

**Tynker Programming 201 Curriculum Overview Table**

Lesson	Title	Topics
1	Introduction	Identify and order steps Use loops Create an alien-themed project
2	Loops and Animation	Use code blocks to animate Actors Add a background and music to a scene Solve coding puzzles Create animated projects
3	Creating a Scene	Use code blocks to animate Actors Add a background and music to a scene Solve a coding puzzle Create a Dance Party project
4	Jumping Over Obstacles	Use code blocks to program Actors to move in different directions Use negative numbers Apply knowledge of x- and y-coordinates
5	Storytelling	Use speech bubbles to make Actors have a conversation Use speech bubbles and delays to convey meaning and emotion Create a comic-book style conversation between characters
6	User Interaction	Use keyboard (web) or tilt controls (mobile) to move characters Create unique controls to move Actors
7	Guessing Game	Apply conditional logic to create an interactive quiz game Use conditional statements ("if", "if-else")
8	Rotation	Apply math concepts such as rotation and degrees Rotate and flip Actors
9	Alien Invaders	Discuss different types of games Make Actors move to random screen locations Apply math concepts such as degrees and x/y-coordinates
10	Music and Animation	Use code blocks to add background music to the main Actor in a scene Set how fast music plays

		Apply coding concepts to create musical projects
11	Instruments and Tempo	Discuss different instruments Set how fast music plays Use code blocks to create interactive music projects
12	Broadcasting Messages	Use code blocks to make Actors and the background play music Program Actors to send and receive messages Apply coding concepts to solve a puzzle module
13	Time Limits	Program a game to end after a specified number of seconds 2/3 Apply coding concepts to solve a puzzle module Use code blocks to create an arcade game.
14	Message Driven Programming	Use messaging code blocks to send multiple messages to Actors Program Actors to dance and perform different animations Apply coding concepts to solve a puzzle module.
15	Pop the Balloon	Create 2 different clicking games Use code block to create a balloon popping game Use code blocks to send and receive messages between Actors
16	Animation with Movement	Use code blocks to combine animation with movement Use variables Use code blocks to send a message to make an Actor move, animate, and play a sound Create a dancing game
17	Obstacle Course	Use code blocks to program Actors to move randomly across the Stage and bounce off the edge Use code blocks to program Actors to follow a mouse pointer (web) or touch location(mobile) Create an obstacle course game