Established in 2006
Dear Spectrum Middle School Students and Parents/Guardians:

Our course registration guide has been prepared as a tool for you to use in planning for the next school year. It not only prepares students for next year but for the future as well. Before graduation from Spectrum High School, it is imperative that all students are equipped with the necessary skills to be successful at the next level.

Regardless of what that "level" may be, a 2-or 4-year college or university, vocational training, military service, or immediately into the workforce, an important part of the preparation process begins with course registration. When selecting courses, please consider two critical questions:

- What are the courses I need in order to ensure I meet Spectrum’s graduation requirements?
- What are the courses I should take to best prepare me to achieve my goals and dreams after graduation?

Course planning is truly a team effort that involves parents/guardians, students, and staff. The faculty and staff at Spectrum Middle School look forward to assisting in this process. Carefully planning now will serve students well at Spectrum High School and in their post-secondary lives.

Thank you for choosing Spectrum. We look forward to assisting you in making good academic decisions that sets your child on a path for future success.

Mr. Greg Heinecke
Middle School Principal
small school.......BIG RESULTS

**SPECTRUM HIGH SCHOOL ADMINISTRATION**

Mr. Dan DeBruyn – Executive Director
Mr. Mark Leland – High School Principal
Mr. Greg Heinecke – Middle School Principal
Mr. Rick Peterson – Athletic Director/Facilities
Mr. Darrell Skog – Dean of Students/Transportation
Mrs. Emily Patnode – Coordinator of Curriculum and Instruction

**SPECTRUM HIGH SCHOOL GUIDANCE OFFICE**

- **Ms. Susan Matheson**  
  Grades 7-8
- **Mrs. Amanda Sitron**  
  Grades 9-10
- **Mrs. KellyAnn Lockrem**  
  Grades 11-12
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Online Registration for 2018-2019 School year

- The portal will be open from March 12 – March 23, 2018.
- Students register online for their 2018-2019 courses. Directions found on the www.spectrumhighschool.org under For Students > Guidance Office > Class Registration
- Guidance office will enter required courses. Required courses and elective choices should equal 36 units.
- Middle School students must choose elective courses for semester one and semester two. If choosing alternate electives, enter in order of preference.
- For students who need assistance or do not have access to a computer at home, members of the Spectrum High School guidance staff will be available on select days to assist them.
- After completing your registration-print, sign, and return the REQUEST SUMMARY Form to the Guidance Office by Friday, March 23, 2018.

*By signing the Request Summary Form both the student and parent agree that the student intends to remain enrolled in the courses requested for the duration of the term.

If students need assistance with registering for courses, or do not have access to a computer at home, the following days have been set aside to come to the guidance office. Students should come in on the day designated for their graduation class:

- Class of 2020  Wednesday, March 14, 2018
- Class of 2021  Thursday, March 15, 2018
- Class of 2022  Friday, March 16, 2018
- Class of 2023  Tuesday, March 20, 2018

Need support from the Guidance Office?

Contact guidance staff based on your graduation class

Ms. Susan Matheson  Classes of 2023, 2024
Mrs. Amanda Sitron  Classes of 2021, 2022
Mrs. KellyAnn Lockrem  Classes of 2019, 2020
Spectrum Middle School Planning Chart

Planning for the Present.
Use the following chart to review what courses you’ll take in middle school.

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<td>6 Physical Education 6</td>
<td>Algebra I</td>
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<td>Essential Math (if recommended by teacher and/or based on test scores)</td>
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<td>Physical Education 7</td>
<td>Essential Math (if recommended by teacher and/or based on test scores)</td>
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<td>Art</td>
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Spectrum High School Math Course Pathways 6th-12th

Graduation Requirement: Three full years of Math in High School (3 credits)

- **6th Grade**: Foundational Math
  - Pre-Algebra
  - Linear Algebra
  - Non-linear Algebra
  - Geometry
  - Algebra II
- **7th Grade**: Pre-Algebra
- **8th Grade**: Linear Algebra, Algebra I
- **9th Grade**: Non-linear Algebra, Geometry
- **10th Grade**: Geometry, Algebra II
- **11th Grade**: Algebra II, Intro to Stats CaSH, Mathematical Thinking CaSH, Mathematical Applications
- **12th Grade**: Algebra II, College Algebra I CaSH, College Algebra II CaSH, Calculus CaSH

*This path is re-evaluated every year in order to best place students in a class that meets an appropriate level of rigor and success.*

Note: These students will need to take two electives to get the required math credits.

