CALCULUS ROUNDTABLE

PROGRAM GUIDE 2022-23

FOR SCHOOLS & DISTRICTS

WWW.CALCROUND.ORG

1400 Marina Way South
Richmond, CA

BEING GREAT, TOGETHER

Calculus Roundtable is a nonprofit vertical education organization operating at all levels of the system. We help policy makers research educational data; create curriculum guides and articulations for school administrators, produce professional workshops for teachers and principals, all in support of proving students the best environment to excel. We serve those students in three major STEM initiatives from Early childhood to graduate school and beyond. These initiatives are:

K-7

DIGITAL ONE ROOM SCHOOLHOUSE

Our online enrichment program that includes fun, engaging and educational activities for students. These activities have at their core an understanding of the scientific method and help students learn and reinforce skills more deeply through real-world projects.

7-12

DIGITAL PORTS OF ENTRY

Our career exploration career pathways program that focuses on math and science skills needed in today's most exciting job industries.

Under grad

DIVERSITY IN STEM FELLOWSHIP

College students in STEM career fields share their expertise with K-12 students and receive mentorship from advanced professionals to help them launch their career.

STEM BROADCASTING NETWORK

SBN is our online platform of live classes, recorded lessons, games, tutoring and special STEM guests from careers,, laboratories and research sites from the world.

OUR PROGRAMS

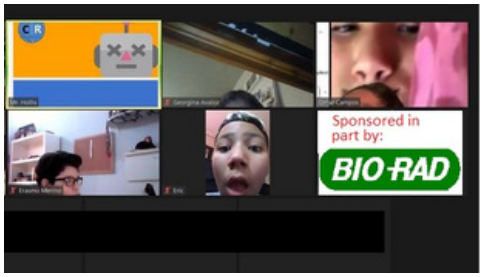
- **ELM** Elementary School
- **MS** Middle School
- **HS** High School
- **EL** English Learner
- **CTE** Career and Technical Education
- **PD** Professional Development

Our courses can be configured into many different models

WE OFFER SERVICE IN A VARITIY OF CONFIGURATIONS

In-Class

In person, in-class instruction



Online

Zoom oriented classes on our STEM Broadcasting Network

Hybrid

With an instructor on site, students also connect with Zoom oriented classes on our STEM Broadcasting Network

SOME CURRENT OFFERINGS

BIG DATA

ELM MS HS EL

A customizable solution for students and families who need support outside of school. Students attend a weekly meeting with a Calculus Roundtable Instructor where they set goals and monitor progress. Each student has an individualized learning plan that allows them to access up to 3 courses per semester, plus the DORS site with supplemental materials.

BIOMED

ELM MS HS EL

Our BioMed programs encourage students to connect natural science and medical technology through engaging, hands-on activities. Whether they're designing EKG heart monitors, germ-fighting organisms, therapeutic toys, digital animations, or an artificial limb, students activate critical and creative thinking, enhance teamwork skills, and step into the role of medical investigators, surgeons, and biomedical engineers.

CYBERSECURITY

HS EL

Think Like a Game Designer brings coding to life. Students learn what its like to build a game and work for a gaming company. Students learn the basics of game development while learning multiple the programming languages at the heart of Silicon Valley's most sought after skills. Students work with and visit gaming companies, learn to creatively integrate technology; mingle with industry leaders and have a fun time learning math and science.

GIRLS MATH CLUB

ELM MS HS EL

Designed by female mathematicians and scientists of color, GMC is an innovative after-school class that instills confidence in algebra, geometry, statistics, and physics. Students learn at their own pace in a safe, supportive environment with access to interactive questions, fun activities, and one-on-one tutoring.

SOME CURRENT OFFERINGS

HABITAT & MIGRATION

ELM MS

Students collaborate with scientists and record their observations of local plant and animal life, learning about the delicate balance between humankind and nature. Their photos and documentation become part of a worldwide database depicting the biodiversity of the planet.

HIGH IMPACT TUTORING

(1:1, SMALL GROUP)

ELM MS HS EL

The High Impact Tutoring program utilizes research-backed teaching interventions to support struggling math students. Our highly trained instructors are college students of color with strong backgrounds in STEM who administer an effective, quality curriculum along with endless encouragement. Students increase their math scores and their confidence and gain pivotal role models.

