



Southside High School

Discrete Math

Syllabus 2026 - 2027

Instructor(s): Brian Briggs, Megan Blackwell

Location: Room 215

Phone: 864.729.2425 (This is my google voice number. If you text please indicate who you are and who your child is.)

Email: bmbiggs@greenvilleschools.us, mnblackwell@greenvilleschools.us

Tutoring/Office Hours: Tutoring available upon request - Monday and Wednesday afternoons

OFFICE HOURS: 1st Semester: (2:15 - 3:45 PM Monday - Friday)

2nd Semester: (8:30-9:45 AM Monday-Friday)

Instructor(s)' Schedule:

	Fall Semester	Spring Semester
1st Block - 8:45-10:15 AM	Alg 2 Honors	Discrete Math
2nd Block - 10:20-11:50 AM	Discrete Math	Algebra 1 CP
3rd Block - 11:55- 2:10 PM	Discrete Math	Planning
Lunch - 1:08-1:37 PM	C Lunch	C Lunch
4th Block - 2:15- 3:45 PM	Algebra 1 CP	Algebra 1 CP

COURSE DESCRIPTION: Discrete Mathematics (DM) is a collection of methods for studying big data analytics. It includes the study of the principles of number theory, classification and comparison of objects, use of matrices to model and solve problems, use of a recursion model, analysis of numbers with different bases, data probability and statistical reasoning in real-world situations, use of graph theory, and the principles of logic theory. The standards and indicators in DM are sorted within the strands of Data, Probability, and Statistical Reasoning (DPSR); Measurement, Geometry, and Spatial Reasoning (MGSR); Numerical Reasoning (NR); and Patterns, Algebra, and Functional Reasoning (PAFR). DM stresses the connections between contemporary mathematics and their applications to our daily lives. DM provides tools for understanding and using inference systems for drawing reasonable conclusions and algorithms for scaling computations and for managing large-scale data. Topics addressed in DM are applicable to real-world career fields such as the field of computer science and situations that include management sciences, statistics, voting and social choice, fairness and game theory, size and growth, and money and resources. Environmental and economic decisions dominate modern life, and behind these decisions are fundamental principles of science, technology, and mathematics.

TEXTBOOK(S): Blitzer thinking mathematically eighth edition

INSTRUCTIONAL PHILOSOPHY: The Mathematics Department of Southside High School believes that all students can succeed. We follow South Carolina College- and Career-Ready Standards at every level to plan and implement lessons designed to improve mathematical skills in a logical, systematic, and sequential

manner. A variety of teaching and assessment strategies are used to address multiple learning styles. We adhere to the district grading guidelines and to its scope and sequence recommendations in order to help each student realize his or her potential as a learner.

ATTENDANCE: We are currently on a 100% attendance plan. Should school guidelines change in the future, this class will follow all guidelines set out by school-wide administration.

TARDINESS TO CLASS: Students are expected to be in the classroom before the tardy bell rings for class. Repeat offenders will be subject to the school's disciplinary guidelines.

Cell Phone Policy:

Based on input provided from schools across the District, including ours, Greenville County Schools has updated the [Administrative Rule JCDA](#) with the goal of creating a more consistent practice regarding the use of personal electronic devices during the school day. Beginning January 4, 2024, personal electronic devices cannot be used by high school students in classrooms during the instructional day. All personal devices must remain out of sight of others during this time. Students may use personal electronic devices during class changes, lunch, and other times outside of the classroom during the instructional day unless directed differently by the principal or principal's designee. [The instructional day for high schools has been defined as 8:45 a.m. to 3:45 p.m. The instructional school day for other special centers shall be determined by the location administrator in accordance with the instructional](#) activities of that facility. Students not adhering to this policy could face disciplinary action in accordance with [Board Policy JCDA](#).

Teachers may allow students to use a wired headphone in the chrome book only. You may not use bluetooth headphones during class at all. The teacher will tell you when you may use this option. This is not allowed during instructional time.

SHS Late Work Policy:

Make-up Work:

All work must be completed and turned in according to teacher directions within one week of returning to school.

Late Work:

	Minor Grades	Major Grades	Tests	Mastery/Corrections
CP & Honors	Accepted until the major/summative assessment at the end of the unit, and are subject to a penalty of 10 points.	Accepted within 5 school days of the due date, and subject to a 10 points deduction if not missed for an excused absence.	Made up for full credit with an excused absence within 5 days.	Accepted until the end of the quarter

ASSESSMENT & GRADING POLICY: Students are encouraged to conference with the instructor at a mutually agreed upon time so they can discuss their academic strengths and needs. Assessments will be formative (evaluating academic needs) and summative (evaluating academic progress).

Major: 60%

Minor: 40%

ACADEMIC DISHONESTY: Students are expected to uphold a high level of integrity and honesty when it comes to submitting original works. Any student who is found in violation of the provisions set by the academic integrity code in the student handbook will receive an automatic zero for the assignment. Additionally, further action may be taken by the administration.

Note on AI: AI tools are valuable learning resources when used ethically and appropriately. In this class, you may use AI to help you learn—such as explaining concepts you don't understand, checking your work after you've completed it independently, exploring alternative problem-solving methods, or generating additional practice problems. However, AI may not be used to complete assignments, projects, or assessments for you, as a substitute for your own thinking and problem-solving, or in any way that misrepresents AI-generated work as your own. The goal of this course is to develop your mathematical understanding and skills, not simply to obtain correct answers. Using AI to do your work rather than support your learning constitutes academic dishonesty and will result in consequences outlined in the school's academic integrity policy. When in doubt about whether a particular use of AI is appropriate, ask first.

REQUIRED MATERIALS: Chromebook, notebook, pencil
Recommended: Graphing calculator (Calculators will be provided for classroom use.)

BEHAVIORAL EXPECTATIONS:

- When in the building, arrive to class on time, collect necessary materials and begin on the bell ringer at your seat
- Do not engage in activity that is disruptive to the class, disrespectful to others or destructive in any way
- Be respectful to me as well as your fellow classmates when they are speaking, do not interrupt or speak over people
- Follow all rules set out in the student handbook, the teacher will follow consequence matrices as per the student handbook

CONSEQUENCES:

If a student fails to obey the classroom procedures and rules:

- 1st & 2nd offense: Warning (individual conversation between student and teacher)
- 3rd & 4th offense: Call home to parents/guardians, written referral to administrator
- 5th or more offense: Referral, parent-teacher conference with administrators and student

COURSE OUTLINE: Instruction will follow the timeline below.

1st Quarter :

Unit 1: Problem solving and critical thinking

Unit 2: Set Theory

Unit 3: Logic Theory

Unit 4: Number Theory and the Real number system

2nd Quarter:

Unit 5: Counting Methods and Probability Theory

Unit 6: Voting and Apportionment

Unit 7: Graph Theory

Unit 8: Number Representation and Calculation

Unit 9: Measurement (if time permits)

Unit 10: Combinatorics (if time permits)

South Carolina College and Career Ready Standards for Discrete math can be found at:

<https://ed.sc.gov/scdoe/assets/File/instruction/standards/Math/PrintableSCCCRAAlgebra2Standards201516.pdf>