*Electives Available 10th-12th after Algebra II Completion*
Spectrum Middle School - Sixth Grade Courses

Computer

Quarter Intro to Coding 6  
5666  
*Grade: 6*

This course introduces our students to computer programming basics and computational thinking. Utilizing lessons from www.code.org and Google CS First (which utilizes MIT’s Scratch Program), students work to create games and interactive stories using cause and effect relationships and problem solving techniques. This course helps to promote and increase the critical thinking skills required when beginning to code using a specific programming language.

Quarter Tech 6  
5856  
*Grade: 6*

Students are introduced to and practice using the different technology resources they will use at Spectrum High School on a regular basis, including Schoology, Infinite Campus, Email, Google Apps, and more. The course also incorporates lessons in typing and digital citizenship. In this class, problem-solving, collaboration, and critical thinking skills are reinforced on a regular basis as students are immersed in project-based learning.

Elective

AVID Grade 6  
556-1, 556-2 (Year-long course)  
*Grade: 6*

AVID is a required course for all 6th grade students. Students will be introduced to the AVID system in 6th grade. This will include learning and developing skills and strategies needed for success throughout their academic career. Some of these skills and strategies include: organization, collaboration, critical thinking, writing and reading strategies, along with study skills.

Academic Study Hall  
9-1, 9-2 (Year-long course)  
*Grade: 6*

*Dual enrollment with choir.*

Academic Study Hall is intended to meet the needs of students who seek a quiet, structured environment to individually complete assignments. Students are expected to arrive to class with work to complete on a daily basis.

*To be paired with a choir.*
Quarter Life Skills 6

This course covers the basics of what Health is and how you can gain total wellness. For 6th graders the class starts with the well known Botvin Life Skills (Level 1) which covers the topics of social skills, decision making, and becoming assertive and many more. These are skills that aren't always learned in everyday life. The hard cover textbook that we are using is Glencoe Health, and this is the 2011 edition. The chapters that we will be talking about from that book in 6th grade are: understanding wellness, taking charge of your health, personal health, and physical activity and fitness.

Service Learning

It is the mission of the Spectrum High School Service Learning program to empower and unify our communities through service, education, and action. The course is graded with in-class activities as they relate to each group, and outside community outreach hours. All students are required to participate in a Service Learning group.

Fine Arts

Quarter Art 6

This 9 week introductory course is designed to give students a sampling of various art forms that emphasize and introduce the elements and principles of art. Students will learn about art history while learning basic techniques for painting, drawing, and sculpture work.

Beginning Band

Beginning Band is available for all students in 6th grade. Previous knowledge of an instrument or how to read music is NOT required. With the help of the band director, students will select instruments at the required Instrument Placement Night in August. Certain instruments (especially alto saxophone and percussion) will be limited to a finite number of students in order to create balanced instrumentation. Students will begin their instrumental and musical growth by learning the basics of instrument care and maintenance, note naming, instrumental technique, rhythmic vocabulary, ensemble skills, and rehearsal etiquette. Students perform two concerts a year at night, and attendance is mandatory. All 6th grade students are required to participate in choir and/or band.
Choir 6  
*5376-1, 5376-2 (Year-long course)*  
*Grade: 6*

This ensemble requires a commitment to excellence in vocal music performance. A wide range of choral literature will be explored from various periods and cultures with the goal to perform at the highest possible level. Students are required to perform in a minimum of two concerts. All 6th grade students are required to participate in choir and/or band.

Language Arts

**Literature 6**  
*2216-1, 2216-2 (Year-long course)*  
*Grade: 6*

Students will experience and analyze texts across a variety of genres, such as historical fiction, poetry, short stories, informational texts and essays.

**Writing 6**  
*2286-1, 2286-2 (Year-long course)*  
*Grade: 6*

Students will write across a variety of genres, using the writing process, while learning and developing in the six traits of writing.

