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The Real World Starts Here...

The Dayton Regional STEM School is one of 5 independent public STEM (Science, Technology, Engineering and Math) schools across Ohio. The School opened in August 2009 with its first class of 9th grade students from across Clark, Greene and Montgomery counties in southwestern Ohio. It currently serves 675 students in grades 6-12 (350 in high school) from 37 different school districts in eight counties. Students participate in inquiry and project-based instruction that integrates the traditional STEM content areas with social studies, language arts, the fine arts, and wellness and fitness – the School’s primary foreign language offering is Mandarin Chinese. The curriculum is directly connected to the real world of work being done by the scientists, engineers, strategists, planners, manufacturers, innovators and entrepreneurs throughout the Dayton region.

School Facts - for the Class of 2019

Here is an overview of the Class of 2019 from the Dayton Regional STEM School (DRSS) -

Type: public, four-year comprehensive high school.

Enrollment: 350 high school students from 27 different school districts in five counties. Our students are: 52% male, 48% female; and an ethnically diverse group: 6% Asian, 10% Black or African American, 3% Hispanic/Latino, 8% Multiracial and 73% White - which is reflective of the surrounding region.

Faculty: the faculty consists of 39 teachers, 89% hold advanced degrees, including one with National Board certification and two staff members hold a Ph.D.

College Credit Plus (CC+): students have the opportunity to take courses offered by local universities and colleges on-site at DRSS and earn college credit in addition to high school credit. These courses include: Chinese 1, 2 & 3; Calculus, English, Psychology and Sociology. Students in grades 11 and 12 may also take courses offered at local colleges/universities. Credit is awarded and grades are included in the final GPA.

STEMmersion: each school year, students spend a 10 day period immersed in a meaningful, authentic experience focused on one project. These STEMmersion courses are driven by student interest and are designed to foster deep understanding of content and a love of learning.

Athletic and Extracurricular Activities: the Dayton Regional STEM School does not have sports teams - students can play sports for their home school districts. DRSS offers numerous extracurricular activities including: Science Olympiad, Robotics, Destination Imagination and Cyber Patriot teams; science fair; National Honor Society; Student Government; Student Ambassadors; community service opportunities; and a variety of clubs.

College and Career Readiness: students Job Shadow once in 9th grade and once in 10th grade and attend annual Career Fairs. They have also made at least three School-organized college visits. Students must complete an Internship Experience (minimum of 72 hours) in order to graduate.

Student Portfolios: each year, students compile a Digital Portfolio, which chronicles their academic growth over the course of the year. The students present projects or experiences which demonstrate a learning and/or growth related to the School’s Five Important Qualities: Persistence, Inquiry, Communication, Creativity & Collaboration.

Grade Point Range: calculated at the end of their junior year, the DRSS senior class is 51% 3.5 or above; 25% 3.0-3.4; 16% 2.5-2.9; 5% 2.0-2.4.

Graduation Requirements

- 4 credits Mathematics
- 4 credits Laboratory Sciences
- 4 credits Language Arts
- 3 credits Social Studies
- 3 credits Foreign Language (2 must be Chinese)
- 1 credit Art
- 1/2 credit Health
- 1/2 credit Physical Education
- 3-1/2 credits Electives
- 1/2 credit Internship Experience

24 Credits

Grading Scale *

A	100 - 90
B	89 - 80
C	79 - 70
F	69 and below

* The Dayton Regional STEM School does not report class rankings.

Academics - What does a STEM education look like?

Instruction at the Dayton Regional STEM School is inquiry- and project-based, filled with many hands-on and group/team experiences. There is a strong link and connection to the real world of work via the School's many partners - who are the "movers and shakers" across the Dayton region - and are involved in the School on a regular basis. While freshmen and sophomores, students participate in several "fully integrated" units, exploring a single driving question/theme across all of their core classes. Evidence of student work is found throughout the School, as public exhibition of student work is one of the School's tenets. Additionally, partners are invited to help evaluate student work, judge debates, and interact with students at twice-a-year Public Exhibitions. Below is an overview of the college-preparatory classes offered - a more detailed description of each course can be found in the *Dayton Regional STEM School Course Descriptions*. College classes are offered through partnerships with Wright State University and Sinclair Community College.

9th Grade Courses:

Language Arts 9 CP
U.S. History
Algebra 1 CP
Geometry
Honors Geometry
Engineering Science
Honors Engineering Science
Art
Chinese I
English 12 CP

10th Grade Courses:

Language Arts 10 CP
World History
Geometry
Algebra II
Honors Algebra II
Biology
Honors Biology
Wellness & Fitness
Chinese II
CC+ Chinese I – CHI 1010/1020

11th Grade Courses:

Honors Algebra II/Trigonometry
Algebra II
Pre-Calculus
Chemistry
Technical Reading & Writing
Government
Economics
CC+ Chinese II – CHI 2010/2020
Chinese III
Spanish I

12th Grade Courses:

Pre-calculus
CC+ Calculus – MTH 2240
Material Science
Anatomy & Physiology
Physics
English 12 CP
CC+ English – ENG 1100
Chinese III or IV
Spanish I or II
Statistics

Electives:

Principles of Engineering
Environmental Engineering
Experiential Learning
CC+ Psychology – PSY 1100
CC+ Sociology – SOC 1101
Digital Electronics
Computer Hardware
Networking
Network Security
Computer Programming
Optional Online Electives in various content areas

FIVE IMPORTANT QUALITIES

In addition to our regular instruction, we teach, practice, model and assess the following "five important qualities" at the Dayton Regional STEM School:

PERSISTENCE ~ INQUIRY ~ COMMUNICATION ~ CREATIVITY ~ COLLABORATION