

Brent Cubitt - Secondary Math Specialist
Emilie Schiff - Elem/Middle Math Specialist
Missy Butki - Data & Assessment Specialist

RESEARCH

Math & SAT

Can my child test
into a advanced/
honors course?

"If my child is not
in honors/advanced
math they will not
get into a go..."

Session
Expectations

Is My Child on the Right Math Track?



Session Expectations

Information
session

PLEASE HOLD

QUESTIONS

Information session

- The current math course offerings and course progression at LOCS
- Research on the effects of accelerating students through math courses
- Can you test out of a course? How does that work?
- Math Support at Middle and High School levels
- Math, SAT and College and Career Planning

PLEASE HOLD

- Comments about the "New Math" or "Michigan Standards"
- Comments about individual teachers or buildings
- Comments about homework, grades or textbooks

VisualThinkingMagic.com



CLARIFICATION

Jot down any questions or anything that may need to be clarified.

Your questions may get answered as we go through the presentation.

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K-12 Progression of Math Courses

"If my child is not in honors/advanced math they will not get into a good college"

GRADUATION
REQUIREMENTS

Different
Paths

SUPPORT

GRADUATION REQUIREMENTS



CREDITS of MATH



Senior year - one math -related course

Different Paths

High School
and
Advanced Courses

Middle Level Mathematics

K - 5 Mathematics

Traditional



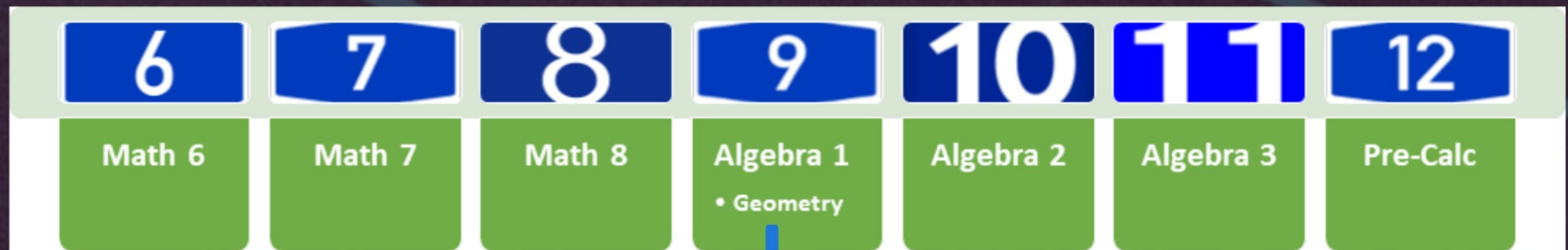
	Period	1A	1B	2A	2B	3A	3B	4A	4B
	Term	45 min	45 min	45 min	45 min	45 min	45 min	45 min	45 min
SEM 1	Q1	Math							
	Q2	Math							
SEM 2	Q3								
	Q4								

	Period	1A	1B	2A	2B	3A	3B	4A	4B
	Term	45 min	45 min	45 min	45 min	45 min	45 min	45 min	45 min
SEM 1	Q1	Math							
	Q2	Math							
SEM 2	Q3	Math							
	Q4	Math							

Accelerated

6	7	8	9	10	11	12
Adv Math 6	Acc Math 7	HS Algebra 1	Hon Geometry	Hon Adv Alg	Hon Trig	Hon Pre- Calc

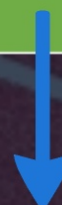
Traditional + 1



	Period	1A	1B	2A	2B	3A	3B	4A	4B
	Term	45 min	45 min	45 min	45 min	45 min	45 min	45 min	45 min
SEM 1	Q1	Algebra 1							
	Q2	Algebra 1							
SEM 2	Q3	Geometry							
	Q4	Geometry							

