

CYBERCAMP INSTRUCTIONAL ACTIVITY SCHEDULE

School Division(s): Manassas City Public Schools School: Osbourn High School

Camp Begin Date: July 5, 2016 Camp End Date: July 22, 2016 Days of Week: Monday thru Friday

Daily Instruction Begin Time: 8:00 am Daily Instruction End Time: 1:00 pm Specify alternate schedules below

Lunch Period (begin/end): 11:00-11:30 am Total instructional hours including guest speaker(s) field trip(s) and culminating

Enrollment 25 students activity: 70 hours

WEEK 1 – July 5-8 2016

Monday	Tuesday <u>Day 1</u>	Wednesday <u>Day 2</u>	Thursday <u>Day 3</u>	Friday <u>Day 4</u>
<p>4th of July</p> <p>No CyberCamp</p> 	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Introductions, team building, getting to know you.</p> <p>Introduction to cyber security and overview of learning experiences during camp.</p> <p style="text-align: center;">IC3 Pre-test</p> <p>Intro to Electricity</p> <p>Intro to Robotics</p> <p>Intro to Humanities</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Virginia Education Wizard</p> <p style="text-align: center;">Field Trip: Micron Manassas, VA Tour Facility-Cyber Security 9 am to 12 pm</p> <p>Virginia Education Wizard</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Review electricity- Make circuits, including series and parallel circuits and switches.</p> <p>How batteries work- Make a wet cell battery</p> <p>Design a flashlight using variety of household items (dollar store)</p> <p>Humanities Content- Creative writing on cyber-attacks lead to a city wide blackout.</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Review robots and their components.</p> <p>Hello World- Interact with the Boe-Bot to learn intro to coding and key words.</p> <p>ASCII and Timers- Use the Boe-Bot to practice with variables and timing statements.</p> <p>Timers and LEDs- Construct and LED circuit and the Boe-Bot for a visual connection to processing speed.</p> <p>Current event assignment – Cyber Security</p>

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WEEK 2 – July 11-15, 2016

Monday <u>Day 5</u>	Tuesday <u>Day 6</u>	Wednesday <u>Day 7</u>	Thursday <u>Day 8</u>	Friday <u>Day 9</u>
<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Timers and LEDs- Code the LEDs on Boe-Bots to communicate Morse code</p> <p>Cyber Current Events- Student presentations.</p> <p>Boe-Bots Basic navigation Subroutines Code movement</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Coding Turning maneuvers Programing design Refine movements</p> <p>Infrared navigation- Construct a pair of infrared navigation circuits and use to navigate Boe-Bots around obstacles.</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Infrared Navigation II- (Cyber Literacy II) – Use the IR circuits to trigger additional Boe-Bot responses such as speakers to create music.</p> <p>Guest Speaker(lunch time): <u>Charles Britt (NVCC)</u>-Cyber Ethics, Cyber Society, and Jobs in Cyber Security</p> <p>IR programmable remote-(Cyber Literacy II) – Programmable remotes to control the Boe-Bots.</p> <p>Humanities and Ethics- Malicious control of wireless devices (hackers).</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Intro to Humanities and Cyber World- Connections between the physical person and the domain of cyberspace. What does it mean to be a responsible cyber citizen? Discuss relevant improvements to cyber technologies. Discuss malicious intent and malware to which cyber citizens may be exposed to.</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Network terms and definitions. Sample layouts of networks. Student will construct a live “human” network in the classroom using ropes (network connections) and envelopes (data) and observe how information travels.</p>

CYBERCAMP INSTRUCTIONAL ACTIVITY SCHEDULE

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WEEK 3 – July 18-22, 2016

Monday <u>Day 10</u>	Tuesday <u>Day 11</u>	Wednesday <u>Day 12</u>	Thursday <u>Day 13</u>	Friday <u>Day 14</u>
<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Debates- Assign groups and topics for debates on cyber topics.</p> <p>Students will research topics and hold structured debates in class that discuss relevant cyber-security headlines.</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Cyber Society- (cyber ethics) Examine the impact of digital technology on friendships, and personal relationships. This will include technology and privacy.</p> <p>Human Personality- Intellectual and emotional traits cultivated through the use of technology.</p> <p>Personal use of technology.</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p>Digital Technology- Harms and trusts.</p> <p>Military technology</p> <p>Guest Speaker (lunch time): <u>Manassas City Police</u>-Cyber Crimes and Cyber Security.</p> <p>Social Media</p> <p>Cyber Ethics- ethical judgment activity</p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p><u>IC3 Certification Test</u></p> <p>Guest Speaker(lunch time): <u>Lockheed Martin</u>-Cyber Ethics, Cyber Society, and Jobs in Cyber Security</p> <p><u>IC3 Certification Test</u></p>	<p>Daily Opening (10-15 min) with Counselor-Academic and Career Plan, VA Wizard, and Naviance.</p> <p><u>IC3 Certification Test</u></p> <p>Awards ceremony with dinner. Parents, staff, and community leaders will be invited to celebrate OHS CyberCAMP 2016.</p>