HOMEROOM

ELM MS HS EL

The Homeroom program is a customizable solution for students and families who benefit from extra support outside the classroom. From their homes, students attend a weekly online meeting with their assigned Calculus Roundtable instructors to develop an individualized learning plan, create attainable goals, and monitor their progression. Each semester, students have access to three Calculus Roundtable courses, the DORS website, and supplemental materials that steer them towards success.

SOME CURRENT OFFERINGS

MATH & SCIENCE OF INDIGENOUS PEOPLES

ELM MS HS

The Math & Science of Indigenous Peoples is a culturally inclusive course combining the traditions of Native communities with modern STEM subjects. Calculus Roundtable teachers, college fellows, and instructional coaches collaborate with tribal leaders to increase students' knowledge of new technologies and health and wellness. The program links willow trees to biomedicine, "Code Talkers" to wi-fi, basket weaving to structural engineering, while adhering to school-level math and science standards.

MONEY WORKS

ELM MS HS EL

In this empowering course, students examine a multitude of avenues for money, like income, finance, and budgeting, and learn the mathematics and concepts behind launching and maintaining a successful business. The program aligns with school math standards and prepares students for higher learning and successful careers by teaching them the importance of managing earnings, savings, credit cards, and much more.

ROBO WORLD

ELM MS HS EL

This interdisciplinary course integrates computer science and engineering, and introduces students to the design, construction, operation, and use of robots. Robo World is an unforgettable experience that focuses primarily on machines created to assist humankind.

SPACE CAMP

ELM MS

Students explore our vast universe with scientists and astronomers of color from NASA's Jet Propulsion Lab, the University of Capetown, South Africa, and China and Central America. While meeting space explorers and participating in scientific research, students build introductory physics skills by completing space-related activities that are simply out of this world.

SOME CURRENT OFFERINGS

SPORTS MATH

ELM MS HS

Statistics, time measurement, geometric shapes, averages, and slopes velocity are all embedded in our favorite sports. This student-friendly course has been a great success with students not traditionally interested in calculations, but who've memorized the three-point percentage of their favorite player. In analyzing baseball batting order, Olympic figure skating programs, scoring systems, and the geometrics of fields of play, participants build a variety of STEM skills.

STEM KITS

ELM MS HS

Our variety of math and science STEM kits are perfect for students of all ages, and allow them the freedom to dream up their own creations. These kits include flexible, step-by-step instructions, and recipients have access to STEM Broadcasting tutorial sessions to ensure their projects are a success.

THE 'REAL' DEAL

HS CTE EL

This course is a comprehensive introduction to the business math needed to be effective in the real estate industry. Topics include square footage calculations, financing, purchase agreements, creating a listing, escrow, and property management.

RIVERS, OCEANS & WATERWAYS

ELM MS EL

Students learn the incredible value of water by studying its composition, its use in agricultural and scientific industries, and its connection with the land in creating different habitats.

THINK LIKE A GAME DESIGNER

ELM MS HS EL CTE

Students work in teams with industry-leading game designers and engineering students to learn the basics of game development. Available at an introductory, beginner, and intermediate level, club members graduate from having zero experience in coding to building apps and storyboards, designing characters, and creating virtual worlds using programming developed by MIT.

UX/UI DESIGN

CTE HS EL

Calculus Roundtable has teamed up with Google, Amazon, and EA Sports to produce this teenage-friendly, teacher-led program that introduces students to the diverse and lucrative career of user experience design. Classroom activities and discussions reinforce the mathematics, data collection, and analysis skills developed via Google's "Foundations of User Experience Design" course so that students can develop their own apps, websites, and products. This program also provides resources and guidelines for CTE teachers so they don't have to become experts in UX design.

VIRTUAL WORLD TOUR

ELM MS HS

See the world from the privacy of your own home or classroom! Students embark on a virtual tour of some of the world's greatest cities and discover hidden math and science activities along the way. This program delves into geography, cultural awareness, climatology, animal habitat, art history, and many more relevant topics of today.

BEING GREAT, TOGETHER

ELM MS EL PD

Calculus Roundtable offers a variety of professional development workshops for teachers during the academic year and throughout the summer. We focus on promoting enriching STEM education in the classroom, particularly for underserved students and students of color. Every professional development engagement is customized for the school's and the district's needs, and depicts fully integrated subject content and recommended practices across STEM fields.

