

Central Bucks School District 2023-2024

MIDDLE SCHOOL PROGRAM OF STUDIES GRADES SEVEN AND EIGHT

HOLICONRAM OF

This course is a formal study of Algebra 1 concepts including integers, rational numbers, expressions, solving linear equations, graphing linear functions, writing linear equations and exponents. Criteria for placement: Pre-Algebra grade of or better for the year or teacher recommendation.

2710 Pre-Algebra

GRADE 8 MATHEMATICS

Because of the sequential development of the mathematics curriculum, students must attain the prerequisites in the previous course before advancing to a more difficult level. The prerequisite for each course has been developed with the sole purpose of ensuring students have the skills they need to be successful. These prerequisites must be met before entering the course. Students who do not meet the prerequisite for the next sequential math course can elect to retake the course in summer school or during the next school year. For a complete secondary math course sequence visit:

http://www.cbsd.org/Page/1512

2800 Geometry/Trigonometry

This course is designed for students who have successfully completed Algebra 1 or Algebra 1B. Geometry/Trig has three major sections: The Foundation (Units 1-2), The Heart (Units 3-5), and The Application (Units 6-8). In The Foundation students will learn about proper mathematical communication. Students will learn to make logical arguments and justify their rationale for problem solving steps. In The Heart students will focus on Triangles (Rules & Relationships, Similarity, Congruence, and Right Triangle Trigonometry). Finally, in The Application, students will apply concepts from throughout the course to Polygons, Quadrilaterals, and Circles. Students will conclude the course by reviewing Area & Perimeter of Plane Figures and studying Surface Area & Volume of Solids. There will be an emphasis on applying algebra to geometric figures and applying geometric concepts to real world scenarios. Prerequisite: Algebra 1, - (80%) or teacher recommendation.

2810 Algebra 1

This course is intended for college bound students who EMC /P &MCID 1m26(ducce)-3(s) oul y4()-246coneplte 6proe gebra nd 6EMC /P &MCID 1m26(d)-2(esm)3(o)4(u)4(d)]TETQq0.0000 The Advanced Science 8 course of study includes variations in materials, tasks, and assessments. Advanced students will complete more demanding assignments and study additional material beyond that expected in the Academic level. Further, Advanced students will be required to complete a challenging scientific investigation focusing on the important role of the scientific method in the analysis of a problem. Although registering for both Advanced Science and Advanced Social Studies is permitted, it is not encouraged. Because of the rigor of these courses, students must understand that taking both simultaneously will be demanding. Prerequisite: Academic Science 7, average or teacher recommendation.

3820 Academic Science 8

Science 8 is an integrated course that covers topics in the life, physical, and Earth/space sciences. The units of study

Art

8750 Art Essentials: 7

This eighteen-week course builds upon the skills emphasized in the Elementary art program. Students focus on the possible studio units of drawing, painting, printmaking, ceramics, and sculpture. Students produce a variety of two and three-dimensional art works. Art history is integrated

Music

Students may elect to take a performing group music class in seventh and eighth grades. Students choose from band, orchestra, or chorus. Please note: Only students enrolled in curricular music performance classes (Chorus, Band and Orchestra) are eligible to audition for the BCMEA County Music Festival, and (after-school) select music ensembles. (Exploratory Music does not qualify as a performance class.)

8752 Band 7

This course is designed for students who play band instruments in the woodwind, brass and percussion families.

Students receive experience playing in a variety of musical styles and continue their development of musical skills and techniques. Prerequisite for Band 7: Successful completion of Grade 6 band or the equivalent.

8852 Band 8

This course is designed for students who play band instruments in the woodwind, brass and percussion families. Students receive experience playing a variety of musical styles and continue their development of musical skills and techniques. Public performances are scheduled throughout the year, incl decision-making skills, substance abuse, and healthy relationships will also be a focal point in class. Students will gain knowledge of stress management techniques, effective communication strategies, personal safety awareness, recognition of at-risk behaviors, and effective refusal skills. Physical education will focus on the connection between exercise and the brain through personal fitness, team sports, individual sports, and cooperative activities. Students will learn teamwork, cooperation, and sportsmanship; and they will be able to develop the skills necessary to modify activities to suit their own unique needs and interests.

TECHNOLOGY AND ENGINEERING EDUCATION

6751 Foundations of Engineering

6851 Principles of Engineering

Students completing the course will experience manufacturing, construction, communications, EPT (energy, power, and transportation) and coding, utilizing current technologies. Students will learn to apply the design loop to systematically solve problems.

CENTRAL BUCKS SCHOOL DISTRICT 7th Grade Course Information

Integrated Technology, Health/PE and Innovation and Creativity (InC) are mandatory courses for all 7th graders.

6th Grade students can choose from two schedule options for their 7th grade schedule: MUSIC PERFORMANCE SCHEDULE—Band, Chorus or Orchestra EXPLORATORY ELECTIVES SCHEDULE

A MUSIC PERFORMANCE SCHEDULE includes BAND, CHORUS or ORCHESTRA

Students will be scheduled for Innovation & Creativity (InC), Integrated Technology, H&PE, and one of the following—Art, Tech Ed, or Family & Consumer Sciences. The two specials (of these three) not scheduled in a student's 7th grade year will be scheduled during the student's 8th grade year.

CENTRAL BUCKS SCHOOL DISTRICT 8th Grade Course Information

A MUSIC PERFORMANCE SCHEDULE includes BAND, CHORUS or ORCHESTRA