

Browning Public Schools Club Goals/Sponsors

School Year: 2024 - 2025

School: Browning Middle School

Club Name: Code Girls United

Club Sponsor Name: Alysa Arrowtop

Club Goals: Code Girls United brings the language of code and problem solving power to girls

in rural and tribal communities.

Proposed Meeting Time: After school on Thursdays, in the BMS Library

Summary of Proposed Club Activities:

Social emotional growth: The young girls who enter our program walk away with a new sense of self-confidence in their abilities and an empowerment to take control of their future. Computer science and coding activities have been shown to help build up feelings of autonomy, confidence, creativity, and critical problem solving—in addition to skills building

Computer Science: Computer science and coding activities teach students the importance of logical progressions, loops, and if-then statements, which directly translates to the students' ability to understand how their own actions can affect others in a positive or negative way.

Math: Girls in our program engage with mathematical concepts such as discrete math, logic, data structures, probability and statistics, and linear algebra. Through our hands-on use of MIT's App Inventor our girls are exposed to topics such as: counting, summation, algebraic structures, predicate logic, first-order, higher-order, functional programming, algorithms, Artificial Intelligence, databases, and much more.

Literacy Skills: Program participants create a business plan, develop and conduct surveys, research community problems with adult mentors, and create public presentations. These activities foster constructed and contextual knowledge, information creation as a process, research as inquiry, scholarship as conversation, and strategic exploration.

All sponsors must keep sign-in sheets for ALL meetings and sign sheets will include the date of the meeting and SIGNATURES of STUDENTS attending. These sign-in sheets will be turned in at the end of the year before receiving the stipend.