

PROJECT-BASED COURSES

8th Grade STEM

This is a project-based course designed to develop and strengthen the analytical and numeric skills of 8th grade students via STEM (science, technology, engineering, and math) education. Through technological projects, students will learn how systems work together to solve problems and capture opportunities.

In the 21st century, math, science, and technology are becoming more integrated, and systems are becoming more and more dependent upon each other than ever before. Electronic systems are interacting with natural systems as humans use more and more monitoring devices for scientific reasons.

Electrical systems are interacting with mechanical and fluid power systems along with robotics as manufacturing establishments become increasingly automated. This course gives students a general background on the different types of systems but concentrates more on the connections between these systems and careers in the STEM field.

Units of Instruction:

- Measuring: standard and metric systems
- Technological Systems: How They Work
- Leadership, Management and Interpersonal Skill
- Technological Systems: Issues and Impacts
- Technological Systems Interactions
- Maintaining Technological Systems
- Technological Systems and the Designed World
- Space Transportation Systems and robotics via *The Lego Project*
- Drone Technology

This course is yearlong and blocked every other day for (82 min). The course is team taught with a Science and STEM Coordinator teacher.



PROJECT-BASED COURSES

7th Grade ELArt

This is a project-based course designed to develop and strengthen the language and writing skills of 7th grade students via the fine arts. Art history and the exposure to a range of artists and their use of certain mediums will also be a starting point for the hands-on projects.

Painting, drawing, and printmaking as well as sculptural mediums like clay are all part of the experience.

Students will utilize the writing process as they prepare poetry, narratives, and informational and persuasive texts for publication. Additionally, students will use the Mac Lab daily to produce writing, conduct research, and create multimedia presentations. The course is team taught with an English and art teacher.

This course is yearlong and blocked every other day for (82 min). The course is team taught with a ELA and Art teacher.

7th Grade AgriMath

This is a project based course designed to develop and strengthen the analytical and numeric skills of 7th grade students via Ag and Mathematics. It is a course designed to prepare students to meet their present and future responsibilities as family and community members, consumers, home managers, and wage earners. The goal is to educate students to think constructively, make sound decisions, solve problems, and manage resources. The course will also focus on process skills such as: communication, leadership, thinking, and management. In this year-long course, students will use critical thinking skills and apply them to mathematics and science and begin to answer all of these questions. By focusing on agriculture: Animal Science, Plant and Environmental Science, and Leadership, students will discover how careers in math and science are growing and will continue to evolve in the 21st century. Students will also review principles of the National FFA Organization and how the leadership learned in FFA can lead to personal growth and career success. ***This course is yearlong and blocked every other day for (82 min). The course is team taught with a math and agriculture teacher.***



SOUTHERN CAYUGA JR/SR HIGH SCHOOL

2018-19 JR HIGH SCHOOL PROGRAM



JR HIGH SCHOOL
STUDENTS FOLLOW A
MODIFIED BLOCK
SCHEDULE THAT
ENHANCES PROJECT-
BASED LEARNING

SOUTHERN CAYUGA JR HIGH PROGRAM

PROJECT-BASED LEARNING

What is project-based learning?

Project-based learning is an instructional model that involves students in investigations of 'real-life' problems that culminate in authentic products. Projects that make for stronger classroom learning opportunities can vary widely in subject matter and scope, and can be delivered at a wide range of grade levels. A few defining features of project based learning:

- Projects grow out of challenging questions
- Projects put students in an active role such as: problem solver, decision maker, and investigator
- Projects serve specific, significant educational goals
- Projects can bring community businesses in as a partner to the school

Project Based Courses

7th grade - AgriMath

7th grade - ELArt

8th grade - STEM

Course descriptions can be found on the reverse side of the pamphlet

P₃ R₁ O₁ J₈ E₁ C₃ T₁

B₃ A₁ S₁ E₁ D₂

L₁ E₁ A₁ R₁ N₁ I₁ N₁ G₂

SAMPLE JR HIGH SCHEDULES

Blocked course (82 minutes every other day)

7th Grade Schedule			
Advisory	7:40-8:00		Days
Block #1	8:03-9:31	English 7 Soc Studies 7	AC BD
Block #2	9:34-10:59	Science 7 Math 7	AC BD
Lunch	10:59-11:29		ABCD
Block #3	11:32-12:57	AgriMath ELArt	AC BD
Period 10	1:00-1:41	Health PE	AC BD
Period 11	1:44-2:24	Band/SH/ReTeach Chorus/SH/ ReTeach	AC BD

8th Grade Schedule			
Advisory	7:40-8:00		Days
Block #1	8:03-9:31	Spanish 1 Math 8 or Math 8E	AC BD
Block #2	9:34-10:59	Soc Studies 8 English 8	AC BD
Lunch	10:59-11:29		ABCD
Block #3	11:32-12:57	Science 8 STEM 8	AC BD
Period 10	1:00-1:41	Studio Art OR SH/ReTeach/PE	ABCD AC/BD
Period 11	1:44-2:24	Band/SH/ReTeach/ PE Chorus/SH/ ReTeach/PE	AC BD

****Enriched Math 8**

Prerequisite:

- 90% or above each MP in Math 7
- Teacher recommendation

*Students will follow the Math 8 curriculum until NYS

OUR 7TH AND 8TH GRADE SCHEDULE

In an effort to better personalize and enhance student learning at the Jr High School (grades 7 & 8) level, we follow a modified block schedule. This schedule primarily allows us to offer most of the core area classes (Math, Sci, SS & ELA) during the morning hours.

Each day, students will begin with an advisement period from 7:40-8:00am. Our block schedule will contain many courses held for 82 minute periods, thus reducing the number of classes/transitions students have in a day and allowing more time for student project work.

Students in need of extra assistance in Math & ELA will be enrolled in a re-teach class offered every other day during block 3 or period 10/11.

The goal of Reteach is to provide 7/8 students the opportunity to master essential skills and knowledge in Math and/or ELA before moving on to the next level. Teacher(s) will meet with students who are struggling with a concept to provide additional time and attention to content curriculum and homework.



SCHS Mission statement: *The mission of Southern Cayuga Jr/Sr High School is to create an environment that is conducive to personal and academic excellence.*

*This will be accomplished by creating a school community that embodies the principles of being: **Safe, Respectful, Responsible, and Kind.***