



OKLAHOMA SCHOOL of SCIENCE and MATHEMATICS

1141 N. Lincoln Boulevard, Oklahoma City, OK 73104

Website: www.ossm.edu Main: (405) 521-6436

Fax: (405) 522-4586 CEEB: 372-684

Edna Manning, Ed.D.
Interim President

Ken Lease, Ed.D.
Interim Executive Vice President

A. Brent Richards, Ph.D.
Vice President for Academic Services

Cynthia Parish
College Counselor
O: 405.522.7834
cynthia.parish@ossm.edu

2022-2023 Profile for Colleges

About OSSM

Created by legislative action in 1983, the Oklahoma School of Science and Mathematics began classes in 1990 as Oklahoma's only co-educational, two-year, public, fully-residential high school for juniors and seniors with exceptional ability in science and mathematics. OSSM is situated in Oklahoma City in the heart of the Innovation District.

The 95 students (46 seniors and 49 juniors) represent 30 high schools in 17 counties throughout the state of Oklahoma. Our students come from a wide range of socio-economic backgrounds. Historically, 100% of our graduating seniors enroll at a four-year college or university directly after graduation. All 26 faculty members hold at least a master's degree; 76% hold a doctorate in their academic teaching discipline.

Our Mission

- * To educate students who show promise of exceptional academic development through a program of instruction and discovery that challenges them far beyond the traditional high school model, providing a superior foundation for careers in chosen fields.
- * To serve as a catalyst for advancing public school STEM education in Oklahoma by providing residential, regional, summer, and virtual learning programs that extend advanced science and math education to a diverse student demographic.
- * To inspire students to make a difference in the State of Oklahoma and the world by leveraging their knowledge and curiosity for the betterment of mankind.

OSSM Class of 2023

- 58.6% Asian
- 24.4% White
- 6.8% Hispanic or Latino
- 5.1% American Indian
- 1.7% Black or African American
- 60% Male
- 40 % Female
- 11% First Generation
- 15% Qualify for Free/Reduced Lunch
- 15 National Merit Semifinalists

OSSM Class of 2024

- 50% Asian
- 30% White
- 2% Hispanic or Latino
- 4% American Indian
- 14% Black or African American
- 50% Male
- 50% Female
- 10% First Generation

OSSM ranks in the top 1% of high schools in the nation (Niche.com).

OSSM was recently named by *Newsweek* as one of the leading public schools in the nation.



Admissions

OSSM is a two-year program of study. Students are admitted to OSSM in their junior year and invited to return for their senior year if they remain in good academic standing.

Admission is competitive and is initiated by written application, which includes essays and faculty and counselor recommendations. Students selected to be semi-finalists are invited to interview with the admission committee.

Student Life

Our courses are all taught at a college level—They are rigorous and demanding, and classes run from 8am to 6pm Monday-Friday.

Students have a mandatory two-hour study hall Sunday- Thursday evenings from 8pm-10pm.

Extracurriculars

Outside of school hours, OSSM students may participate in academic competitions, robotics, intermural activities, and club rowing.

Service Hours

Students are required to complete **60** hours of community service and **60** hours of school service to graduate.

Class Schedule

Students follow a **collegiate class schedule** : Classes Meet M-W-F for 50 Minutes or T-Th for 75 Minutes.

Students are enrolled in a **minimum of seven** academic courses, fine arts, and physical education each semester.

Science laboratories meet weekly for two- or three-hour sessions.

In addition to the typical seven-course load, all students are required to participate in physical education two days a week.

To satisfy the fine arts requirement, our students may take classes in music, dance or visual arts.

Directed Studies

Directed Studies courses regularly include topics in Computer Science, Engineering, Literature, History, and Modern Politics.

Most Directed Studies receive P/F grades and do not count towards graduation requirements. Some exceptions occur.

Research and Mentorship

Our proximity to the OU Health Sciences Center, the OK Medical Research Foundation, and downtown OKC allows students extensive opportunities for research and internships. OSSM students who are in good academic standing may participate in independent research or mentorships, receiving hands-on experience in their field of interest outside of the classroom.

Mentorships have been a part of the academic program at the Oklahoma School of Science and Mathematics since the first graduating class.

Graduation Requirements

Sixteen units are required for graduation (Each semester course = .5 units).

Each required science class at OSSM includes **three hours of lecture and a two- or three -hour laboratory session** per week.

All courses utilize collegiate textbooks.

Humanities (4 courses required):

- English Composition/American Literature (11th)
- US History I & II *or* East Asian History/History of the Modern Middle East if US History taken prior to OSSM)(11th)
- Ethics /World Literature (12th)
- History of the Western Tradition I & II (12th)

Humanities Electives:

- Science Fiction: Literature & Film
- US Foreign Policy
- History of Medicine

Chemistry (2 courses required)

- General Chemistry I (w/lab)
- General Chemistry II (w/lab)
- Organic Chemistry I & II (w/lab)
- Biochemistry (w/lab)
- Physical Chemistry

Mathematics (Four courses required, including

Calculus II. Placement determined by exam

- Pre-Calculus II/III
- Calculus I/II
- Probability & Statistics
- Multivariate Calculus
- Linear Algebra
- Complex Analysis
- Differential Equations
- Independent Study

Computer Science (1 course required)

- Intro to Computer Science
- Object-Oriented Programming w/Java
- Data Structures I & II
- Computer Architecture
- Networking

Biology (2 courses required)

- General Zoology (w/lab)
- Plant & Soil Science (w/lab)
- Human Anatomy & Physiology (w/lab)
- Introduction to Neuroscience
- Genetics
- Conservation Biology
- Ecology (w/lab)
- Endocrinology
- Biochemistry (w/lab)
- Embryology
- Microbiology
- Environmental Science

Physics (Three courses required)

- General Physics (w/lab)
- Mechanics (w/lab)
- Electricity & Magnetism (w/lab)
- Modern Physics I & II
- Robotics Engineering
- Exploration Geoscience
- Thermal Physics Waves and Optics
- Theoretical Physics

Foreign Language

(2 semesters of same language taken at OSSM required.)

