in an effort to drive the lower back into the floor. Neutral spine and pelvis provides the most core stability. However, neutral spine is challenging to achieve and maintain throughout movements for many participants with weak obliques and abdominals. In an effort to assist them stabilize the spine and pelvis, imprint might be a safer and an effective option when neutral cannot be maintained.



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C-CURVE



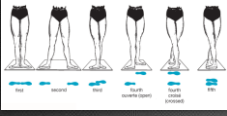
- Imprint your sacrum to the floor while keeping your hands on the backs of the legs to gently flex the spine uniformly from the cervical through the thoracic and lumbar spine.



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ANKLE AND FOOT ALIGNMENT



* Ankle and foot alignment can affect function throughout the body. Incorrect alignment can lead to dysfunction and pain in the knees, hips and back. Distribute weight on all three points of the foot including the big toe, pinky toe and heel. Think of the foot as a tripod and ensure that your arches are lifted. Additionally, the knees should align with the second and third toe. Always avoid pronation or supination at the ankles.

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BARRE CLASS DESIGN

1. Length of class is 30min., 45min., or 60 minutes
2. Class consists of eleven elements
3. Duration of each segment five to eight minutes per segment


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MODULE 4

BARRE CLASS DESIGN & SEQUENCE




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BARRE CLASS DESIGN

- Select two to four progressive movements of rhythmic variations per exercise:
 - Full range of motion
 - Half range of motion
 - Hold position in challenge zone
 - Hold position in challenge zone and move one inch
 - Pulse one inch in challenge zone
 - Circles in challenge zone
 - Rhythmic variations – see exercise selection
- Execute two to four sets of eight repetitions per variation




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BARRE CLASS STRUCTURE AND SEQUENCE

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    graph TD
      1[1. Warm-Up: include movements that prepare you for the workout] --> 2[2. Core Stability: planks and/or movements that require the core to stabilize the spine through a dynamic range of motion and movement]
      2 --> 3[3. Upper Body Floor: movements that strengthen the chest (push-ups), back, rear delt, triceps, biceps and/or shoulders]
      3 --> 4[4. Upper Body Standing: movements that strengthen back, rear delt, triceps, biceps and/or shoulders]
      4 --> 5[5. Thigh Work: movements such as plies in first, wide, or parallel position that strengthen the quadriceps and stabilize the spine and pelvis]
      5 --> 6[6. Seat Work Standing: movements that strengthen the gluteals, hamstrings and/or lower back]
  
```




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BARRE CLASS STRUCTURE AND SEQUENCE

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    graph TD
      7[7. Seat Work Floor: movements that strengthen the gluteals, hamstrings and/or lower back] --> 8[8. Core Strength: movements such as supine spinal flexion and seated V's to strengthen the abdominals]
      8 --> 9[9. Weights: can be adding to any seated or standing movement]
      9 --> 10[10. Gliders: can be adding to any seated or standing movements]
      10 --> 11[11. Stretches: passive and active stretches to increase flexibility in muscles worked to bring body back to homeostasis]
      11 --> 12[Include passive stretches throughout the workout]
  
```



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MODULE 5
BENEFITS OF BARRE



NFTX Functional Fitness Training

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BENEFITS OF BARRE TRAINING WHY DO THIS CLASS

- Besides sheer physical mastery, many benefits can be gained from the precise training methods of ballet. Ballet offers one of the most correct and holistic ways of training the body resulting in a heightened state of body awareness. The fitness industry over the past few years has favored Functional Fitness Training and this compliments the more rigid structure of ballet as an exercise format.

