

Gray Matter Fall 2018 - Course Catalog

Monday/Wednesday

Engineering

Teacher: Laura Woolley

Grades: 6, 7, 8

Class Schedule: Monday/Wednesday

Class Time: 10:45 - 12:15 pm

Duration: 1.5 hours per week, 32 wks

Fee(s):

Full Tuition

Supply Fee

\$990.00

\$0 – supplies are included in tuition

Description:

Students review simple machines to see how they are used for energy transference in more complex machinery. Students use the Engineering Design Process on their many designs throughout the class. They will work together to create simple and complex Rube Goldberg machines. When learning about various forces, they will apply their knowledge of bridge design and construction to determine which bridge design is the most robust.

Your students learn about:

- Energy transference and simple machines
- Perspective, orthographic, isometric and CAD drawings
- Tension, compression, torque and shear, how these forces interact with structures, and design basics used when dealing with these forces.
- Various materials and fasteners available, the strengths and weaknesses of each, and how to choose the best material and fasteners for your design.
- Various tools, including basic and power tools, necessary safety instructions, and how/when to use them.
- The Engineering Design Process

Toward the end of the year, students apply the knowledge gained in class and the Engineering Design Process to build something lasting for the school. The class is very interactive and student-driven, with a lot of activities built into the curriculum.

The class focuses on the design and build process.

Prerequisites:

None

Homework:

Students can expect to spend 1-3 hours per week.

Class Materials:

No textbook for this class

All handouts are provided by teacher. The materials fee of \$50 is included in the tuition.

Standard notebook paper (spiral or loose leaf, student's preference), binder, and pens

We are using the eGFI (engineering Go For It) website resources: <http://www.egfi-k12.org/about/>

Payment Options:

1. Full tuition of \$990.00 due at time of registration.
2. Semester tuition of \$495 due at time of registration and second semester payment of \$495 due by January 15th
3. Monthly payments of \$110. First month is due at time of registration. Subsequent monthly payments of \$110 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Middle School Math (Section 1)

Teacher: Habib Saidane

Grades: 6, 7, 8, 9

Class Schedule: Monday/Wednesday

Class Time: 9:30 – 10:45 am

Duration: 2.5 hours per week, 32 wks

<u>Fee(s):</u>	<u>Full Tuition</u>	<u>Supply Fee</u>
	\$720.00	\$0

Description: In Middle School Math, you master fractions (when starting at the Epsilon level) or decimals (starting at the Zeta level) or negative numbers, order of operations, and solving for the unknown (when starting at the Pre-Algebra level). (See the placement tests below to help you pick the math level on which you should begin.) Together we use discovery learning and hands-on activities to understand the basic concepts for your level. This helps you obtain a deeper understanding, life-long learning, and a functioning knowledge of how to use math as the problem-solving tool for which it is designed.

We have what is called a flipped classroom, meaning you watch the lesson using the learning website www.sophia.org at home and attempt the first page of the workbook for that lesson. This prepares you for our classwork and helps you to ask questions on anything you don't understand. I help you figure out where and why you may be struggling, then individualize the teaching for you. I want you to know, "**Yes, You CAN do math!**"

I help my students to work at a pace appropriate for their abilities. I believe there is no such thing as "behind in math." You are where you are, for who you are, this moment. The question becomes, "Where do you want to go from here?" I'm available to help you achieve your mathematics goals. If your goal is to finish the level you are on within the school year, you should be averaging a lesson per week (video, online quiz, practice page, review page, and test). The in-class activities are based on a pace of one lesson per week.

What do I buy? Which Math-U-See level do I pick? We use the Math-U-See curriculum and manipulatives. Students are required to have the student workbook and test book (sold on the Math-U-See website as a student pack) prior to the first day. **Just a caution**, it can take a couple of weeks to arrive through the mail. I provide the teaching textbooks, manipulatives, and any supplementary material. Both Epsilon and Zeta require mastery of the basic operations of adding, subtracting, multiplying, and dividing.

Go to www.mathusee.com/ to find free placement tests.

Prerequisites: None

Homework: Students can expect to spend about 1 hour per week on math outside of class. They will be asked to watch the chapter lesson at home before starting each new chapter. They will be expected to complete all lesson practices, honors lessons, systematic reviews, chapter tests, and occasional unit tests.

Class Materials: Math-U-See Epsilon Student Pack.
OR Math-U-See Zeta Student Pack.
OR Math-U-See Pre-Algebra Student Pack.

