

Brown County Middle School

**8th Grade Course Guide
2021-22**



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STUDENT PLACEMENT

Student success in school is dependent upon several variables including student skill, student work ethic, correct placement, and parent support and encouragement. The school works to ensure that students have every chance to succeed. Based on grades, ILEARN, and other test scores, students have been recommended for placement in the appropriate level of math and science. *Administrative approval is required for change.*

HONORS Math & Science

Brown County Middle School offers an “HONORS” track in 8th grade for math and science. Students who meet the placement criteria will engage in Geometry and Biology for high school credit. Placement in “HONORS” classes requires that students meet the established evaluation criteria.

DAILY TIME SCHEDULE

Monday, Wednesday, Friday

SRT	8:15 -8:45
Period 1	8:49 - 9:45
Period 2	9:49 - 10:41
Period 3	10:45 -11:37
Period 4	11:41 -1:07
Period 5	1:11 - 2:03
Period 6	2:07 - 3:00

1st Lunch: 11:37 – 12:07

2nd Lunch: 12:07 – 12:37

3rd Lunch: 12:37 – 1:07

Trimester I	August 5 th – November 6 th
Trimester II	November 9 th – February 19 th
Trimester III	February 22 nd – May 20 th

DAILY TIME SCHEDULE

Tuesday, Thursday

Period 1	8:15 - 9:17
Period 2	9:21 - 10:19
Period 3	10:23 -11:21
Period 4	11:25 -12:55
Period 5	12:59 - 1:58
Period 6	2:02 - 3:00

1st Lunch: 11:23 – 11:53

2nd Lunch: 11:54 – 12:24

3rd Lunch: 12:25 – 12:55

Trimester I	August 5 th – November 6 th
Trimester II	November 9 th – February 19 th
Trimester III	February 22 nd – May 20 th

REQUIRED COURSES

<u>Subject</u>	<u>Days</u>
Language Arts 8	3 trimesters
Social Studies 8	3 trimesters
Mathematics 8	3 trimesters
Science 8	3 trimesters
Health & Fitness 8	1 trimester
College & Careers 8	1 trimester

ELECTIVES

<u>Subject</u>	<u>Days</u>	<u>Comments</u>
Ceramics 8	1 trimester	
Design & Printmaking	1 trimester	
Honors Art 8/Intro to 2-D Art	2 trimesters	teacher recommendation/ high school credit course
Automation & Robotics 8	1 trimester	
Eaglet Manufacturing	2 or 3 trimesters	“C” or higher in Middle Level Eng/Tech 7 and teacher recommendation high school credit course
STEM Lab 7/8	1 trimester	
Medical Detectives 8	1 trimester	
Intro to Human Anatomy 8	1 trimester	
Creative Computing 8	1 trimester	
Instrumental Music 8	3 trimesters	
Choraliers 8	1, 2, or 3 trimesters	
Advanced Music Tech 8	1 trimester	
Spanish I	1 trimester	high school credit course

REQUIRED COURSE DESCRIPTIONS

LANGUAGE ARTS

Language Arts provides an integrated study of literature, media, reading process, oral communication, writing process, and language, which includes grammar, usage, mechanics, and spelling as tools of effective communication. Student use of language is further developed as a tool for learning and thinking, as well as a source of pleasure. While the core language arts program is an integrated approach, time blocks focus on any of the following components: reading, literature, writing and language, and oral communication.

Language Arts 8

Language Arts, Grade 8, a course based on *Indiana's Academic Standards for English/Language Arts* emphasizing reading, writing, speaking and listening in interest- and age-appropriate content. Students begin to study the history and development of English vocabulary. They begin to compare different types of writing as well as different perspectives on similar topics or themes. They evaluate the logic of informational texts and analyze how literature reflects the backgrounds, attitudes, and beliefs of the authors. They read and respond to fiction selections, such as classic and contemporary literature, historical fiction, fantasy or science fiction, mystery or adventure, folklore or mythology, poetry, short stories, and dramas, and nonfiction selections, such as subject area books, biographies or autobiographies, magazines and newspapers, various reference or technical materials, and online information. Students self-select books of interest and read independently for enjoyment.