HYBRID CLASSROOM MANAGEMENT

PD

This workshop assists schools struggling to find a balance between in-person and remote classes and offers engaging activities for all grade levels that suit a variety of schedules, from weekly class rotations to half days to a more concurrent model in which all students "attend class" simultaneously.

FAMILY ENGAGEMENT

PD

Calculus Roundtable offers several options to improve family engagement in schools. These courses are designed to build partnerships between teachers and families so that both parties can support the student and allow them to maximize their potential. Program participants first complete an online module aimed at building their knowledge of family engagement. Teachers and families later meet in a synchronous online workshop to apply this knowledge to their own schools. Because all individuals and communities are unique, this program is completely customizable.

UNPACKING INSTITUTIONAL RACISM IN STEM EDUCATION

PD

This program empowers schools to remove systemic barriers that impact STEM education, learn how to implement effective and inclusive environments for learning, and advance the science and promotion of racial equity in STEM subjects. Participants embark on critical race theory discussions with professionals and researchers in STEM fields and use their newfound knowledge to create safe, supportive spaces for their students.

ELD LITERACY THROUGH COMPUTER CODING

With such limited time in elementary classrooms, it can be challenging for teachers to instill the foundational skills required of English language fluency. The ELD Literacy through Coding program demonstrates to teachers the value and method of using coding as a language acquisition tool. Similar to recognizing sentence structures and vocabulary when reading, game code brings its narrative alive through numbers. Students draw connections between images, patterns, and words on their screens as they design their own virtual worlds and characters.

PD

IMPORTANT MEDIA

WHY CALCULUS ROUNDTABLE? HEAR WHAT EDUCATORS SAY:

Dr. Cliff Thompson is a teacher in West Contra Costa Unified School District. The district implemented DORS in Dr. Thompson's classroom over the summer of 2017. In this clip (as he addresses the CR board, during last year's retreat) Dr. Thompson explains the effect of DORS in the classroom and with one student, in particular, keep your proposal easy to read and pleasant to look at. Don't overload a slide with too many words, and choose a color palette that won't distract the audience.
Watch the video here: https://vimeo.com/421315994

"What parents have been waiting for..."
ABC Channel 7

"Possibly, the future of education"
The Mercury News
The Newspaper of Silicon Valley

A promising practice in closing the achievement gap
ED TRUST WEST

" A game changer at our school"
Dr. Ida Oberman
Community School for Creative Education
(top 5 schools for growth in African American math test scores in the Bay Area)

Awarded
The Special Congressional Recognition Award for our work,
"Bringing STEM Education to Communities of Color"

