

2020-2021 Subject and Personnel New Courses

Updated 4/17/2020

Code	Name	STI Short Name	Course Description	Low Grade	High Grade	Credit	Course Type	Begin Service Year
210045	Grade 7 Accelerated Mathematics	Acc Math 7	<p>2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. The Grade 7 Accelerated Mathematics course has been carefully aligned and designed for middle school students who show particular motivation and interest in mathematics. Grade 7 Accelerated Mathematics includes standards from Grade 7 Mathematics and incorporates standards from Grade 8 Mathematics and Algebra I with Probability. Students who complete this class are eligible to enroll in Grade 8 Accelerated Mathematics or Grade 8 Mathematics. Students who complete both Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics are considered to have met the requirements of and may opt to omit the Algebra I with Probability course in their high school mathematics progression to enroll in additional mathematics courses after completing the required Algebra II with Statistics course.</p>	07	07	None	(40) Core Secondary	2020-2021
210046	Grade 8 Accelerated Mathematics	Acc Math 8	<p>2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. GThe Grade 8 Accelerated course has been carefully aligned and designed for middle school students who have completed the Grade 7 Accelerated course and show particular motivation and interest in mathematics. Grade 8 Accelerated contains four content areas: Number Systems and Operations; Algebra and Functions; Data Analysis, Statistics, and Probability; and Geometry and Measurement. The algebra focus is on quadratic relationships.</p> <p>Students who successfully complete this course will be prepared to enter Geometry with Data Analysis in Grade 9 and then accelerate directly into Algebra II with Statistics in Grade 10, thus providing them with an opportunity to take additional, specialized mathematics coursework, such as AP Calculus or AP Statistics, in Grades 11 and 12.</p>	08	08	None	(40) Core Secondary	2020-2021

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210051	Geometry with Data Analysis	Geom/DataAn	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Geometry with Data Analysis is the first of three required courses in high school mathematics. In Geometry with Data Analysis, students incorporate knowledge and skills in Geometry and Measurement, Algebra and Functions, and Data Analysis, Statistics, and Probability, leading to a deeper understanding of fundamental relationships within the discipline and building a solid foundation for further study. The prerequisite for Geometry with Data Analysis is either Grade 8 Mathematics or Grade 8 Accelerated Mathematics. For students who opt to accelerate their mathematical pathways in the 9th grade, Geometry with Data Analysis may also be taken concurrently with Algebra I with Probability.	09	12	Full	(40) Core Secondary	2020-2021
210052	Honors Geometry with Data Analysis	HGeom/DatAn	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Honors Geometry with Data Analysis is the first of three required courses in high school mathematics. In Honors Geometry with Data Analysis, students incorporate knowledge and skills in Geometry and Measurement, Algebra and Functions, and Data Analysis, Statistics, and Probability, leading to a deeper understanding of fundamental relationships within the discipline and building a solid foundation for further study. The prerequisite for Honors Geometry with Data Analysis is either Grade 8 Mathematics or Grade 8 Accelerated Mathematics. For students who opt to accelerate their mathematical pathways in the 9th grade, Honors Geometry with Data Analysis may also be taken concurrently with Algebra I with Probability.	09	12	Full	(40) Core Secondary	2020-2021
210053	Advanced Geometry with Data Analysis	AdvGeom/Dat	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Advanced Geometry with Data Analysis is the first of three required courses in high school mathematics. In Advanced Geometry with Data Analysis, students incorporate knowledge and skills in Geometry and Measurement, Algebra and Functions, and Data Analysis, Statistics, and Probability, leading to a deeper understanding of fundamental relationships within the discipline and building a solid foundation for further study. The prerequisite for Advanced Geometry with Data Analysis is either Grade 8 Mathematics or Grade 8 Accelerated Mathematics. For students who opt to accelerate their mathematical pathways in the 9th grade, Advanced Geometry with Data Analysis may also be taken concurrently with Algebra I with Probability.	09	12	Full	(40) Core Secondary	2020-2021