SOCIAL STUDIES

United States History – Growth and Development

In Grade 8, students study United States history, including a review of key ideas, events, and movements related to the discovery, exploration, and colonization of America, as well as the revolutionary and founding eras. Emphasis is given to the principles of the Constitution of the United States and other founding-era documents and their applications to subsequent periods of national history and to civic and political life; the constitution of Indiana; geographic and economic factors related to national development and westward expansion; and the changes brought about by the Civil War and Reconstruction period. Students examine major themes, issues, events, developments, and figures in United States history and explore their relationship to contemporary issues and current events.

Using geographic skills and technology to examine the relationship of geographic and economic factors, students name and locate the major physical and cultural features of the United States. Students examine the influence of artistic movements, scientific developments, and changes in technology on cultural life and describe the challenges faced and contributions made to

American society by social, racial, and cultural groups. Historical narratives are read and examined to identify multiple perspectives, interests, and points of view. Students evaluate a variety of information resources to distinguish fact from opinion and analyze cause and effect relationships. By analyzing primary sources (autobiographies, diaries, maps, photographs, letters, and government documents) and secondary sources (biographies and non-fiction books, articles, statistical data, geographic technology, and web sites), students form research questions and seek answers. Communication skills and charts, graphs, and other organizers are used to compare data and report their findings.

Social Studies 8

Eighth grade United States History emphasizes the interaction of historical events and geographic, social, and economic influences on national development prior to the twentieth century. Special attention is given to (1) Native American cultures and the pre-Columbian period; (2) colonial, revolutionary, and constitutional issues; (3) early national formation; (4) sectional divisions leading to the Civil War; (5) Reconstruction; (6) industrialization; (7) urbanization; and (8) immigration. In this course, students examine major themes, issues, events, movements, and figures in United States history prior to 1900 and explore relationships to modern issues and current events, for example: (1) antiwar movements in different periods in United States history, (2) the influence of inventions and economic innovations, and (3) Indiana's concurrent growth and development. Students will develop critical thinking and research skills by learning to use primary documents and community resources to identify, evaluate and apply appropriate data and reference information. This course also helps students develop an appreciation of historical preservation and a commitment to the rights and responsibilities of citizenship in a democratic society.

We the People 8

Students in this class must have demonstrated strong written and oral communication skills in seventh-grade language arts and social studies classes and are expected to work cooperatively in group settings. A more thorough understanding of the Social Studies 8 curriculum and the demonstration of higher level thinking skills are required.

The "We the People" program is an in-depth study of the United States Constitution and other founding documents, as well as the institutions of our government. The "We the People" program culminates with two competitions held at the end of the first semester against middle schools from across the state.

MATH

Students use rational numbers, irrational numbers, exponents, powers, roots, ratios, proportions, and percentages; solve simple linear equations and inequalities; graph functions and understand the concepts of slope and rate; construct shapes that meet given conditions and apply geometric concepts to solve problems; convert between units of measure; and use rates and scale factors to solve problems. They collect, organize, represent, and interpret relationships in data sets that have one or more variables and make decisions about how to solve problems and communicate their ideas.

Math 8

This class provides a review of the four operations with whole numbers, decimal numbers, and fractions. Students extend the study of ratio, proportion, integers, and number theory. More in-depth work with probability, geometry, algebra, and statistics is provided. Problem solving techniques are explored and applied throughout each unit.

Honors Math 8 (Geometry)

3 trimesters, 2 high school credits

This course provides for the use of geometric skills in a wide range of problem solving situations. Topics include: Points/Lines, Angles, Planes, Triangles, Quadrilaterals and Other Polygons, Circles, Transformations, and Three Dimensional Solids.

SCIENCE

Science provides learning experiences through which students begin to comprehend the nature of science as well as continue to develop, in concrete terms, their understanding of fundamental concepts and principles about the nature of science and technology, the physical setting, the living environment, the human organism, the designed world, and the common themes of science.