CALCULUS ROUNDTABLE COURSE GUIDE 2022-23

Name of Class	Class Descriptions	Outcomes	Subject	Subject II	Grade Level	Standards	STEM Partners
CTE Courses	These courses are designed to emphasize the math and science behind some of today's most exciting STEM industries. CR has developed a set of high-quality activities and curriculum designed in conjunction with companies like Google, Dolby, Bristol-Myers Squibb, and many more high-tech Silicon Valley companies. Students will work in tandem with industry professionals, many of which are leaders of color. This gives students a real pathway to college and career readiness.						
Digital Art	Students use a series of computer apps, tools and filters to search for images, create images and animation using their laptop, phone or tablet		Art, Photography, Digital Art,		K-3, 3-5, 6-8, HS		
Habitat & Migrartion	Students explore the nature of water, its connection with the land to create habitats, and the use of water in industry agriculture and science		Life Science, Ecology, Genetics, Chemistry		3-5, 6-8		
Math Wizard	In Math Ninja, students are assessed to determine their math proficiency level, then math and science 'gamified' activities are assigned, students are paired by math deficiency, instructional coaches work with small student groups (3-5)in a fun and engaging lab. As students advance they receive a martial-arts type belt until they ascend to black belts		Basic Mathematics, Pre-Algebra, Algebra, Geometry, Statistics, Physics and Calculus		K-3, 3-5, 6-8, HS	Various elementary and middle school mathematics standards	
Robo World	Students learn about the design, construction, operation, and use of robots. The goal of robo world is to introduce the design machines that can help and assist humans.	Robo World is an interdisciplinary course that integrates computer science and engineering. What makes them move, what makes them move and how are they used.	Mechanical engineering, electrical engineering, information engineering, mechatronics, electronics, bioengineering, computer engineering, control engineering, software engineering, mathematics, among others				
Rollercoaster	Students design and build virtual roller coasters while learning laws of motion and introductory concepts used in higher math.		Introduction to Physics, Physics		K-3, 3-5, 6-8, HS		
Space Camp	of various space related skillbased activites for learners at various grade level from pre-K through grade 4 to intro to physics. All activies are aligned and support national education standards in STEM	Students will work with scientiest of color from NASA, Jet Propulsion Lab and astonomers from Africa, China and Central America	Astronomy Algebra, Calculus, physics and planetary systems		K-3, 3-5, 6-8, HS		
Sports Math	Mathematics plays a large role in the efficiency of sports. Coaches constantly try to find ways to get the most out of their athletes, and sometimes they turn to mathematics for help. This help may include the best batting order for a team to maximize the number of runs it can score or the putting together of a program for an Olympic skater so that the jumps the skater makes take advantage of the scoring bonus when these jumps are performed later in a program when tiredness starts to set in. There are also mathematical issues involved in scoring systems for some of the complex and subjective aspects of scoring sports events.	Students will look at the geometrics of fields of play, scores and average and how they play a role I the outcome of sporting events.they will lean.	Basic Mathematics, Pre-Algebra, Algebra, Geometry, Statistics, Physics and Number Theory		6-8, HS		
The Girls Math Club (GMC)	Made to help our female our students gain fluency and confidence in math! The Girls math club (GMC) is designed by our female instructors of color, to help girls master essential skills at their own pace through fun and interactive questions, built in support, and motivating awards.	This innovative class operates as a homework club for extra help with mathematics but underneath, its a comfortable environment where girls learn from activities designed and delivered by female mathematicians and science college fellows.	Basic Mathematics, Pre-Algebra, Algebra, Geometry, Statistics, Physics and Calculus		K-3, 3-5, 6-8, HS		
The Science and Math of Indigenous Peoples	In the Math & Science of Indigenous People, students combine ancient traditions of Native cultures with new and cutting-edge science innovations. This program focuses on new technologies and the health-wellness of tribal youth. It covers everything from Willow trees to biomedicine; from 'Code Talkers' to wi-fi. The course follows school-level math and science standards while being culturally inclusive	This experience provides opportunities for students to learn about and connect with 'big data' health information and community-based health services. Students learn about Mental Health Counselors, School Nurses, Social Workers, School Psychologists, and other health allies.	Life Science, UX, Chemistry, Statistics		6-8, HS		
Think Like a Game Designer (Coding Camp I EL)	English Learner Students work in a fun, Spanish-rich, educational game-based environment taught by native Spanish speakers. Students learn to code without any prior experience. After completing Coding Camp I, students will be able to navigate through the programming world with a sense of confidence and accomplishment. Perfect for EL and Dual Language Immersion (DLI) students.				3-5, 6-8, HS	CSTA.1A.AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes	
Think Like a Game Designer (Coding Camp I)	Students work in a fun and educational game-based environment where they learn to code without any prior experience. After completing Coding Camp I, students will have a basic understanding of programming concepts allowing them to navigate through the programming world with a sense of confidence and accomplishment.	students learn the fundamentals of block programming through interactive lessons involving Sequencing & Simple Loops, 2) Conditional Loops 3) If/else Conditions	Block coding -SCRATCH, Coffeescript		3-5, 6-8, HS	CSTA K-12 Computer Science Standards - **CSTA.1A.AP-10** Develop programs with sequences and simple loops, to express ideas or address a problem **CSTA.1A.AP-14** Debug (identify and fix) errors in an algorithm or program that includes sequences and simple loops	
Think Like a Game Designer (Coding II EL)	Coding Camp II EL continues where Coding Camp I EL leaves off, providing powerful coding tools for beginner programmers who are English Learners.The class is centered around Scratch Block Programming, developed by MIT. Students operate software and complete coding challenges of programming concepts by creating animations and computer games with interacting characters. This course creates a beginner foundation in programming which can be used in other advanced languages. Perfect for EL and Dual Language Immersion (DLI) students.	Students learn the Fundamentals of text coding fundamentals through interactive lessons involving Functions & Conditions, Logic & Events,	Text Coding-Javascript, Python		3-5, 6-8, HS		
Think Like a Game Designer (Coding II)	Coding Camp II continues where Coding Camp I leaves off, providing powerful coding tools for beginning programmers. The class is centered around Scratch Programming, developed by MIT. Students operate software and complete coding challenges of programming concepts by creating animations and computer games with interacting characters. This course creates a beginner foundation in programming which can be used in other advanced coding languages	Students learn the Fundamentals of text coding fundamentals through interactive lessons involving Functions & Conditions, Logic & Events. Students make their own storyboards of games and animated shorts.	Text Coding-Javascript, Python		3-5, 6-8, HS	MATH.PRACTICE.MP3- Construct viable arguments and critique others' reasoning. Analyzes situations by breaking them into cases, 2)MATH.CONTENT.6.NS.C.5-Apply and extend previous understandings of numbers to the system of rational numbers. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values 3) ELA-LITERACY.RST.6-8.3-Key Ideas and Details. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.	
Think Like a Game Designer (Coding III)	Coding Camp-III continues where Coding Camp II leaves off. Students use learned programming skills to create a applications and computer game that can be published and played by others. Students meet "real" video game developers, work on industry led projects and attend real and virtual field trips to some of the worlds largest video game companies to imagine, 'How to think like a game designer'. The class continues with CoffeeScript & JavaScript application development, providing powerful coding tools for intermediate programmers.	Students create a Scratch programmed game or device that encompasses the learning already experienced.	Python, Unity		6-8, HS		
Water Ways	Students explore the nature of water, its connection with the land to create habitats, and the use of water in industry agriculture and science		Life Science, Ecology, Engineering, Chemistry		K-3, 3-5, 6-8, HS		