Languages offered:

- Chinese
- French
- German
- Japanese
- Latin
- Spanish

Fine Arts (2 courses required)

Offerings vary

Physical Education

Required each semester at OSSM

Academics

GPA and Class Ranking

Because of our diverse demographics with students coming from various academic backgrounds, **OSSM does not rank students.**

OSSM's emphasis is on academic challenge; all academic courses are advanced and/or accelerated courses.

The academic culture encourages students to take academic risks and challenge themselves; as a result, **OSSM does not calculate a cumulative grade point average.**

Standardized Testing (Class of 2023)

ACT	Middle 50%	Mean	Students Tested
English	28 - 35	31.3	
Math	27 - 34	30.2	
Reading	27 - 35	30.8	
Science	25- 34	29.8	
Composite	27 - 34	30.6	44

SAT	Middle 50%	Mean	Students Tested
Evidence Based Reading and Writing	630 - 740	688	
Mathematics	660 - 790	718	
Total	1320 - 1500	1406	26

Advanced Placement (AP)

OSSM does **not teach AP courses**; however, OSSM students take AP exams each spring.

In May 2022, 38 students took 109 AP exams; 73% of the AP Exams earned scores of 3 or higher.

Grading Information

The academic year is comprised of two semesters. Progress reports are given at 6 and 12 weeks. Final grades are given after the eighteenth week of each semester.

All students are required to sit for a comprehensive three-hour final in each course.

Due to the rigor of our courses, we suggest the following grading scale be used to evaluate a student's coursework:

87 -100 = A

77 - 86 = B

70 - 76 = C

< 70 = No credit received

Students receive a **Pass (P)** for Physical Education, Fine Arts and Directed Studies.

Mentorships also receive a **Satisfactory (S)** or **Pass (P)** grade.

Grade Averages	Fall 2021	Spring 2022
Mathematics	85.16	85.79
Biology	87.76	88.27
Chemistry	86.63	85.87
Physics	85.24	86.02
Computer Science	92.1	91.2
Humanities (all)	89.17	90.94
US History and Social Sciences Electives	93.99	92.77
Ethics/ World Literature	91.15	92.57
History of Western Tradition	86.30	86.53

OSSM Class of 2022 College Acceptances* (Class size: 55)

***Bold** denotes Matriculation

Aquinas College	Illinois Institute of Technology	The University of Alabama
Austin College	Johns Hopkins University	The University of North Carolina at Chapel Hill
Bard College	Knox College	The University of Texas at Austin
Bates College	Lawrence University	The University of Texas at Dallas
Baylor University	Lehigh University	The University of the South
Beloit College	Lewis & Clark College	Trinity University
Boston University	Macalester College	University of Alabama at Birmingham
Bowdoin College	Missouri Southern State University	University of Alabama in Huntsville
Carleton College	Missouri University of Sci and Tech	University of Arkansas
Carnegie Mellon University	Northwestern University	University of Central Oklahoma
Case Western Reserve Univ.	Oberlin College	University of Delaware
Coe College	Ohio State University	University of Detroit Mercy
Colby College	Oklahoma City University	University of Evansville
College of the Atlantic	Oklahoma State University	University of Hawaii at Manoa
Colorado College	Penn State University	University of Illinois
Colorado Mesa University	Princeton University	University of Maryland-College Park
Colorado School of Mines	Purdue University	University of Massachusetts-Amherst
Colorado State University	Reed College	University of Michigan
Columbia University	Rensselaer Polytechnic Institute	University of Mississippi
Cornell College	Rhodes College	University of Missouri-Kansas City (BA/MD)
Drake University	Rice University	University of Notre Dame
Drexel University	Saint Louis University	University of Oklahoma
Drury University	Seattle University	University of Oregon
Duquesne University	Seton Hall University	University of Rochester
Eckerd College	Southern Methodist University	University of San Francisco
Embry-Riddle Aeronautical Univ	Southwestern Oklahoma State Univ	University of the Pacific
Emory University	St Olaf College	University of Tulsa
Fort Lewis College	Stevens Institute of Technology	University of Washington
George Washington University	Stony Brook University	Washington and Lee University
Grinnell College	Texas A & M University	Washington University in St Louis
Hendrix College	Texas Christian University	Wichita State University

Notable Student Achievements 2022

- * Class of 2022: Nine National Merit Semi-Finalists; Four Commended Scholars; Two National Hispanic Recognition Scholars; Two National Indigenous Recognition Scholars.
- * Three Questbridge National College Match Recipients.
- * Physics Olympiad Gold Medal Semifinalist.
- * First-place award at the International Science and Engineering Fair.
- * MIT Research Science Institute Participant.