Mathematics

**Foundational Math**  
*1136-1, 1136-2 (Year-long course)*  
*Grade: 6*

Student will develop skills in the following areas; expressions and patterns; integers; rational numbers; equations and inequalities; proportions and similarity; percent; linear functions; probability and predictions; statistical displays; volume and surface area; measurement and proportional reasoning; polygons and transformations.
Physical Education/Health

**Phy Ed 6**  
5186-1, 5186-2 (Year-long course)  
*Grade: 6*

This course will provide an opportunity for students to participate in a variety of sports and games designed to teach teamwork, movement skills and to increase fitness levels. Emphasis is placed on the development, enjoyment, and appreciation of physical activity, leading to lifelong fitness and personal well being.

**Phy Ed 6A**  
76-1, 76-2 (Year-long course)  
*Grade: 6*  
*Prerequisite: Dual-enrollment in band*

This course will provide an opportunity for students to participate in a variety of sports and games designed to teach teamwork, movement skills and to increase fitness levels. Emphasis is placed on the development, enjoyment, and appreciation of physical activity, leading to lifelong fitness and personal well being.

Science

**Science 6**  
3166-1, 3166-2 (Year-long course)  
*Grade: 6*

This course will cover topics of physical science. Students will complete units that include motion and forces, energy and matter, properties and interactions of matter, waves, electricity and magnetism. Students will be introduced to the 15 concepts of science, technology and society, and the design and engineering process.

Social Studies

**Social Studies 6**  
4196-1, 4196-2 (Year-long course)  
*Grade: 6*

Students study Minnesota history and its government, placing the state and its people within the context of the national story. They engage in historical inquiry and study events, issues and individuals significant to Minnesota history, beginning with the early indigenous people of the upper Mississippi River region to the present day. They examine the relationship between levels of government, and how the concept of sovereignty affects the exercise of treaty rights. They analyze how the state's physical features and location of resources affected settlement patterns and the growth of cities. Drawing on their knowledge of economics, students analyze the influence of a market-based economy at the local and national levels. They learn about the unique role Minnesota played, and continues to play, in regional, national and global policies.
Computer

Digital Tech 585 (Semester course)
Grade: 8

This class builds upon the digital literacy skills learned in Tech 6. Students focus on expanding their skills in word processing, building spreadsheets, creating presentations, organizing their files, typing, and digital citizenship. This course also includes a coding unit; it moves students from simple "drag-n-drop" programming/theory to actually writing some code (ex: web design and/or animations/game design). In this class, problem solving, collaboration, and critical thinking skills are reinforced on a regular basis as students are immersed in project-based learning.

Electives

AVID Grade 7 707-1, 707-2 (Year-long course)
Grade: 7

Prerequisite: application, interview, and qualification process

Students will refine short- and long-term goals and begin taking an active role in their learning. Students will also start working on intrapersonal and interpersonal skills, as well as formal and informal speech. They will expand their knowledge bases of note-taking in relation to studying and test preparation.

Note: Students in the AVID Elective Course will receive their English-language arts writing standards as a part of the AVID curriculum. The Elective course meets the requirement of the Writing class. Additional knowledge and skills may come during Sting Time.

AVID Grade 8 708-1, 708-2 (Year-long course)
Grade: 8

Prerequisite application, interview, and qualification process

Students will refine previous goals, focusing on their transition to high school as part of a college preparatory path. Students will transition from active learners to leaders. Other areas of focus include increasing the use of technology and building upon their test preparation and test-taking knowledge.

Note: Students in the AVID Elective Course will receive their English-language arts writing standards as a part of the AVID curriculum. The Elective course meets the requirement of the Writing class. Additional knowledge and skills may come during Sting Time.
**Service Learning**  
525-1, 525-2 (Year-long course)  
Grades: 7-8

It is the mission of the Spectrum High School Service Learning program to empower and unify our communities through services, education, and action. The course is graded with in-class activities as they relate to each group, and outside community outreach hours. All students are required to participate in a Service Learning group.

**Academic Study Hall**  
48-1, 48-2 (Year-long course)  
Grades: 7-8

Academic Study Hall is intended to meet the needs of students who seek a quiet, structured environment to individually complete assignments. Students are expected to arrive to class with work to complete on a daily basis.

**Academic Study Hall A**  
9-1, 9-2 (Year-long course)  
Grades: 7-8

Dual enrollment with a choir.

Academic Study Hall is intended to meet the needs of students who seek a quiet, structured environment to individually complete assignments. Students are expected to arrive to class with work to complete on a daily basis.

To be paired with a choir.