CALCULUS ROUNDTABLE COURSE DESCRIPTIONS

Initiative	Name of Class		Class Descriptions	Outcomes	Subject	Subject II	Grade Level	Standards	STEM Partners
IC	1:1 and Small Group Tutoring	HIT	The High Impact Tutoring program utilizes research-backed teaching interventions to support struggling math students. Our highly trained instructors are college students of color with strong backgrounds in STEM who administer an effective, quality curriculum along with endless encouragement. Students increase their math scores and their confidence, and gain pivotal role models.	Students break into small groups tailored for different skill levels or learning styles. Our CR Diversity in STEM Fellows put into place a system that is sensitive to the students learning needs, growth, social-emotion considerations academics and al.	General Math, Pre-Algebra, Algebra, Geometry, Statistics, Trigonometry, Calculus		3-5, 6-8, HS	Various	
DPOE	App It Tight!	APP	Students work in teams to build thier own app.						
DORS	BioMed	BIOMED	Our BioMed programs encourage students to connect natural science and medical technology through engaging, hands-on activities. Whether they're designing EKG heart monitors, germ-fighting organisms, therapeutic toys, digital animations, or an artificial limb, students activate critical and creative thinking, enhance teamwork skills, and step into the role of medical investigators, surgeons, and biomedical engineers.		Life Science, Physical Science			NGSS LS1.A-1b Animal structure and Function	Bio-Rad
DORS	BioMed Early Ed	BIOMED-ED	BioMed Early taps into students' exploratory nature, engages them in learning that feels like play, and encourages them to keep discovering – now and for years to come. Whether designing germ fighting molecules, a new organism or building digital animations, students engage in critical and creative thinking, build teamwork skills, and learn to try and try again when faced with challenges.	Students use online storytelling tools to create their own model that represent the relationship between the needs of different plants and animals (including humans) and the places they live to create a doctors who examines environmental effects on her patients.	Life Science, Physical Science, storytelling.		K-3,	K-2-ETS1-2 Engineering Design - Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. NGSS K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. NGSS- K-ESS3-1 Earth and Human Activity Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live. NGSS L4.C1 -Adaptation	Bio-Rad
DPOE	BioMed HS	BIOMED-HS	BioMed HS focuses on 3 disciplines: 1) Computer Science that infuses and operates medical technology, engages students in true-to-life activities or runs problem-solving algorithms or apps; 2) Engineering that immerses students in activities like designing an artificial organ or limb, or exploring algae as a biofuel source, and 3) Biomedical Science where students step into the roles of medical investigators, surgeons, and biomedical engineers	Students learn everything from design and data analysis to outbreaks, clinical empathy, health promotion, and more, students explore the vast range of careers in biomedical sciences. They develop not just technical skills, but also in-demand, transportable skills that they need to thrive in life and career. Through projects such as determining the identity of a skeleton using	Engineering, Chemistry, Robotics, Biology, Electronics,Atoms and Elements,		HS	NATIONAL HEALTH SCIENCE STANDARDS- (	Bio-Rad
DORS	BioMed MS	BIOM-MS	BioMed Middle is a science class for middle schoolers that sparks the joy of discovery and illuminates the range of science paths students can look forward to in high school and beyond. Students apply knowledge and skills from a variety of science and creative disciplines. By tackling challenges like designing a therapeutic toy for a child with cerebral palsy, creating their own app, or solving a medical mystery, students are empowered to make a real-world impact.	Students learn everything from design and data analysis to outbreaks, clinical empathy, health promotion, and more, students explore the vast range of careers in biomedical sciences. They develop not just technical skills, but also in-demand, transportable skills that they need to thrive in life and career.	Cell Theory & Structure, Biodiversity, Genetics, Human Systems		6-8	NATIONAL HEALTH SCIENCE STANDARDS-(NHSS) Medical Mathematics 1.31Demonstrate competency in basic math skills and mathematical conversions as they relate to healthcare.a.Metric system (such as:centi, milli, kilo)b.Mathematical (average, ratios, fractions, percentages, addition, subtraction, multiplication, division)c.Conversions (height, weight/mass, length, volume, temperature, household measurements) NHSS-1.1 Human Anatomy and Physiology NHSS-1.11Identify basic levels of organization of the human body. a.Chemical.Cellular.Tissue.Organ.Systems.Organism	Bio-Rad - Debbie, Eliza Jean Marie (fb)-foreisic crime lab tour
	Business Startup (Money Works)	BIZ	Students learn what it takes to start and run a business and the underlying math skills and concepts that support business success.	Students will learn fundamental financial concepts such as interest, profit, and percentages. HS students also produce a business plan and balance sheet.	Financial Math		6-8, HS		
DPOE	CTE Courses	CTE	These courses are designed to emphasize the math and science behind some of today's most exciting STEM industries. CR has developed a set of high-quality activities and curriculum designed in conjunction with companies like Google, Dolby, Bristol-Myers Squibb, and many more high-tech Silicon Valley companies. Students will work in tandem with industry professionals, many of which are leaders of color. This gives students a real pathway to college and career readiness.						
DORS	Digital Art	DART	Students use a series of computer apps, tools and filters to search for images, create images and animation using their laptop, phone or tablet		Art, Photography, Digital Art,		K-3, 3-5, 6-8, HS		
SYSAN	Education Research	SYSRE	Extensive background both quaitiative and qualitative research into what makes for successful learning.						