NFTX Functional Fitness Training

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BENEFITS OF BARRE TRAINING

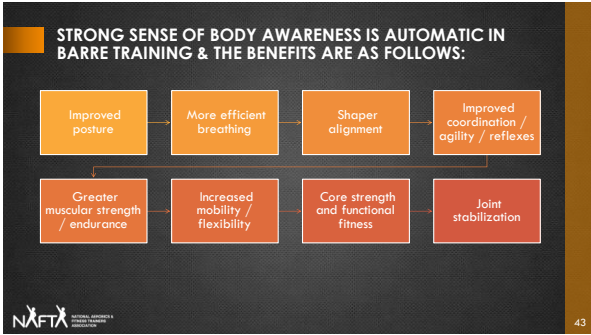
- Functional fitness exercises train your muscles to work together and prepare them for daily tasks by simulating common movements you might do at home, at work or in sports. While using various muscles in the upper and lower body at the same time, functional fitness exercises also emphasize core stability.



NFTX Functional Fitness Training

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- SPECIAL POPULATION AND CLIENTS WITH INJURIES**
- PREGNANCY
 - SPINE: Herniated Disks, Fused Disks & Scoliosis
 - SHOULDER: Rotator Cuff Injury
 - WRIST: Carpel Tunnel, Arthritic Wrists
 - PELVIS: Bursitis, Hip Replacement
 - KNEES: ACL/MCL Injury
 - FEET: Plantar Fasciitis (fash-ee-ahy-tis)
 - VERTIGO
 - OSTERPOROSIS
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PREGNANCY

- Make sure the client brings water to class and does not become overheated. She should be able to perform the "talk test," meaning she should be able to talk in full sentences during the workout. Her level of exertion should be mild to moderate; she should never exercise to the point of fatigue or exhaustion.

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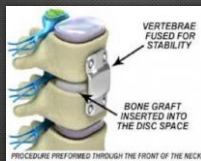
SPINE: HERNIATED DISKS

- Chronic herniations should be separated into non-symptomatic and chronic symptomatic. With all herniations a stronger core will help create better alignment and more disc space and alleviate pain.

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SPINE: FUSED DISKS

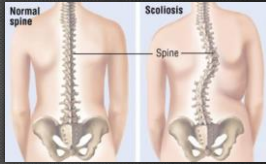
Don't expect individual articulation of each vertebra. There will also be limited range of motion during twisting and forward flexion.



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SPINE: SCOLIOSIS

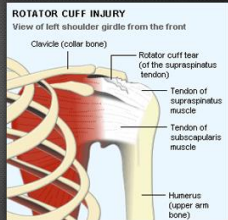
- No specific precautions should be made for this individual. With scoliosis, you often see imbalance in placement. Cue clients to be square and even but know it will not be perfect.



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SHOULDER: ROTATOR CUFF INJURY

- Rotator cuff issues, ranging from a small degree of tendonitis to complete tears. People with acute rotator cuff injuries should not attend a B@rre class.



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ROTATOR CUFF EXERCISE

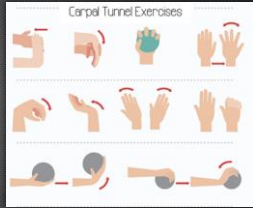
- Movement that can be done in class for participants that have rotator issues.



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WRIST: CARPEL TUNNEL

- Exercise and movement will help chronic carpal tunnel.



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WRIST: ARTHRITIC WRISTS

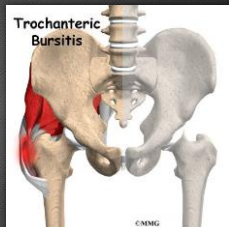
- People with arthritic wrists should be assumed to have arthritis of the cervical spine. Any plank position should be done with the wrists in a natural hand out position—consider putting blocks under the wrists to provide a broader base of support.



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PELVIS: BURSTITIS

- The only movements that should be avoided are those that cause pain. Advise small ranges of motion with the joint plugged into the torso. Avoid forcing any position.



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HIP REPLACEMENT

- Clients who have hip replacements are cleared by their doctor and physical therapist before attending class. Hip replacements age and wear down: A typical life span of a hip replacement is 10 years.



55

KNEES ACL/MCL INJURY

- Acute ACL or MCL injuries should not attend a B@rrre class. Be certain that anyone recovering from surgery has been cleared by their doctor before attending class. Refer to modified stances and foot placement.



