**Curriculum #4 – TEACHING THE DANCE:**

**The Science & Art of Breaking**

**Course Title:**

TEACHING THE DANCE: The Science & Art of Breaking

Grade Level: 8-12 years (can also be as young as 5 years)

Assessment: Instructors, please observe students' participation and engagement in the activities. Please provide feedback through the survey. Thank you!

**Course Overview:**  
This course focuses on developing a strong understanding of the role of physics in movement fundamentals so kids can learn to move their bodies effectively and express themselves through dance. The lessons and activities allow students to practice what they’ve learned and create something unique that they can be proud of.

By working through all curriculum units, students will develop strong skills in movement, creativity, teamwork, problem solving, discipline and more—all while having fun!

Ultimately proving that you can help your student reach their full potential and express themselves through the dance/sport of breaking.

**PART I - THE FORCE OF MOTION**

**Course Mission:**

To help students reach their full potential through breaking. To demonstrate how the science of physics applies to executing the art of breaking moves.

**Course Objectives:**

For students to learn the basic steps of breaking. To introduce the concept of centrifugal force through a breakdance activity using ping pong balls and glasses, and to apply this understanding to back spin and flair breaking moves.

**Course Materials Needed:**

* Whiteboard or large paper and markers
* Table for demonstration
* Two ping pong balls
* Four transparent glasses of the same size (Example: <https://www.youtube.com/watch?v=p7D9MhNjC-Y>)
* Music, music players, speakers (e.g., CD player, laptop, iPad or iPhone)
* Recording device (e.g., digital camera or smartphone)
* A large open space for breaking
* Students to wear appropriate dancewear (e.g., comfortable clothing, knee and elbow pads, sneakers, clothing that’s spinnable)

Note: Ensure that all necessary materials are prepared and available before starting each lesson.

**Course Instruction**:

Lesson: Introduction to Centrifugal Force (5-10 minutes)

Have students gather in a circle and ask if they’ve ever heard of centrifugal force. If so, ask students to provide examples. Next, briefly explain what centrifugal force is in simple terms. You can say, "Centrifugal force is a force that makes objects move away from the center when they're spinning. Today, we'll learn about it and how it relates to breaking!"

**Course Activities**: Activities can take from 10-20 minutes each depending on the number of students and their ages. Adjust the timing of activities based on the needs and pace of your students.

Activity 1: The Spinning Ping Pong Ball Demonstration (10-15 minutes)

* Show the kids the two ping pong balls and four glasses displayed on the table. Explain that you'll demonstrate how centrifugal force works using these items.
* With each hand, place one glass over a ping pong ball and another glass over the other ping pong ball. Simultaneously, start spinning the glasses with the ping pong balls inside.
* While holding the two glasses securely, spin them upside down in a circular motion, lift the inverted (upside down) glasses to show the ping pong balls in motion inside, making sure the ping pong balls stay inside both glasses due to centrifugal force (and not falling out despite gravity’s pull).
* Place the inverted glasses with the ping pong balls on top of the empty glasses and allow the ping pong balls to fall into the empty glasses.
* Discuss with the kids what they observed during the demonstration and reinforce the concept of centrifugal force.

**PART II - THE DANCE: BREAKING MOVES**

**Course Objectives:**

* Learning Basic Steps - Students will learn some basic breaking moves
* Self-Expression Through Movement - Students will learn how to express themselves through movement and by using music
* Choreography and Performance - Students will learn the art of choreography and create their own dances which they can then perform solo or in a group

**Course Mission:**

To help your student develop important skills related to movement, performance, choreography and expression through music. By working through our lessons and projects, each student will be able to build confidence and express themselves in a brand new way.

Activity 1: Breaking Basics (10-20 minutes)

* Teach students some basic breaking moves that involve spinning or circular motions, such as the top rock or the six-step. Demonstrate each move step by step.
* Divide the kids into smaller groups and give them time to practice these moves under your guidance.

Activity 2: Applying Centrifugal Force to Back Spin (15-20 minutes)

* Explain the backspin breaking move to students, highlighting how it involves spinning on their back using centrifugal force to maintain balance.
* Demonstrate the back spin and guide students in practicing the move, ensuring their safety during the process.
* Encourage students to feel the centrifugal force at work as they spin and stay balanced.

Activity 3: Applying Centrifugal Force to Flair Move (15-20 minutes)

* Introduce the flair move, which involves circular movements of the legs and upper body. Explain how the concept of centrifugal force can be applied to this move to maintain momentum.
* Show students a slow-motion demonstration of the flair, breaking down the movements for better understanding.
* Have students practice the flair move, emphasizing how centrifugal force helps them execute the move smoothly.

Closure:

* Gather students back into a circle to briefly discuss what they learned here. Encourage students to always look for opportunities to learn.
* Ask if students have any questions about centrifugal force or breakdancing.
* Summarize the key points and reiterate how physics, creativity, discipline, self-expression & music are important in breaking moves.
* Congratulate students on their efforts and enthusiasm in both learning about the science and art of breaking.
* With these tools, your student will be ready to take on the world of movement and reach their full potential! Let’s turn those dreams into reality! Let’s get dancing!
* Thank them for their participation and cooperation. Wish them a great Breaking Week!