CALCULUS ROUNDTABLE COURSE DESCRIPTIONS

Initiative	Name of Class		Class Descriptions	Outcomes	Subject	Subject II	Grade Level	Standards	STEM Partners
DORS	Girls Math Club		Designed by female mathematicians and scientists of color, GMC is an innovative after-school class that instills confidence in algebra, geometry, statistics, and physics. Students learn at their own pace in a safe, supportive environment with access to interactive questions, fun activities, and one-on-one tutoring.						
DORS	Habitat & Migration	HABMIG	Students collaborate with scientists and record their observations of local plant and animal life, learning about the delicate balance between humankind and nature. Their photos and documentation become part of a worldwide database depicting the biodiversity of the planet.		Life Science, Ecology, Genetics, Chemistry		3-5, 6-8		
	Heroes and Villains		Heroes		Digital Storytelling		K-3, 3-5		
DORS	Homeroom		The Homeroom program is a customizable solution for students and families who benefit from extra support outside the classroom. From their homes, students attend a weekly online meeting with their assigned Calculus Roundtable instructors to develop an						
DORS	Math & Science of Indigenous Peoples	MSIP	The Math & Science of Indigenous Peoples is a culturally inclusive course combining the traditions of Native communities with modern STEM subjects. Calculus Roundtable teachers, college fellows, and instructional coaches collaborate with tribal leaders to increase students' knowledge of new technologies and health and wellness. The program links willow trees to biomedicine, "Code Talkers" to wi-fi, basket weaving to structural engineering, while adhering to school-level math and science standards.						
DORS	Math Wizard	MTH	In Math Ninja, students are assessed to determine their math proficiency level, then math and science 'gamified' activities are assigned, students are paired by math deficiency, instructional coaches work with small student groups (3-5)in a fun and engaging lab. As students advance they receive a martial-arts type belt until they ascend to black belts		Basic Mathematics, Pre-Algebra, Algebra, Geometry, Statistics, Physics and Calculus		K-3, 3-5, 6-8, HS	Various elementary and middle school mathematics standards	
DPOE	Money Works!		In this empowering course, students examine a multitude of avenues for money, like income, finance, and budgeting, and learn the mathematics and concepts behind launching and maintaining a successful business. The program aligns with school math standards and prepares students for higher learning and successful careers by teaching them the importance of managing earnings, savings, credit cards, and much more.						
JJC	OFFRAMP JUVENILE JUSTICE CURRICULM PROGRAM	JJC	Offramp is a blend of Calculus Roundtable's award-winning Digital One Room Schoolhouse (DORS) program and our Digital Ports of Entry (DPOE) Initiative around career technical education but tailored explicitly for Juvenile Court and Alternative Schools.Offramp is dedicated to preparing students who are enrolled in county alternative education programs to become self-sufficient adults, academically prepared for their futures. Offramp supports student success by creating a project-based learning environment that allows hands-on access to math and science concepts through a 3rd party certified program for students in court or juvenile justice incarcerated schools.		Math, intro to mechanical systems	real estate math	6-8, HS		
DORS	Rivers, Oceans & Water Ways	ROWW	Students explore the nature of water, its connection with the land to create habitats, and the use of water in industry agriculture and science		Life Science, Ecology, Engineering, Chemistry		K-3, 3-5, 6-8, HS		
DORS	RIVERS, OCEANS, & WATERWAYS		Students learn the incredible value of water by studying its composition, its use in agricultural and scientific industries, and its connection with the land in creating different habitats.						

