

## **WMS Grade 7 Electives Course Descriptions 2019**

**GRADE 7 ART:** The Middle School art curriculum exposes students to drawing, painting, printing, color theory, sculpting, and mask making. The program aims to make all students art literate. Teachers will coach artists to attend to detail, explore materials and techniques, develop their own style of expression, and produce quality work. These studio courses teach skills and appreciation while exhibitions, contests and publications provide public recognition of student achievement.

**GRADE 7 DRAMA:** Students explore the dramatic process by working together to create a variety of characters and imagery. They play theater games that help them sharpen their acting skills such as body movement, vocal expression, listening and concentration, imagination and spontaneity. They learn how to “stage” their ideas to communicate to an audience, and in turn, they learn to look critically at the performances of others. Students work as a team to create improvisational dramas and prepared scenes, using their own experiences as sources, as well as poems, music, and written dialogue.

**GRADE 7 MUSIC / BEGINNING GUITAR:** This course is designed for the beginner guitar player. Here, we will learn how to read standard music notation, chord symbols, and tablature while playing melodies and chord progressions of traditional folk, rock, and contemporary pop songs. Students will learn the skills necessary to be able to play the music they are familiar with, with confidence. Each student will be assigned their own acoustic guitar.

**GRADE 7 ROBOTICS:** This course introduces students to basic concepts in engineering and computer science, utilizing the Lego NxT Mindstorms system and the NxT-G programming environment to design, model, and prototype robotic systems. Students begin by learning sturdy construction methods with Lego Technics beams through the design of a sturdy chair. The use of gears and other mechanisms to transform speed, torque, and motion are explored. The programming of microcomputers is then explored, applying sensors, motors, and sounds to solve a series of robotic design challenges. Students learn to model behaviors as algorithms, then implement the algorithms in code, learning concepts such as loops, decision trees, and signal thresholds in the process. Finally, these techniques are applied to one or more open-ended design challenges, such as a robotic creature, amusement park, transportation system or exploration voyage, which emphasize engineering systems. Throughout, students are introduced to the work of current leaders of robotics research, and the application of robotics to real-world applications such as navigation, medical prosthetics, and social interaction.