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**Fine Arts**

**Art**  
586 (Semester course)  
Grade: 7

This semester long course is designed to give 7th graders a more in depth sampling of various art mediums both 3D and 2D that emphasize the elements (line, form, color, value and shape) and principles of art (pattern, rhythm, balance, emphasis, proportion and unity). Students will also gain a general overview of art history throughout the semester.

**Choir**  
533-1, 533-2 (Year-long course)  
Grades: 7-8

Prerequisite: Audition required – students must demonstrate ability to match pitch

This ensemble requires a commitment to excellence in vocal music performance. A wide range of choral literature will be explored from various periods and cultures with the goal to perform at the highest possible level. Students are required to perform in a minimum of two concerts. Student placement is at the discretion of the choral conductor.
Concert Band  
612-1, 612-2 (Year-long course)  
Grades: 7-8

Concert Band is available for students in 7th or 8th grade who have completed 6th Grade Band or Concert Band at Spectrum or have completed at least one year of band at another school. An audition may or may not be required. Students will continue their musical growth by expanding instrumental range, instrumental technique, rhythmic vocabulary, ensemble skills, and rehearsal etiquette. This course includes daily ensemble classes and the potential for a required 20-minute sectional or individual lesson once a week. Sectionals are a time during the day when a student leaves a different academic class for specific, small group instruction with students of like instruments. When combined with consistent at-home practice, sectionals help drive individual instrumental improvement and growth. Students perform two concerts a year at night, and attendance is mandatory.

Symphonic Band  
601-1, 601-2 (Year-long course)  
Grades: 7-8

Prerequisite(s): Completion of at least one year of band; Audition required (see band director for details)  
Fees: Instrument; Accessories and materials specific to instrument

Symphonic Band is available for students in 7th or 8th grade who have completed 6th Grade Band, Concert Band, or Symphonic Band at Spectrum, or have completed at least one year of band at another school. An audition is required for placement in Symphonic Band. Students will continue to hone musical, instrumental, and ensemble skills in an advanced format utilizing band music of expanded intricacy and difficulty. A main goal of Symphonic Band is to prepare students for eventual placement in Wind Ensemble beginning in 9th grade. This course includes daily ensemble classes and the potential for a required 20-minute sectional or individual lesson once a week. Sectional are a time during the day when a student leaves a different academic class for specific, small group instruction with students of like instruments. When combined with consistent at-home practice, sectionals help drive individual instrumental improvement and growth. Students perform two concerts a year at night, and attendance is mandatory.

Language Arts

Literature 7  
222-1, 222-2 (Year-long course)  
Grade: 7

Students continue to experience and analyze texts across a variety of genres, such as historical fiction, poetry, short stories, informational texts and essays.

Literature 7 Honors  
226-1, 226-2 (Year-long course)  
Grade: 7

Prerequisite: Complete application and teacher approval

Students continue to experience and analyze texts across a variety of genres, such as historical fiction, poetry, short stories, informational texts and essays at an accelerated pace.
Literature 8

*Grade: 8*

Students will move forward with their experience of analyzing texts across a variety of genres, such as historical fiction, poetry, short stories, informational texts and essays.

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Literature 8 Honors

*Grade: 8*

**Prerequisite: Complete application and teacher approval**

Students will move forward with their experience of analyzing texts across a variety of genres, such as historical fiction, poetry, short stories, informational texts and essays at an accelerated pace.

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Writing 7

*Grade: 7*

Students will continue to write across a variety of genres, using the writing process, while learning and developing in the six traits of writing.

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Writing 8

*Grade: 8*

Students will move forward with their experience of writing across a variety of genres, using the writing process, while learning and developing the six traits of writing.

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Mathematics

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Algebra I

*Grades: 7-8*

Students will develop skills in the following areas: real numbers; linear functions, systems and sequences; exponential and quadratic functions, graphs and tables; expressions, equations and inequalities; Pythagorean Theorem; slope; exponents and roots of numbers; probability and data analysis.

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Essential Math 7

*Grade: 7*

**Prerequisite: teacher recommendation state requirement due to score on statewide assessments.**

This course is designed to boost, enhance, review and increase understanding with important concepts and skills needed to be successful with the subject matter and increase scores on state and federal assessments.

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Essential Math 8

*Grade: 8*

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Prerequisite: teacher recommendation state requirement due to score on statewide assessments.

This course is designed to boost, enhance, review and increase understanding with important concepts and skills needed to be successful with the subject matter and increase scores on state and federal assessments.