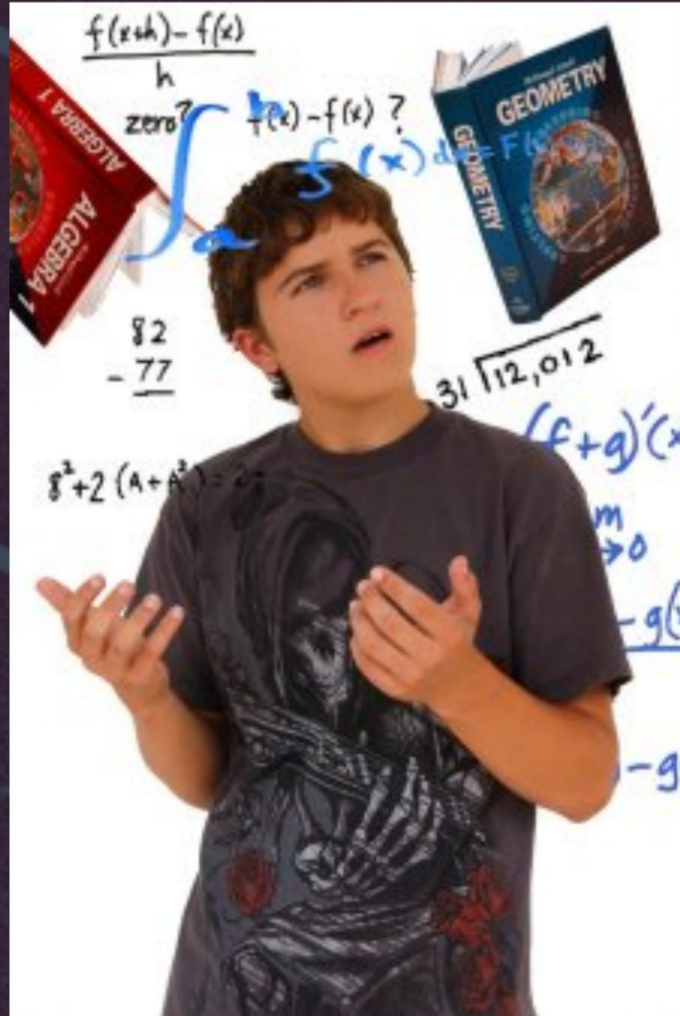
Accelerated + 1

6	7	8	9	10	11	12
Adv Math 6	Acc Math 7	HS Algebra 1	Hon Geometry	Hon Adv Alg •Hon Trig	Hon Pre-Calc	AP Calculus AB/BC



	Period	1A	1B	2A	2B	3A	3B	4A	4B
	Term	45 min	45 min	45 min	45 min	45 min	45 min	45 min	45 min
SEM 1	Q1	Hon Adv Alg							
	Q2	Hon Adv Alg							
SEM 2	Q3	Hon Trig							
	Q4	Hon Trig							

SUPPORT



Middle Level Support

6	7	8	9	10	11	12
Math 6	Math 7	Math 8	Algebra 1	Geometry	Algebra 2	Algebra 3

Middle Level Math Lab

- Semester course in addition to math course
- Diagnose math gaps and work to close those gaps
- Work on problem solving strategies
- Preview current content
- Math vocabulary development

High School Support



Algebra 1 Year-Long

- Algebra 1 course Sem 1 & Sem 2

Math Lab + Algebra 1 Year Long

- Algebra 1 course Sem 1 & Sem 2
- Math Lab Year Long Course
- Year long course in addition to Algebra 1
- Diagnose math gaps and work to close those gaps
- Work on problem solving strategies
- Preview current content

Geometry Year-Long

LSS Support

Algebra 2 Year-Long

LSS Support

Math-Related Course

	Period	1A	1B	2A	2B	3A	3B	4A	4B
	Term	45 min	45 min	45 min	45 min	45 min	45 min	45 min	45 min
SEM 1	Q1	Math Lab	Algebra 1						
	Q2	Math Lab	Algebra 1						
SEM 2	Q3	Math Lab	Algebra 1						
	Q4	Math Lab	Algebra 1						

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What does the
research say?



Doing your
own research

DATA

**College/
Career Goals**

Are they Ready?

Will they need ...