Science 8

Students in eighth grade understand how atomic structure determines chemical properties and how atoms and molecules interact. They explain how the water cycle and air movement are caused by differential heating of air, land, and water and how these affect weather and climate. They understand that natural and human events change the environmental conditions on the earth. They understand the predictability of characteristics being passed from parent to offspring and how a particular environment selects for traits that increase survival and reproduction by individuals bearing those traits.

Biology I

3 trimesters, 2 high school credits

Biology I is a course based on the following core topics: cellular chemistry, structure and reproduction; matter cycles and energy transfer; interdependence of organisms; molecular basis of heredity; genetics and evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

HEALTH AND FITNESS

Health & Fitness 8 (1 trimester)

It is important for our eighth grade students to continue to build on the foundation learned in 7th grade Health and Fitness. Students will be provided more pertinent and relevant facts and information that will help guide their decision-making process when it comes to their personal health and fitness. Health and Fitness education class is an integrated twelve week course that will provide students with the necessary information to develop the appropriate attitudes and behaviors that will ultimately lead to a more productive lifestyle.

During the physical education sessions, students will not only continue to work on basic motor skills for effective fitness and game play but will also delve into the strategies that will enhance performance. These sessions will continue to focus primarily on fitness education through fitness tests that measure strength, cardiovascular conditioning, agility, speed, and power. Students are required to dress out for each physical education session. Lockers will be provided for them to keep their belongings safe.

The health education sessions will continue to examine some of the most important health aspects facing teenagers today. We will continue to use the following units as our primary curriculum for education: growth and development, mental/emotional health, disease prevention, drugs and alcohol, relationships and personal health. The goal for these health education sessions is to reinforce the right behaviors, attitudes, and choices that will provide our eighth grade students with the tools needed to make healthy choices into adulthood.

College & Careers 8 (1 trimester)

College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways

ELECTIVE COURSE DESCRIPTION

Honors Art 8 /Introduction to 2-D Art (2 trimesters – 1 high school credit)

Students must be recommended for this course. If a student has an interest and is not recommended, he/she may request reconsideration. Students must maintain a C average in order to remain in this class. Teacher recommendation is required in order to advance to the second trimester, Introduction to Two-Dimensional Art, which is a high school credit course.

This course is designed to take the student beyond basic art concepts. A large variety of media such as painting, drawing, sculpture, ceramics, printmaking, textiles, and computer graphics will be used throughout the course. By exposing students to techniques and approaches to the visual arts not normally offered in the semester art course, students gain a greater understanding of art history and the effect society has had on the arts and visual expression.

Students taking Introduction to Two-Dimensional Art engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students (1) create works of art, (2) reflect upon the outcomes of those experiences, (3) explore historical connections, (4) write about the process, (5) make presentations about their progress at regular intervals, (6) work individually and in groups, (7) find direct correlation to other disciplines, and (8) explore career options in visual art. Students also identify ways to utilize and support art museums, galleries, studios, and community resources.

Ceramics 8 (1 trimester)

This trimester course will build upon what students have learned about in Visual Arts. It is a course where students will learn to make 3D Sculptures, and will incorporate the use of clay. Students will have a basic understanding of the history of clay, will build sculptures by hand and will throw pottery on a pottery wheel. This is a great way for students to explore art creating 3D objects.

Design & Printmaking 8 (1 trimester)

Students will explore a variety of ways to make prints and will explore and demonstrate ideas of design. Students will explore color theory, photoshop, visual communication, and font design.

Eaglet Manufacturing (2 or 3 trimesters – 2 high school credits)

Prerequisite:

- “B” or better in 7th grade Engineering course
- Must be a student in good standing in BCMS. You could be excluded if you have multiple disciplinary infractions.
- Teacher Recommendation

Eaglet Manufacturing will provide students will experience in running a small business while earning 2 high school credits. The student led business will produce t-shirts, banners, drinkware

and other custom products for the public. This course will also have a heavy emphasis on Advanced use of Autodesk Inventor. The class will be completing numerous projects using Inventor to become better equipped before moving to the next level of Engineering at the high school.