You can find the student workbook and test book at <http://store.mathusee.com/>

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Middle School Math (Section 2)

Teacher: Habib Saidane

Grades: 6, 7, 8, 9

Class Schedule: Monday/Wednesday

Class Time: 11:00 am – 12:15 pm

Duration: 2.5 hours per week, 32 wks

<u>Fee(s):</u>	<u>Full Tuition</u>	<u>Supply Fee</u>
	\$720.00	\$0

Description: In Middle School Math, you master fractions (when starting at the Epsilon level) or decimals (starting at the Zeta level) or negative numbers, order of operations, and solving for the unknown (when starting at the Pre-Algebra level). (See the placement tests below to help you pick the math level on which you should begin.) Together

we use discovery learning and hands-on activities to understand the basic concepts for your level. This helps you obtain a deeper understanding, life-long learning, and a functioning knowledge of how to use math as the problem-solving tool for which it is designed.

We have what is called a flipped classroom, meaning you watch the lesson using the learning website www.sophia.org at home and attempt the first page of the workbook for that lesson. This prepares you for our classwork and helps you to ask questions on anything you don't understand. I help you figure out where and why you may be struggling, then individualize the teaching for you. I want you to know, "**Yes, You CAN do math!**"

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What do I buy? Which Math-U-See level do I pick? We use the Math-U-See curriculum and manipulatives. Students are required to have the student workbook and test book (sold on the Math-U-See website as a student pack) prior to the first day. **Just a caution**, it can take a couple of weeks to arrive through the mail. I provide the teaching textbooks, manipulatives, and any supplementary material. Both Epsilon and Zeta require mastery of the basic operations of adding, subtracting, multiplying, and dividing

Go to www.mathusee.com/ to find free placement tests.

Prerequisites: None

Homework: Students can expect to spend about 1 hour per week on math outside of class. They will be asked to watch the chapter lesson at home before starting each new chapter. They will be expected to complete all lesson practices, honors lessons, systematic reviews, chapter tests, and occasional unit tests.

Class Materials: Math-U-See Epsilon Student Pack.
OR Math-U-See Zeta Student Pack.
OR Math-U-See Pre-Algebra Student Pack.

You can find the student workbook and test book at <http://store.mathusee.com/>

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Middle School Math (Section 3)

Teacher: Habib Saidane

Grades: 6, 7, 8, 9

Class Schedule: Monday/Wednesday

Class Time: 1:00 – 2:15 pm

Duration: 2.5 hours per week, 32 wks

Fee(s):

Full Tuition

Supply Fee

\$720.00

\$0

Description:

In Middle School Math, you master fractions (when starting at the Epsilon level) or decimals (starting at the Zeta level) or negative numbers, order of operations, and solving for the unknown (when starting at the Pre-Algebra level). (See the placement tests below to help you pick the math level on which you should begin.) Together we use discovery learning and hands-on activities to understand the basic concepts for your level. This helps you obtain a deeper understanding, life-long learning, and a functioning knowledge of how to use math as the problem-solving tool for which it is designed.

We have what is called a flipped classroom, meaning you watch the lesson using the learning website www.sophia.org at home and attempt the first page of the workbook for that lesson. This prepares you for our classwork and helps you to ask questions on anything you don't understand. I help you figure out

where and why you may be struggling, then individualize the teaching for you. I want you to know, "**Yes, You CAN do math!**"

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What do I buy? Which Math-U-See level do I pick? We use the Math-U-See curriculum and manipulatives. Students are required to have the student workbook and test book (sold on the Math-U-See website as a student pack) prior to the first day. **Just a caution**, it can take a couple of weeks to arrive through the mail. I provide the teaching textbooks, manipulatives, and any supplementary material. Both Epsilon and Zeta require mastery of the basic operations of adding, subtracting, multiplying, and dividing.

Go to www.mathusee.com/ to find free placement tests.

Prerequisites: None

Homework: Students can expect to spend about 1 hour per week on math outside of class. They will be asked to watch the chapter lesson at home before starting each new chapter. They will be expected to complete all lesson practices, honors lessons, systematic reviews, chapter tests, and occasional unit tests.

Class Materials: Math-U-See Epsilon Student Pack.
OR Math-U-See Zeta Student Pack.
OR Math-U-See Pre-Algebra Student Pack.

You can find the student workbook and test book at <http://store.mathusee.com/>

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Middle School English

Teacher: Julie Poe

Grades: 6, 7, 8

Class Schedule: Monday/Wednesday

Class Time: 3:00 – 4:15 pm

Duration: 2.5 hours per week, 32 wks

Fee(s):

Full Tuition

Supply Fee

\$720.00

\$50

Description:

This class includes grammar, reading, and vocabulary. We read several novels during the year plus short stories and poetry. We will build skills in a variety of ways, including written exercises, games, discussions, group activities, and creative demonstrations of knowledge.

The following is a TENTATIVE and partial list of novels for 2018-2019. (You do not need to purchase these since I will have a classroom set.)

