

# LSU Laboratory School

## Seventh Grade

As the middle year of Middle School, seventh grade is a time for students to continue to develop and grow as independent thinkers and learners. Instructors work together to provide meaningful lessons and experiences across the curriculum, ensuring that each student has the opportunity to make connections in learning. It is expected that all seventh graders will come to class prepared and be responsible for keeping track of homework, assignments, and due dates. Students should expect to spend 20-25 minutes a night on homework. Specific guidelines will be provided by teachers in their individual classes.

The following is a breakdown of the courses offered in seventh grade.

### Courses

#### **READING WRITING WORKSHOP:**

RWW is an opportunity for students to grow as independent readers and writers. This class provides a chance for all students to read works that interest and challenge them and to share those readings and their ideas about the readings with each other. In this way, students in RWW become a community of readers all working together to discover new genres, authors, characters, worlds, etc. This class also offers the opportunity for students to write and to talk about writing in a way that is free from insult and injury. We work together using the steps of the writing process to create strong and polished pieces of writing—some fiction, some non-fiction, some formal, some creative. Again, in this togetherness, we become a community of writers all working together to polish strengths and bolster weaknesses.

#### **SCIENCE: Life Science**

The content for science class in the 7<sup>th</sup> grade is Life Science. This is the first time that students study Life Science as a discrete science, and the beginning of the course focuses on the uniqueness of Life Science and the uniqueness of life. The class is based on the Louisiana Department of Education Grade Level Expectations and centered around 6 Essential Understandings: 1) Science is a human endeavor to explain natural phenomena using evidence; 2) Life Science is characterized by four main themes: Evolution, Structure and Function, Universality versus Diversity, and Equilibrium within Systems; 3) The organs and organ systems of the human body work together to maintain homeostasis; 4) Cell Theory and Evolutionary Theory are necessary to understand the details of each biological level; 5) Students should understand the basic functioning of their own body systems in order to make wise decisions about health; and 6) Students should be able to make informed decisions about stewardship of the planet.

The classroom uses living creatures and biological specimens to teach the concepts of Life Science as much as possible. Course assessment will include conceptual tests, lab work, projects, and other activities. The course will be divided into 8 units using 11 Criterion Referenced Study Guides. The course is meant to be a bridge between the more informal studies of Life Science in elementary school to the required high school course of Biology.

#### **SOCIAL STUDIES: American History**

The 7<sup>th</sup> grade social studies program strives to maintain a balance between breadth of content and depth of inquiry. In this class students practice making informed and reasoned decisions, gain social studies knowledge, and acquire skills that focus on rights, responsibilities, and respect. Seventh grade social studies focuses on American History

through a variety of topics designed to help students see chronological relationships and patterns of events, to understand historical perspectives of these events, and to analyze the impact of these events on past, present, and future lives. Students are also encouraged to see the connections that encompass their life---connections to the past, connections with other cultures, and connections with the world around them. They also use geography to understand the world, civics to learn about rights and responsibilities as members of a self-governing society, and economics to make reasoned judgments in a complex and changing world.

Social Studies Department Minimal Writing Competency for Grade 7: The student can write a multi-paragraphed response to a structured prompt dictated by the teacher. The student response should include a clear opening that restates the general nature of the question(s) asked, supporting details, and a clear closing that ties up any loose ends.

### **MATH: Pre-Algebra or Algebra I**

*Pre-Algebra:* Pre-algebra offers an in-depth, integrated approach to preparing students for Algebra and Geometry. Lessons and units cover the concepts in greater depth and provide many practical applications of skills and concepts. Throughout the courses of middle school mathematics, the following themes are found:

- a. Mathematics as problem solving
- b. Mathematics as numerical intuition
- c. Mathematics as reasoning
- d. Mathematics as connections
- e. Mathematics as communication

Students enrolled in Pre-Algebra should have mastery of skills and understanding of addition, subtraction, multiplication and division of whole numbers, fractions, decimals and negative numbers. Each of the operations listed above contains many imbedded skills. For example, a student who masters addition of fractions will be able to write equivalent fractions with a common denominator, simplify fractions, and change mixed numbers to improper fractions. They will be able perform the operations between the different sets of numbers as well. In other words, they should be able to add fractions to decimals, etc. Because this is a skills based course, homework is given on a regular basis for practice. Students are expected to have daily homework assignments completed for each class.

*Algebra I:* Algebra I is the first high school level mathematics course. It is designed to follow Pre-Algebra. Course material prepares students for Algebra II and Geometry, while laying the foundation for all higher mathematics courses. Equal attention is given to mastery of skills that are necessary for further mathematical exploration and understanding of concepts which underlie the mathematical content and have practical applications. Students are expected to practice and properly perform certain skills, explore and discover mathematical ideas and apply ideas and skills in problem situations. Students should enter the Algebra I course with a *firm* knowledge of operations with all real numbers (whole numbers, decimals, fractions and integers), an understanding of the order of operations, ratio and rate, familiarity with mathematical symbols used in algebraic representation, and some understanding of variable, algebraic expressions and equations. Above all, students should have the ability to perform operations with all numbers and a willingness to explore and practice new procedures. The coursework in Algebra I is built around the symbolic representation of patterns and the use of these representations to predict and solve problems. With this goal, Algebra I begins by focusing on skills and procedures such as writing, simplifying and evaluating algebraic expressions and writing and solving equations and inequalities. It then moves to an in-depth look at relations and functions. Next it focuses more closely on the linear pattern as it is found in certain situations, represented in

different ways (tables, graphs, and equations) and applied to real-world problems. Students learn skills such as solving equations, graphing ordered pairs, calculating slope and writing and graphing linear equations while exploring the underlying patterns and concepts. The final part of the course focuses on the quadratic pattern in much the same way, with an emphasis on skills necessary for dealing with this higher-level pattern. These include exponents, factoring and the quadratic formula.

**FOREIGN LANGUAGE: Spanish or French**

Language is communication and expresses culture. This course is a continuation of 6th grade Spanish or French where students learned about getting to know others, school, sports and leisure activities, and foods. Students are expected to communicate orally and in writing and to develop an understanding of the culture. Curriculum is divided into one review unit and four new major units, with one new chapter each nine weeks. In 7th grade students learn about family, clothing, places to go on vacation, and the house and chores. These units also include time for geography, seasonal activities, current events, and project