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FEET PLANTAR FASCIITIS

- Plantar fasciitis has many contributing causes. Working the leg in natural stance is critical. Stretching calves and Achilles tendons is also critical.



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VERTIGO

- Participants with vertigo should gradually change positions and pause during a position change. The most difficult change in position is from lying down to standing. When clients move from lying to sitting, have them sit up and acclimate before standing. Remind the client with vertigo to breathe.

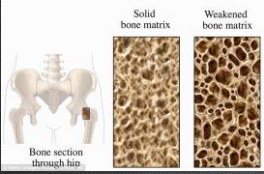


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OSTEOPOROSIS



- B@re will help strength muscles in the upper and lower body and will help build bone density. Increased muscle mass will also help the bones get stronger.


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MODULE 7

KEY TERMS, STANCE & POSITIONS



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1ST POSITION

- 1st Position Legs are turned-out with heels together. Arms are rounded to the front at shoulder height, fingertips almost touching. Imagery: feet are in a shape, and arms are holding a beach ball.



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2ND POSITION



- 2nd Position Legs are turned-out with heels a little wider than hip width. Arms are extended to the sides and rounded slightly to the front, shoulder height. Imagery: Feet are in a wide "V" stance and arms are "holding the world."



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3RD POSITION

- Third Position of the Arms. In the third position, the arms work opposite the legs. If your right foot is in front, your left arm should be raised. Raise your left arm over your head, slightly forward. Round your right arm to the side at belly button height. Keep the palm of your hand turned forward.



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4TH POSITION



• 4th position a position in which the feet are at right angles to the direction of the body, the toes pointing out, with one foot forward and the other foot back.



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5TH POSITION

• 5th position, the feet are turned out and pressed closely together, the heel of the one foot against the toe of the other.



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ATTITUDE



• Attitude in classical ballet is a position where the dancer is standing on one leg with the other lifted, usually to the front (devant) or back (derrière). The leg in the air is bent at the knee so that it forms roughly a 145 degree angle.

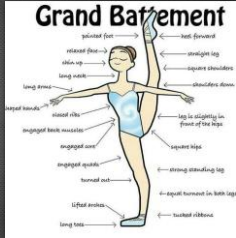


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BATTEMENT

- A big kick. Kick leg up and resist to lower back to starting position



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BARRE STANCE

- Legs are parallel and hip-width apart, toes point forward. Knees are bent slightly. Arms by the sides in a neutral position.



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COUPÉ



- Point one foot at the opposite ankle with legs turned out.

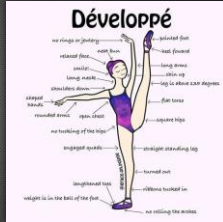


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DÉVELOPPÉ

- Lift leg to passé, extend out and lower back to starting position.

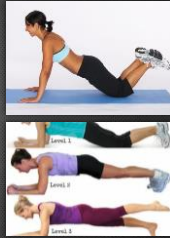


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HALF PLANK/HALF PUSH-UP POSITION

- Hands are planted on the mat, with arms straight, shoulder-width apart. Knees are on the mat planted behind the hips creating a diagonal line from the knees to the shoulders. Feet are parallel and together or crossed in the air.



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NATURAL STANCE

The Anatomical Position

The position of reference for all movements.

Also called the standing supine position



- Natural Stance Stand with the heels together and toes about 2 inches apart. This is the anatomically neutral position of the feet.

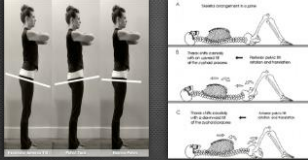


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NEUTRAL PELVIS

- The Pelvis is neutral when the pubic bone and hip bone (ASIS) are in the same vertical plane. This means that the pelvis is not tilted forward with an arch in the spine or tilted back in a tuck.



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PARALLEL

- Legs are together or apart with toes pointing forward.



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PASSÉ

- Point one foot at the opposite knee with legs turned out.