DATA

2015

213
Colleges
and
Universities

14,000
Students

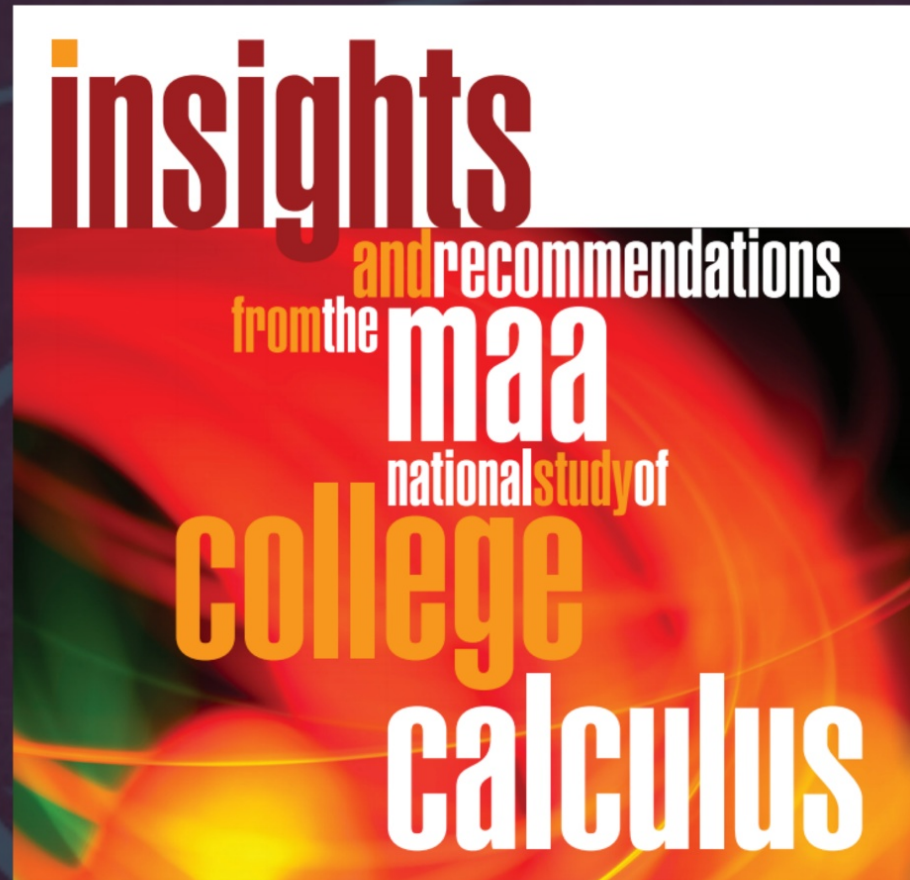


<https://www.maa.org/sites/default/files/pdf/cspcc/InsightsandRecommendations.pdf>

Table 1 Courses Taken in High School by Students in Calculus 1 at Research Universities

	Percentage of Calculus 1 Students	Mean Grade (Standard Deviation)
Algebra 2 at or before Tenth Grade	77%	3.8 (0.5)
Precalculus at or before Eleventh Grade	67%	3.7 (0.6)
Calculus in High School	67%	3.8 (0.5)
Statistics in High School	9%	3.6 (0.6)

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College/Career Goals

That require Calculus and other higher level math

Economics

Buisness

Accounting

Engineering (chemical, civil, mechanical, computer)

Natural Sciences (biology, chemistry, physics

Medical, Dental or Vet School

Mathematics Major/Minor

Computer and Information Science (computer programmer, numerical analyst)

Making informed decisions



Will they need it?

Are they ready?

Admissions



Fall 2019 Freshman Profile*

- Entering class: 8,570
- High school GPA: 3.5-4.0
- Composite ACT: 23-29
- Total SAT: 1,130-1,310

* middle 50 percent of enrolled freshmen

High School Preparation

MSU recommends that students include a majority of **core academic courses** in their schedules each semester throughout high school, **including three such courses each semester during their senior year**. In addition, MSU **encourages students to select honors, Advanced Placement and International Baccalaureate** courses when possible.