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Code	Name	STI Short Name	Course Description	Low Grade	High Grade	Credit	Course Type	Begin Service Year
210056	Algebra I with Probability	Alg I/Prob	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Algebra I with Probability builds upon algebraic concepts studied in Grade 7 and Grade 8 Mathematics. It provides students with the necessary knowledge of algebra and probability for use in everyday life and in the subsequent study of mathematics. Algebra I with Probability is the second of three courses required for all students. Students may enroll in this course after completing Geometry with Data Analysis in Grade 9 or by completing both Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics. Students who wish to accelerate their mathematics pathways in high school may also elect to enroll in Algebra I with Probability concurrently with Geometry with Data Analysis in the 9th grade.	09	12	Full	(40) Core Secondary	2020-2021
210057	Honors Algebra I with Probability	HonAlgI/Prob	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Honors Algebra I with Probability builds upon algebraic concepts studied in Grade 7 and Grade 8 Mathematics. It provides students with the necessary knowledge of algebra and probability for use in everyday life and in the subsequent study of mathematics. Honors Algebra I with Probability is the second of three courses required for all students. Students may enroll in this course after completing Geometry with Data Analysis in Grade 9 or by completing both Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics. Students who wish to accelerate their mathematics pathways in high school may also elect to enroll in Honors Algebra I with Probability concurrently with Geometry with Data Analysis in the 9th grade.	09	12	Full	(40) Core Secondary	2020-2021
210058	Advanced Algebra I with Probability	AdvAlgI/Prb	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Advanced Algebra I with Probability builds upon algebraic concepts studied in Grade 7 and Grade 8 Mathematics. It provides students with the necessary knowledge of algebra and probability for use in everyday life and in the subsequent study of mathematics. Advanced Algebra I with Probability is the second of three courses required for all students. Students may enroll in this course after completing Geometry with Data Analysis in Grade 9 or by completing both Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics. Students who wish to accelerate their mathematics pathways in high school may also elect to enroll in Advanced Algebra I with Probability concurrently with Geometry with Data Analysis in the 9th grade.	09	12	Full	(40) Core Secondary	2020-2021

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Code	Name	STI Short Name	Course Description	Low Grade	High Grade	Credit	Course Type	Begin Service Year
210061	Algebra II with Statistics	Alg II/Stat	2020-2021 TRANSITION YEAR COURSE FOR MATHEMATICS; OPTIONAL. Algebra II with Statistics builds on the students' experiences in previous mathematics in Geometry with Data Analysis and Algebra I with Probability. It is the third of three required courses, and it is to be taken following the successful completion of Geometry with Data Analysis and either Algebra I with Probability or the combination of the Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics course sequence. It is the culmination of the three years of required mathematics content and sets the stage for continued study of topics specific to the student's interests and plans beyond high school. Algebra II with Statistics is the prerequisite for Applications of Finite Mathematics, Mathematical Modeling, Precalculus, and all other approved ALSDE mathematics classes designed for completion of students' fourth mathematics credit.	09	12	Full	(40) Core Secondary	2020-2021
210062	Honors Algebra II with Statistics	HAlgII/Stat	2020-2021 TRANSITION YEAR COURSE FOR MATHEMATICS; OPTIONAL. Honors Algebra II with Statistics builds on the students' experiences in previous mathematics in Geometry with Data Analysis and Algebra I with Probability. It is the third of three required courses, and it is to be taken following the successful completion of Geometry with Data Analysis and either Algebra I with Probability or the combination of the Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics course sequence. It is the culmination of the three years of required mathematics content and sets the stage for continued study of topics specific to the student's interests and plans beyond high school. Algebra II with Statistics courses are the prerequisite for Applications of Finite Mathematics, Mathematical Modeling, Precalculus, and all other approved ALSDE mathematics classes designed for completion of students' fourth mathematics credit.	09	12	Full	(40) Core Secondary	2020-2021

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210063	Advanced Algebra II with Statistics	AdvAlgII/Sta	2020-2021 TRANSITION YEAR COURSE FOR MATHEMATICS; OPTIONAL. Advanced Algebra II with Statistics builds on the students' experiences in previous mathematics in Geometry with Data Analysis and Algebra I with Probability. It is the third of three required courses, and it is to be taken following the successful completion of Geometry with Data Analysis and either Algebra I with Probability or the combination of the Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics course sequence. It is the culmination of the three years of required mathematics content and sets the stage for continued study of topics specific to the student's interests and plans beyond high school. Algebra II with Statistics courses are the prerequisite for Applications of Finite Mathematics, Mathematical Modeling, Precalculus, and all other approved ALSDE mathematics classes designed for completion of students' fourth mathematics credit.	09	12	Full	(40) Core Secondary	2020-2021
210066	Elective Lab Course Math	MathElecLab	2020-2021 TRANSITION YEAR COURSE FOR MATHEMATICS; OPTIONAL. School systems should provide instructional support (labs or intervention periods) for students in Geometry with Data Analysis, Algebra I with Probability, and Algebra II with Statistics. Student assignment to this class period and the length of this class period are at the LEA's discretion. Credit for this class period would count as elective credit, not mathematics credit.	09	12	Full	(50) Elective Secondary	2020-2021