Geometry 102-1, 102-2 (Year-long course)
Grade: 8

This course emphasizes an abstract, formal approach to the study of geometry and typically includes topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity and proportion; and rules of angle measurement in triangles.

Linear Algebra 100-1, 100-2 (Year-long course)
Grade: 8

Students will take this course as recommended or placed by their 7th Grade math teacher. This is the first part of a 2 year course with the second course being Intermediate Algebra. Topics covered include: systems of linear equations; solving equations and inequalities; properties of real numbers and solving; writing and graphing linear equations and functions.

Pre-Algebra 115-1, 115-2 (Year-long course)
Grade: 7

Students will develop skills to prepare for Algebra in the following areas: integers; real number system and properties; equations and inequalities; expressions and functions; linear functions and systems. Students will develop skills to prepare for Geometry in the following areas: two and three dimensional geometry; triangles and transformations; units of measure; area and volume; data analysis and statistics; probability and combinations.

Physical Education/Health

Health 602 (Semester course)
Grade: 7

This course covers more advanced topics from the Glencoe Health book such as skills for healthy relationships, achieving mental and emotional health, medications and drugs, communicable diseases, and non-communicable diseases. We will also be using the well-known Botvin Life Skills (Level 2 and 3). These are similar topics that are concentrated as well as more of a mature level of thinking. This class is the next step to achieving wellness in the lives of students.

Phy Ed 7 518-1, 518-2 (Year-long course)
Grade: 7

This course will provide an opportunity for students to participate in a variety of sports and games designed to teach teamwork, movement skills and to increase fitness levels. Emphasis is placed on the development, enjoyment, and
appreciation of physical activity, leading to lifelong fitness and personal well being. The Presidential Physical Fitness Test is given as a required measurement of fitness.

**Phy Ed 8**

*Grade: 8*

This course will provide an opportunity for students to participate in a variety of sports and games designed to teach teamwork, movement skills and to increase fitness levels. Emphasis is placed on the development, enjoyment, and appreciation of physical activity, leading to lifelong fitness and personal well being. The Presidential Physical Fitness Test is given as a required measurement of fitness.

**Phy Ed A**

*Grades: 7-8*

*Prerequisite: Dual-enrollment in choir or band*

This course will provide an opportunity for students to participate in a variety of sports and games designed to teach teamwork, movement skills and to increase fitness levels. Emphasis is placed on the development, enjoyment, and appreciation of physical activity, leading to lifelong fitness and personal well being. The Presidential Physical Fitness Test is given as a required measurement of fitness.

*To be paired with a choir or band.*

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**Science**

**Science 7**

*Grade: 7*

This course will cover topics of life science. Students will complete units that include structure and function of cells, kingdoms of life, animals, human body, systems and interactions of life.

**Science 8**

*Grade: 8*

This course will cover topics of earth science. Students will complete units that include exploring earth, geologic changes, weather and climate, water and oceans, and exploring the universe. Students will develop their understanding of the scientific method, and the design and engineering process.

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**Social Studies**
Social Studies 7  
**Grade: 7**

Students learn about people, issues and events of significance to this nation's history from 1800 to the current era of globalization. They examine the Declaration of Independence, the Constitution, the Bill of Rights, and Supreme Court decisions for their lasting impact on the American people, economy and governance structure. Students study civics and policies on how people lived, worked, and functioned in society. They create and use detailed maps of places in the United States and conduct historical inquiry on a topic in the nation's history.

Social Studies 8  
**Grade: 8**

Students in Global Studies explore the regions of the world using geographic information from print and electronic sources. They analyze important trends in the modern world such as demographic change, shifting trade patterns, and intensified cultural interactions due to globalization. Students participate in civic discussion on contemporary issues, conduct historical inequity and study events over the last half century that have shaped the contemporary world. They analyze transformations, and understand reasons for the creation of modern nation states. They learn that governments are based on different political philosophies and serve various purposes. By learning economic principles of trade and the factors that affect economic growth, students understand why there are different standards of living in countries around the world.

World Languages

Exploratory Spanish  
**Grade: 8**

This class is designed for students who have little or no previous study of Spanish. During the course, students will begin to learn the basics of communication in Spanish, with a focus on high-frequency words and cultural topics. The course will focus on communication through the four modes: reading, writing, speaking, and listening.