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PLANK/PUSH-UP POSITION

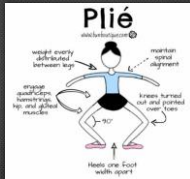
- Hands are planted on the mat with arms straight and shoulder-width apart. Shoulders are positioned over the wrists. The balls of the feet are planted on the mat with legs straight.



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PLIÉ

- Bend knees over toes (demi = half; grand = big).



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RELEVÉ

- Rise up onto the balls of the feet.



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TABLE

- Kneel on the mat with shoulders over the wrists, hips over the knees with a neutral pelvis.



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TABLE TOP

- Lying supine, knees raised and bent over hips, feet raised and in line with the knees.



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TENDU

- Slide foot forward leading with the heel; point foot; heel lifts, toes stay on floor.



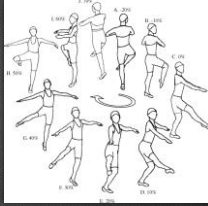
The heel is slightly under, with the toes in front of the line from the hip and wrist back in a pointed foot.

The toes are behind the line from the hip, ensuring the feet is tracking in a correctly pointed foot.

81

TURNED OUT

- Rotate the leg outward from the hip socket allowing the knee and foot to follow. When both legs are turned out, the heels point in toward the midline of the body.



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MODULE 7

MUSIC



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MUSIC


- Two methods of utilizing music:
 1. 8 count or 32 count phrasing
 2. Song Structure



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BEATS PER MINUTE FOR B@RRE

- 125 – 135 BPM for B@rre
- Establish BPM : Metronome - Count beats for 10 seconds x 6 = 60 second



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MAPPING MUSIC


Fitness music is built traditionally in 4/4 time – 4 counts per measure.
Fitness/dance counts two measures = 8 – 1,2,3,4,5,6,7,8

- A. Counting the music – downbeat
- B. Downbeat – first count of the measure – 1,2,3,4

32 count phrasing
8 measures of 4 counts example: song section

SONG STRUCTURE – MUSIC MAPPING

- A. Intro – BEGINNING of the song
- B. Verse – occurs at least once and possible three times
- C. Chorus – HIGHER intensity than the verse and occurs 2 – 3 times
- D. Bridge – transition, occurs once and can include one different movement or rhythm variation from verse and chorus
- E. Ending – conclusion of song example: song





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MODULE 8

CHOREOGRAPHY





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CHOREOGRAPHY VARIABLES


- Exercise Choice and Movement Variations
- Exercise Intensity – **VARIABLES**
 - Body Position
 - Challenge Zone
 - Isometric Engagement
 - Level Length
 - E unilateral

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CHOREOGRAPHY VARIABLE


- Range of Motion
- Volume: Reps, Sets, Duration & Time Under Tension
- Load – External Weight
- Tempo – Rhythmic Variables:
 - 1/1 – down 1 up 1
 - 1/3 – down 1 up 3
 - 3/1 – down 3 up 1
 - 2/2 – down 2 up 2
 - 4/4 – down 4 up 4
- Duration of Rest

 89

89

CHOREOGRAPHY VARIATIONS

- Full Range of Motion/Slow 2/2 or 4/4
- Full Range of Motion/Fast 1/1
- Shortened Range of Motion (Challenge Zone/Slow (1 inch)
- Shortened Range of Motion/ Fast (pulses)

 90

90

CHOREOGRAPHY PITFALLS

1. No or Too much Preview
2. Transitions are too fast or too many transitions
3. No options, no Rest, premature joint or muscle fatigue
4. Be mindful to include Balancing exercise between front and back of the body.

NAFTA

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YOUTUBE BARRE FULL BODY, UPPER BODY & LOWER BODY

[Click on video to play]

NAFTA

92

GLIDER WORKOUT

[Click on video to play]

NAFTA

93

BENDER BALL WORKOUT

Bender Ball - Core & Abs

Bender Ball - Core Workout

[Click on video to play]

NAFX

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94

DYNABAND WORKOUT

0:33

Abs & Butt

Butt and Thighs

Full Body with Bands

[Click on video to play]

NAFX

95

95