Any student considering attending Michigan State as a freshman should pursue a strong college preparatory curriculum. At a minimum this includes:

- Four years of English (composition and literature)
- **Three years of mathematics (two years of algebra, one year of geometry)**
- Three years of social studies (history, anthropology, economics, geography, government, political science, psychology or sociology)
- Two years of science (biology, chemistry, physics or earth science)
- Two years of a single foreign language

Applications showing a lack in one of these areas will still be considered; however, a less rigorous curriculum will put these applications at a disadvantage.

Detailed suggestions for students in grades eight through 11 are available in [MSU's College Planning Guide](#).

GUIDELINES FOR EIGHTH GRADE

- Consider taking algebra I in order to take precalculus or calculus as a senior in high school.
- Consider taking a foreign language course.
- Develop good study habits, which will assist you in high school as well as in college.
- Visit the websites of colleges that interest you and note their high school curriculum requirements.
- Let your guidance counselor know you want to follow a college preparatory program when planning your high school schedule.



Math placement testing

Students may take the math placement exam online. Students seeking to improve their score may retake the test a second or third time with a four-week waiting period between exams. Students who have taken the math placement exam online are welcome to take the proctored exam at NSO if they wish to attempt to improve their score. Students may not take the math placement exam after attending NSO.

Students with transferable math credit at a specific level, Advanced Placement (AP) math credit or strong ACT/SAT math scores may be exempt from the math placement exam.



NSO (New Student Orientation)

2. Students who have received Advanced Placement credit for calculus prior to the AOP, **or**
3. Students who have either an ACT Math score of at least 28 or an SAT math score of at least 660 and who will also be taking math courses at MSU.

Admissions



2019 Entering Class Test Scores

Average GPA: 3.9

ACT 32-35
mid 50th % range

- English: 33-35
- Math: 30-35
- Science: 30-35
- Reading: 32-35

SAT 1380-1540
mid 50th % range

- Writing/Evidence-Based Reading: 680-750
- Math: 700-790

Key criteria we take into consideration, include:

- Your cumulative GPA
- Your test scores (SAT with writing, ACT with Writing)
- The quality of your curriculum (its solid college preparation, strength of courses, what courses you've taken based on what is available in your high school, such as AP, IB, or honors, etc.)
- Your class rank, if available
- Your specific academic interests

Admissions



COURSE PLACEMENT

oakland.edu/fyac/courseplacement

For first-year students, Oakland uses SAT or ACT scores for course placement. Some courses at OU require students to take additional placement exams before orientation or meet certain criteria. Placement testing assists academic advisers and new students in determining appropriate courses. Before orientation, you should learn about course placement by visiting oakland.edu/fyac/courseplacement. Questions? Contact the Orientation staff at (248) 370-GOLD.

Criteria

Generally, freshman admission to Oakland University is based on a combination of criteria:

- A completed Oakland University admission application. While an essay is optional, interested students may choose to include an essay for consideration.
- Cumulative high school grade point averages of 3.2 or above. Applicants with cumulative grade point averages below 3.2, but above 2.5, may be admitted after consideration of the quality of academic preparation. Scholarship awards are based on a student's academic record at the time of admission. However, students may submit updated transcripts and/or test scores for scholarship reconsideration until the March 1 scholarship deadline.
- SAT or ACT scores are required. Oakland University looks for one of the following:
 - a total score of 940 or higher (Evidence-Based Reading & Writing and Mathematics sections) on the SAT
 - a composite score of 18 or higher on the ACT (not including the writing section)
- Number and types of college preparatory courses
- Positive trend of grades

Additionally, students must meet their state graduation requirements. First-year college students interested in applying to Oakland University's Honors College should check their additional admission criteria.

We strongly encourage students to follow a college preparatory curriculum that includes:


- Four years of English
- A minimum of three years of mathematics, including intermediate algebra
- A minimum of three years in social sciences
- A minimum of three years in biological/physical sciences
- A minimum of two years in a foreign language

Oakland University **does not** require letters of recommendation as part of the application for freshman admission.

Math Placement Testing

Students who have not taken the SAT or ACT or who feel their Math subscore does not reflect their current abilities, should take a Math Placement Test prior to orientation.