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Code	Name	STI Short Name	Course Description	Low Grade	High Grade	Credit	Course Type	Begin Service Year
210067	Applications of Finite Mathematics	AppFinitMath	<p>2020-2021 TRANSITION YEAR COURSE FOR MATHEMATICS; OPTIONAL. Applications of Finite Mathematics was developed as a fourth-year course that extends beyond the three years of essential content that is required for all high school students. Applications of Finite Mathematics provides students with the opportunity to explore mathematics concepts related to discrete mathematics and their application to computer science and other fields and includes areas of study that are critical to the fast-paced growth of a technologically advancing world. The wide range of topics in Applications of Finite Mathematics includes logic, counting methods, information processing, graph theory, election theory, and fair division, with an emphasis on relevance to real-world problems. Logic includes recognizing and developing logical arguments and using principles of logic to solve problems. Students are encouraged to use a variety of approaches and representations to make sense of advanced counting problems, then develop formulas that can be used to explain patterns. Applications in graph theory allow students to use mathematical structures to represent real world problems and make informed decisions. Election theory and fair division applications also engage students in democratic decision-making so that they recognize the power of mathematics in shaping society. The prerequisite for Applications of Finite Mathematics is Algebra II with Statistics. Note: Students may not receive credit for both Applications of Finite Mathematics and Discrete Mathematics, as Applications of Finite Mathematics includes mathematics content that also appears in the Discrete Mathematics course.</p>	09	12	Full	(50) Elective Secondary	2020-2021

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Code	Name	STI Short Name	Course Description	Low Grade	High Grade	Credit	Course Type	Begin Service Year
210068	Mathematical Modeling	MathModeling	2020-2021 TRANSITON YEAR COURSE FOR MATHEMATICS; OPTIONAL. Mathematical Modeling is developed to expand on and reinforce the concepts introduced in Geometry with Data Analysis, Algebra I with Probability, and Algebra II with Statistics by applying them in the context of mathematical modeling to represent and analyze data and make predictions regarding real-world phenomena. Mathematical Modeling is designed to engage students in doing, thinking about, and discussing mathematics, statistics, and modeling in everyday life. It allows students to experience mathematics and its applications in a variety of ways that promote financial literacy and data-based decision-making skills. This course also provides a solid foundation for students who are entering a range of fields involving quantitative reasoning, whether or not they require calculus. The prerequisite for Mathematical Modeling is Algebra II with Statistics. Note: Students may not receive credit for both Mathematical Modeling and Algebra with Finance, as Mathematical Modeling includes mathematics content that also appears in the Algebra with Finance course.	09	12	Full	(50) Elective Secondary	2020-2021
490029	Pharmacy Technician	Pharm Tech	Pharmacy Technician is a one credit course that prepares students for the Pharmacy Technician Certification exam and a pharmaceutical career. The course covers content related to medicine, federal requirements, patient safety, quality assurance, and order processing. Foundations of Health Science is a prerequisite course.	09	12	Full	(80) Career Tech	2020-2021
490036	Operating Room Foundations	Op Rm Found	Operating Room Foundations is a one-credit course that introduces students to the exciting and dynamic world of the operating room, and exposes students to an array of multidisciplinary specialties and concepts within perioperative medicine. Course content focuses on the knowledge and skills needed to promote patient safety and optimize surgical outcomes.	09	12	Full	(80) Career Tech	2020-2021
510046	Creative Designs	Creat Desgn	This course is designed to provide students the opportunity to use a variety of equipment, including heat transfer/digital printers, cutters, embroidery machines, heat presses, quilting machines, and computer design software programs to develop skills needed to effectively organize and manage a business while also learning the necessary employability (soft) skills to be a productive employee in the workforce.	09	12	Full	(80) Career Tech	2020-2021

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560033	Engineering Essentials-PLTW	EngEss PLTW	A one credit course designed for high school students to explore the work of engineers and their role in the design and development of solutions to real-world problems.	09	12	Full	(80) Career Tech	2020-2021
922853	INTRODUCTION TO INJECTION MOLDING LAB	AUT 146	Theory 0. Lab 3. Students learn to safely operate an injection molding machine. Students learn to properly startup, set machine controls and shutdown a molding machine.	10	12	Full	(90) College Credit	2020-2021
924017	INTRODUCTION TO GAME DESIGN I	CAP 104	Theory 1. Lab 2. This course is designed to introduce the students to the theory of game design and production using industry software and related technologies. Upon completion, students should be able to demonstrate the technical and creative aspects of game development. Prerequisite: CAP 101	10	12	Full	(90) College Credit	2020-2021
924018	INTRO TO COMPUTER PROGRAMMING FOR 3D	CAP 105	Theory 1. Lab 2. This course is designed to introduce fundamental concepts of computer programming as applied to 3D modeling software and game engines. Upon completion, students should be able to demonstrate knowledge of industry programming language.	10	12	Full	(90) College Credit	2020-2021
934230	INTRODUCTION TO MACHINING TECHNOLOGY	MSP 125	Theory 1. Lab 2. This course introduces precision machining processes as they relate to the metalworking industry. Topics include machine shop safety, precision measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform basic measurement and layout, drilling, sawing, turning, and milling to make parts and tools.	10	12	Full	(90) College Credit	2020-2021
938640	SMAW GROOVE	WDT 106	Theory 2, Lab 4. This course provides students with instruction and opportunities to develop skills on joint design, joint preparation, and fit-up of groove welds in accordance with applicable welding codes. Emphasis is placed on safe operation, joint design, joint preparation, and fit-up.	10	12	Full	(90) College Credit	2020-2021
938641	SMAW FILLET/OFC/PAC/CAC	WDT 107	Theory 2, Lab 1. This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting, plasma arc cutting and carbon arc cutting.	10	12	Full	(90) College Credit	2020-2021