- *Bud Not Buddy* by Christopher Paul Curtis
- *A Single Shard* by Linda Sue Park
- *Gathering Blue* by Lois Lowry
- *Walk Two Moons* by Sharon Creech

NOTE: Students can take this course for up to 3 years. The textbooks, vocabulary, and literature will not be the same from one year to the next.

Prerequisites: None

Homework: Students can expect to spend 1–4 hours per week, depending on student pace.

Class Materials: Textbook: *Building Vocabulary Skills, 4th edition* Author : Sherrie L. Nist **SKU/ISBN:** 1-59194-188-1
(*Vocabulary Plus is not required, but you might find it worth the five dollars.*)

3-ring binder devoted to this class only
Standard notebook paper
Pens/pencils
Colored pencils
Optional: laptop or other writing device

\$50 supply fee for instructor to provide materials throughout the year. I will provide a classroom set of the novels we read so that we can all use the same edition. If a student wants to keep a particular book, he can buy it from me for \$5.

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Writer's Workshop

Teacher: Julie Poe

Grades: 6, 7, 8

Class Schedule: Monday/Wednesday

Class Time: 9:30 – 10:45 am

Duration: 2.5 hours per week, 32 wks

Fee(s):

Full Tuition

Supply Fee

\$720.00

\$0

Description:

My goal is to take the dread out of writing! We will do all kinds of exercises and activities to explore our voices and to improve our mechanics and style. This class will include some gentle work on spelling, but spelling or handwriting do not determine a student's success as a writer. We will actually be writing often during the class period, so students are encouraged to bring a laptop or other device to class to do their writing.

NOTE: This class does NOT use the WriteShop Curriculum.

Prerequisites:

None

Homework:

Students can expect to spend 1–2 hours per week.

Class Materials:

3-ring binder devoted to this class only
Standard notebook paper
Pens/pencils
Colored pencils
Optional: laptop or other writing device

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Middle School Spanish

Teacher: Julie Poe

Grades: 6, 7, 8

Class Schedule: Monday/Wednesday
week, 32 wks

Class Time: 11:00 – 12:15 pm

Duration: 2.5 hours per

Fee(s):	Full Tuition	Supply Fee
	\$720.00	\$30

Description: This class is designed for students who have little or no experience with Spanish. Above all, we are going to have fun discovering this beautiful language. We will also enjoy some of the culture (especially food!) of several Spanish-speaking countries.

Prerequisites: None

Homework: Students can expect to spend 1-2 hours per week.

Class Materials: 3-ring binder devoted to this class only
Notebook paper
Pens/pencils
Colored pencils
Internet access at home for homework assignments

No textbook is required.
The supply fee of \$30 allows the teacher to provide resources and materials..

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.

Introduction to Formal Logic

Teacher: Laura Woolley

Grades: 6, 7, 8

Class Schedule: Monday/Wednesday

Class Time: 9:30 – 10:45 am

Duration: 2.5 hours per week, 32 wks

Fee(s):	Full Tuition	Supply Fee
	\$720.00	\$0

Description: After providing an introductory overview of logic fundamentals, students will study propositions and their relationships. Students translate statements from ordinary language to categorical syllogism and test these arguments for validity. Concepts are cumulatively mastered, each new idea requiring the student to employ concepts from previous lessons. Students also learn about the importance of using clear, precise, and purposeful terms in their assertions and arguments. Understanding the role language plays in all arguments is essential. Defining terms is a must when practicing logic!

Some of the concepts covered include:

- Formal vs. informal logic
- Deductive vs. inductive reasoning
- Categorical vs. propositional logic
- The Three Acts of the Mind
- Relationships of Opposition
- Relationships of Equivalence
- Syllogisms
- Defining terms

The skills gained in this class help students to more fully evaluate information encountered in higher-level education. Additionally, they should be able to draw their own conclusions, rooted in the basic understanding of what constitutes a valid argument and what does not.

Prerequisites: None

Homework: Students can expect to spend 1-3 hours per week.

Class Materials: **NEW Textbook:** ?????

1 1/2" binder
Lined paper
A set of 5 dividers
Index cards
2 pencils

NOTE: Each student needs to bring with them on the first day of class the class materials listed below and a NEW copy of the textbook. The textbook has consumable exercises.

Payment Options:

1. Full tuition of \$720.00 due at time of registration.
 2. Semester tuition of \$360 due at time of registration and second semester payment of \$360 due by January 15th
 3. Monthly payments of \$80. First month is due at time of registration. Subsequent monthly payments of \$80 on 9/1, 10/1, 11/1, 12/1, 1/1, 2/1, 3/1, 4/1. No tuition is due in May.
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