Your Math Subscore	Pass Math Placement Test	Your Math Placement
*SAT (new): 0-470 *SAT (old): 0-430 ACT: 0-17	E	MTH 0661** (Elementary Algebra) <u>OR</u> MTH 1118 (Mathematical Sciences in the Modern World)
*SAT (new): 480-540 *SAT (old): 440-510 ACT: 18-21	I	MTH 0662** (Intermediate Algebra) <u>OR</u> MTH 1118 (Mathematical Sciences in the Modern World)
*SAT (new): 550-650 *SAT (old): 520-630 ACT: 22-27	R	MTH 1118 (Mathematical Sciences in the Modern World) <u>OR</u> MTH 1221 (Linear Programming, Elementary Functions) <u>OR</u> MTH 1441 (Precalculus) <u>OR</u> MTE 2110 (Numerical Structures) <u>OR</u> STA 2220 (Intro to Statistical Concepts and Reasoning)



COLLEGE for Creative STUDIES

General Admissions Requirements

1. Complete our free online application
2. Submit your transcript(s)
3. Submit your ACT or SAT scores
Our ACT school code is 1989. Our SAT school code is 1035*.
**Not required for transfer students*
4. Show us your work
Upload five to eight pieces to <https://ccs.slideroom.com>.
There is a \$10 upload fee.

High School Transcript

Request official transcripts from your guidance counselor, or digitally through Parchment.

Transcripts can also be sent via email. Applicants must have a minimum 2.5 cumulative high school grade point average.

Official GED results will be accepted in place of transcripts – a minimum 682 composite score is required.

Request your
Transcript

ACT or SAT Test Score

Submit your ACT or SAT scores (our ACT code is 1989 and our SAT code is 1035). (The average ACT score of CCS students is 23. The average SAT score of CCS students is 1091.)

Get Your SAT Score

Get Your ACT Score

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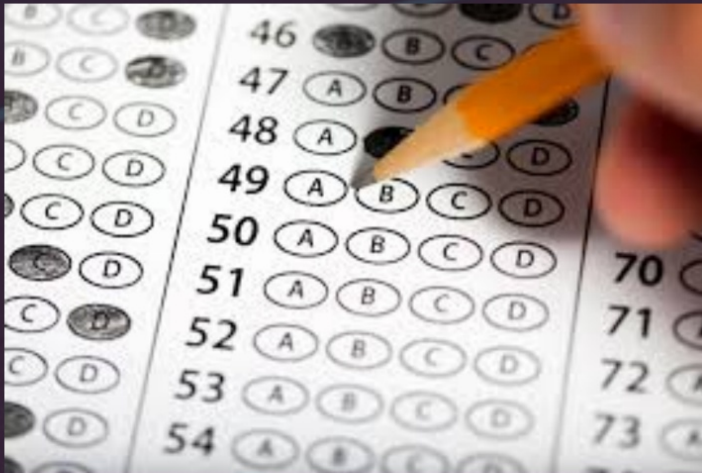
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When?

CONTENT

**Practice and
Support**

When?

Grade 8 - PSAT 8/9 - April 2019

Grade 9 - PSAT 8/9 - April 2019

Grade 10 - PSAT 10 - April 2019

Grade 11 - SAT - April 2019

ACT - June 2019 (LOHS test center)

Grade 12 - SAT Retake - \$\$ (multiple dates, test centers)

Do Your Research

Math Placement exam or SAT score?



SAT College and Career Readiness Benchmarks

Evidence-Based
Reading and Writing

480

Math

530

Practice and Support



SAT PREP

0.5 credit, grade 11

SAT Prep Class is designed to help students improve scores on standardized tests. Each student takes the SAT to collect baseline data in Critical Reading, Mathematics and Writing subsections. They then learn test taking strategies, take several practice tests in each subsection, and build a portfolio showcasing their improvement.

 CollegeBoard +  KHANACADEMY

Official SAT® Practice

Personalized practice, anytime, anywhere — for FREE.