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938642	INTRODUCTION TO THE MARITIME INDUSTRY	WDT 140	Theory 4. Lab 1. Introduces the facilities, methods, and processes used in the shipbuilding and repair industry. Describes the impact the industry has on the U.S. economy and explores the various craft opportunities available to workers. Provides an overview of the safety practices specific to the industry.	10	12	Full	(90) College Credit	2020-2021
938643	INTRODUCTION TO MARITIME STRUCTURAL FITTING	WDT 170	Theory 2. Lab 2. This course is designed to cover Welding Safety, Oxyfuel Cutting, Base Metal Preparation, Weld Quality, Shielded Metal Arc Electrodes, Tack Welding, Fire Watch, Introduction to Structural Fitter Drawings, and Fitting One.	10	12	Full	(90) College Credit	2020-2021
938644	INTRODUCTION TO APPLIED TECHNOLOGIES	WDT 100	The course is designed to introduce the student to the basic concepts, terminology and procedures associated with applied analytical skills needed to succeed in higher-level courses to include: basic mathematical applications, use of scientific calculators, measurements, and geometric and triangulation methods. Theory 3. Lab 0.	10	12	Full	(90) College Credit	2020-2021
938808	MSSC Safety Course	WKO 141	Theory 1H, Lab 2H. This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. This course is equivalent to AUT 102.	10	12	Full	(90) College Credit	2020-2021
938809	MSSC Quality Practices and Measurement	WKO 142	Theory 1H, Lab 2H. This course is designed to provide students with knowledge and skills related to quality practices and measurement in a manufacturing environment. This course is equivalent to ADM 106.	10	12	Full	(90) College Credit	2020-2021
938810	MSSC MANUFACTURING PROCESSES AND PRODUCTION	WKO 143	Theory 1, Lab 2. Knowledge and skills related to manufacturing processes and production in a manufacturing environment	10	12	Full	(90) College Credit	2020-2021
938811	MSSC MAINTENANCE AWARENESS	WKO 144	Theory 1, Lab 2. Knowledge and skills related to maintenance awareness in a manufacturing environment	10	12	Full	(90) College Credit	2020-2021

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941211	ADVANCED EMERGENCY MEDICAL TECHNICIAN	EMS 155	Theory 4, Lab 3. This course is required to apply for certification as an Advanced Emergency Medical Technician (AEMT). This course introduces the theory and application of concepts related to the profession of the AEMT. The primary focus of the AEMT is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Topics include: extending the knowledge of the EMT to a more complex breadth and depth, intravenous access and fluid therapy, medication administration, blind insertion airway devices, as well as the advanced assessment and management of various medical illnesses and traumatic injuries. This course is based on the NHTSA National Emergency Medical Services Education Standards. Requires licensure or eligibility for licensure at the EMT level and EMS 156 must be taken as a co-requisite.	10	12	Full	(90) College Credit	2020-2021
941212	ADV EMERGENCY MEDICAL TECH CLINICAL	EMS 156	Theory 0, Lab 2. This course is required to apply for certification as an Advanced Emergency Medical Technician (AEMT). This course provides students with clinical education experiences to enhance knowledge and skills learned in EMS 155. This course helps prepare students for the National Registry AEMT Exam. The student will have the opportunity to use the basic and advanced skills of the AEMT in the clinical and field settings under the direct supervision of licensed healthcare professionals. Requires licensure or eligibility for licensure at the EMT level and EMS 155 must be taken as a co-requisite.	10	12	Full	(90) College Credit	2020-2021
943192	MSSC SAFETY COURSE	ADM 291	Theory 3. Lab 0. This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment.	10	12	Full	(90) College Credit	2020-2021
943193	MSSC QUALITY PRACTICES AND MEASUREMENT	ADM 292	Theory 3. Lab 0. This course is designed to provide students with knowledge and skills related to quality practices and measurement in a manufacturing environment.	10	12	Full	(90) College Credit	2020-2021