CALCULUS ROUNDTABLE COURSE DESCRIPTIONS

Initiative	Name of Class		Class Descriptions	Outcomes	Subject	Subject II	Grade Level	Standards	STEM Partners
			of juvenile justice incarcerated schools.						
DORS	Rivers, Oceans & Water Ways	ROWW	Students explore the nature of water, its connection with the land to create habitats, and the use of water in industry agriculture and science		Life Science, Ecology, Engineering, Chemistry		K-3, 3-5, 6-8, HS		
DORS	RIVERS, OCEANS, & WATERWAYS		Students learn the incredible value of water by studying its composition, its use in agricultural and scientific industries, and its connection with the land in creating different habitats.						
DORS	Robo World	ROBO	This interdisciplinary course integrates computer science and engineering, and introduces students to the design, construction, operation, and use of robots. Robo World is an unforgettable experience that focuses primarily on machines created to assist humankind.	Robo World is an interdisciplinary course that integrates computer science and engineering. What makes them move, what makes them move and how are they used.	Mechanical engineering, electrical engineering, information engineering, mechatronics, electronics, bioengineering, computer engineering, control engineering, software engineering, mathematics, among others				
DORS	Rollercoaster	ROLL	Students design and build virtual roller coasters while learning laws of motion and introductory concepts used in higher math.		Introduction to Physics, Physics		K-3, 3-5, 6-8, HS		
DORS	Space Camp	SPACE	Students explore our vast universe with scientists and astronomers of color from NASA's Jet Propulsion Lab, the University of Capetown, South Africa, and China and Central America. While meeting space explorers and participating in scientific research, students build introductory physics skills by completing space-related activities that are simply out of this world.	Students will work with scientiest of color from NASA, Jet Propulsion Lab and astonomers from Africa, China and Central America	Astronomy Algebra, Calculus, physics and planetary systems		K-3, 3-5, 6-8, HS		
DORS	Sports Math	SPORTS	Statistics, time measurement, geometric shapes, averages, and slopes velocity are all embedded in our favorite sports. This student-friendly course has been a great success with students not traditionally interested in calculations, but who've memorized the three-point percentage of their favorite player. In analyzing baseball batting order, Olympic figure skating programs, scoring systems, and the geometrics of fields of play, participants build a variety of STEM skills.	Students will look at the geometrics of fields of play, scores and average and how they play a role I the outcome of sporting events.they will lean.	Basic Mathematics, Pre-Algebra, Algebra, Geometry, Statistics, Physics and Number Theory		6-8, HS		
KITS	STEM KITS		Our variety of math and science STEM kits are perfect for students of all ages, and allow them the freedom to dream up their own creations. These kits include flexible, step-by-step instructions, and recipients have access to STEM Broadcasting tutorial sessions to ensure their projects are a success.						