	Practice tests and more 8 official full-length practice tests, plus study and test-taking tips		A tailored practice plan We'll import your PSAT/NMSQT results and pinpoint your areas for practice
	Interactive practice Thousands of practice questions, video lessons, and hints		Instant feedback Get constant feedback and progress so you know where you stand

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TESTING

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course?

Middle Level

Middle Level

5

- Common Assessments
- State Assessment
- Nationally normed CAT assessment
- Teacher input/Student Profile

Grade 6 - 8

During the Middle Years (Independent Study)

BEFORE

6

BEFORE

7

BEFORE

8

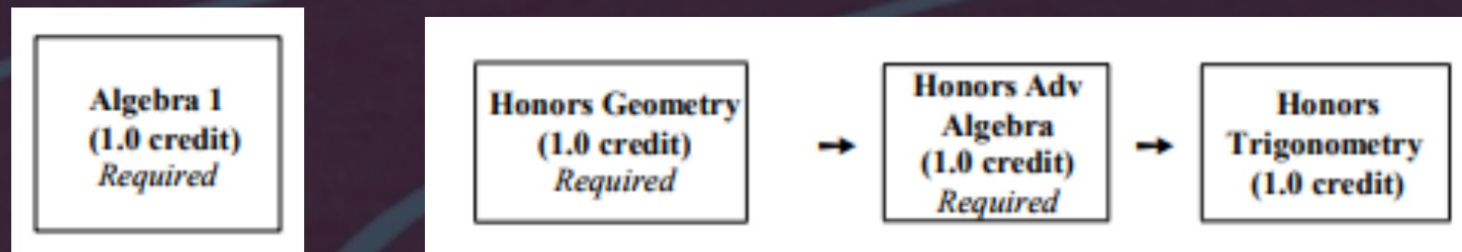
- Advanced on MSTEP
- College Pathway on MOY screener
- 90% or better on district unit assessments

TEST IN

May

80%

Algebra 1 to Honors Geometry



High performance and teacher recommendation

At the High School

High School Curriculum
Handbook page 86

TESTING OUT -- GUIDELINES AND CONDITIONS

1. The scheduled Test Out dates are the second Wednesdays in December and May.
2. Due to the extensive curriculum material for each class period, it is extremely challenging for students to successfully test out of additional courses. For each testing out date, it is recommended that students attempt to test out of no more than one full credit.
3. Once a student has received the testing out materials, they must attempt to test out of the course during the scheduled testing "window." Students may not request to take the exam during a later semester; if the student elects to not take the exam during the scheduled testing "window," the student will be required to take the course.
4. The department chairperson will provide to the student a copy of the course syllabus, performance expectations, textbook, and primary resources that are not covered in the textbook, but are covered on the exam. Materials distributed to students must be returned in order to take the test out assessment. Any materials not returned will be subject to fines.
5. The assessment used for testing out will evaluate the same performance expectations as stated in the course syllabus. The assessment may include one or more of the following: written test, oral test, portfolio, projects, papers, performance, etc.
6. The grading for test out assessments is handled as follows:
 - Scores 79% and below are not proficient, and high school graduation credit will not be granted. If it is a required course, the student must then take that specific course to graduate. The attempt to test out will not be reflected on their transcript.
 - Scores 80% or higher demonstrate content proficiency; the student will be given high school graduation credit. A grade of "P" (Passing) will be indicated on the student's transcript and will not be included for any purpose in a computation of grade point average.
7. If a student is attempting to test out of a 1.0 credit course, they must take the first term exam AND the second term exam. To test out of the entire course, a 80% or better must be achieved on BOTH final exams; the two grades are not averaged together. If a student receives a score of 80% or higher on only one exam, they will receive a .5 credit for only that portion of the course.
8. Students may only attempt to test out of the same course one time.
9. Once a student has successfully completed the testing out process with a 80% or higher, he/she cannot enroll in, or test out of, a lower level course(s) within that department.
10. Be aware, NCAA Clearinghouse will not recognize testing out credits when determining eligibility for Division 1 or Division 2 College athletes.



**BEGIN
WITH
THE END
IN MIND**

Covey 1989

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