Automation & Robotics 8 (1 trimester)

This is an entry level course designed to introduce students the basics about robotics and automation. Students will use VeX robotics materials to become familiar with how robots work and how they are programmed. Programming will use C++ coding language for all VeX materials. Students will create and operate an assembly line as a capstone project. The course will also dive into using robotic arms to do various tasks. The robotics arms that we use are Dobot Magicians.

STEM Lab 8 (1 trimester)

This course will be in addition to their regular science and math classes. The STEM course is not an add-on math, science, or technology course. Students will explore mini-units that are unique to their grade level. The goal of STEM is to foster a learning environment in which students are guided to produce original ideas, objects, and structures according to certain specifications using concepts and skills from math, science, and technology.

Medical Detectives 8 (1 trimester)

In this course, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction. Students solve medical mysteries by performing a brain dissection and conducting crime scene investigations! Students use tools such as the engineering design process, an engineering notebook, and electrophoresis to solve a murder. Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a “crime scene.” They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health. Students will learn how creative thinking and problem solving can change their world!

Intro to Human Anatomy 8 (1 trimester)

This course is a study of human anatomy which develops a basic understanding of the structure and function of body organs and systems and their interactions. Course topics include:

- The Language of Human Anatomy
- DNA, Cells, and Tissues of the Human Body
- Muscular and Skeletal Systems
- Senses and Nervous System
- Cardiovascular and Respiratory Systems

- Digestive and Urinary Systems
- Hormones and the Endocrine System
- Physiology and Exercise

Creative Computing 8 (1 trimester)

Creative Computing is designed to give students an introduction to the programming languages of Javascript and Python. This course is a great opportunity for students to get exposure to these two programming languages. Common application of these languages in industry is seen in game development, app design/development, and artificial intelligence. Students will write and run programs in the browser using the CodeHS online editor. Students will be able to write text based or block based programs in JavaScript with Karel and text based programs in Python with Tracy. Students will also create several web pages using HTML and CSS. These webpages will be hosted on the CodeHS website so that they can keep a running portfolio of their creative projects, and easily share their programs.

Instrumental Music 8 (3 trimesters)

Instrumental Music 8 is an ensemble that is open to all 7th graders currently enrolled in Instrumental Music, or by special exemption by the instructor (see Mr. Finley for details). The group will perform music that is more challenging and builds upon the skills learned previously in 7th grade. This group will also have more opportunities to perform outside the school day than in previous years.

Choraliers 8 (1, 2, or 3 trimesters)

Choraliers is an advanced-level performing ensemble for students in 7th and 8th grade. This ensemble will expose students to a challenging repertoire.

Advanced Music Technology 8 (1 trimester)

This course will focus more deeply on digital audio, MIDI sequencing, and notation software. Students will design and produce independent and group projects in the areas of music composition, performance, and recording. Completed products will use Finale, Ableton Live, and Garage Band software. Hardware components such as Makey-Makey's, Novation Launch Pad, and MIDI Keyboard will also play an integral role in the creation of this music.

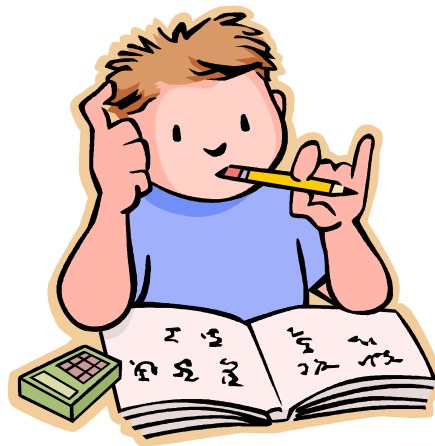
Spanish I (1 trimesters - 1 high school credits)

Prerequisite: First semester grade of A or B in Honors Language Arts 7 or an A in Language Arts 7

Diploma Preparation: Fulfills ½ of the World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.

Spanish I will introduce students to effective strategies for beginning Spanish language learning and to various aspects of target language culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to

basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of the target language culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding the target language and culture outside of the classroom.



NOTES