

# Student Technical Support Course

The course curriculum below is designed to teach students the technical skills of how to manage a student-run IT help desk for a middle or high school. The curriculum includes student responsibilities, learning products, and overarching projects. The curriculum addresses both IT technical knowledge as well as help desk management skills. This course is designed as a standalone semester course (15 weeks), or it can be executed as a student club either during or after regular school hours. The club version would allow students to work at their own pace which may be more beneficial for students who already have the requisite skills in certain IT topics.

Some potential barriers to adoption include funding, equipment, Help Desk space, internet capacity, and enough mentor teachers with the requisite IT supervisory skills.

## Helpful Resources:

<https://www.edsurge.com/news/2016-07-17-beyond-the-genius-bar-cultivating-leadership-with-a-student-led-tech-team>

<https://www.genyes.org/genyes/>

<https://bhshelpdesk.com/about/>

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## *Course Overview*

Credit: 3 hours or 1 full semester (15 weeks); the curriculum can also be modified to act as the foundation for a student club for self-paced study

Course Description: The Student Technical Support Course is a hands-on study of technology integration teaching students the skills to become active members of the school's IT Help Desk. The course is designed for high school students but could also be modified for middle/junior high. Students will learn to assess problem sets and define the best approach to solving them. In addition to solving problems for students and teachers, students will complete and maintain several running projects that address problems or solutions in educational technology integration. Students can collaborate with outside businesses and organizations as they develop and implement their projects.

Prerequisites: To be successful in this course, students should have a working knowledge of Apple OS and Microsoft Windows OS.

## *Required Materials*

Students must have access to a computer with reliable high-speed Internet access to participate in the course. A webcam and microphone are strongly recommended for synchronous meetings. There are no required texts for this course beyond the online material, which will be provided by the school.

## *Course Structure*

The course will be divided up into 5 units. Each unit will last two to four weeks and will follow a similar structure.

### Unit Structure:

- Information Technology Basics – introduction to coding, website construction, and digital production techniques
- Mentoring Skills – stakeholder engagement, project management, and challenge resolution
- IT Support – problem diagnosis, solution management, and device accountability
- Digital Citizenship – digital literacy, responsible surfing, and social media safety
- Facilitation Skills – presentation design and delivery

Certification: Only certified graduates of the course will be allowed to join the Student IT Help Desk. Certification is awarded upon successful completion of each of the five core units. Students are scored on the variety of technologies they've used, their problem-solving and critical thinking skills, and the support provided to teachers and peers at their school. To become certified, students must have exemplary leadership and demonstrate significant learning in the technology support program. Unit completion requirements are captured in the grading rubric below.

Community of Practice: With teacher support, students will update and maintain two forums where members can collect, collaborate, share lesson plans, and engage in conversations to support technology integration in the school. The first will be the IT Learning Network, an internal-facing online space to house course

instructional material, how-to videos, and Help Desk work items. The second forum will be an external-facing Help Desk Blog to deliver articles containing tips and technology integration insights for students, teachers, administrators, and parents.

## *Course Objectives*

1. Students will be able to define and identify a variety of problems with technology in an educational setting.
2. Students will be able to interpret, question, and evaluate each problem set as it arises.
3. Once the problem has been defined and addressed, students will create a digital resource for the Help Desk blog to address future occurrences of the same problem or problems.
4. Students will be able to define, recognize and demonstrate use of collaborative or networked environments. These environments will be used to connect, share and learn from each other and a larger social network beyond the Help Desk.
5. As the course evolves, students will build a personal learning network that they can incorporate into their own learning.
6. Students will be able to adapt to new environments and problem sets.
7. Students will be able to support and formulate a solution for all problem sets.
8. Students will make adjustments when their “agenda” does not go according to plan.
9. Students will take on a leadership role among their peers.
10. Students will be willing to try new things and independently seek out new opportunities for learning.
11. Students will develop a vision for their own learning. They will look for creative ways to improve situations.
12. Students will offer a fresh perspective towards integrating technology in the classroom and keep BHS moving forward with innovative approaches to teaching and learning.
13. Students will be able to define, process, and translate problems using all available resources.
14. Students will be able to evaluate information, both on and offline, and determine its validity.
15. Students will be able to demonstrate professionalism and decorum when interacting with BPS faculty, staff and student body.
16. Students will demonstrate superior written and oral communication skills.
17. Students will be able to seek out unique pathways to direct their own learning.
18. Students will take strategic risks and feel free to explore and experiment with new technology.

## *Course Agenda*

Unit	Dates	Major Focus	Topics for Unit Will Include	Deliverables
1	Weeks 1-4	IT Basics	Coding & Modeling Building Websites Digital Art & Storyboarding Video Production & Animation Makerspace Projects	- Forum Post x 4 - Unit Project - Project Feedback
2	Weeks 5-6	Mentoring Skills	Working with Mentor Teachers Independent Learner Skills Team Building Project Management & Leadership Problem Troubleshooting	- Forum Post x 2 - Unit Project - Project Feedback

3	Weeks 7-10	IT Support	Log Help Desk Tasks Fix & Maintain Computers (Hardware) Do Diagnostics & Install Updates (Software) Deploy & Inventory Devices	- Forum Post x 4 - Unit Project - Project Feedback
4	Weeks 11-13	Digital Citizenship	Information & Media Literacy Research Skills Internet Safety Social Media Etiquette Online Responsibility & Ethics	- Forum Post x 3 - Unit Project - Project Feedback
5	Weeks 14-15	Facilitation Skills	Presentation Facilitation Graphic Design Fundamentals Information Clarity Effective Public Speaking	- Forum Post x 2 - Unit Project - Project Feedback

## Grading

Your course grade will be calculated based on the following weights:

- 40%: Average of blog forum grades
- 50%: Average of project grades
- 10%: Participative Activity

Grading Scale: A (90=100), B (80-89), C (70-79), D (60-69), F (59 or less)

### Blogging Rubric:

Criteria Weight	Rubric Criteria	4	3	2	1	0
		<b>Advanced</b>	<b>Proficient</b>	<b>Basic</b>	<b>In Progress</b>	<b>Unacceptable</b>
		100%	85%	75%	65%	0%
25.00%	Post Content	Well written, synthesizes learned content and constructs new meaning.	Moderate amount of external reading and has made some attempt to synthesize information and form new meaning.	Little to no evidence of reading other information in order to form new meaning of the topic.	Still in draft or template format	No evidence of work
25.00%	Writing	Superior writing style with a distinct voice. Grammar, spelling, and punctuation are flawless.	Needs minor revisions and the student demonstrates an above average writing style. Few grammar, spelling, and punctuation errors.	Needs significant revision. Grammar, spelling, punctuation errors throughout.	Still in draft or template format	No evidence of work
25.00%	Relevance to Teachers	Detailed and critical analysis of the	Adequate explanation as to how the	Some explanation as to how the	Still in draft or template format	No evidence of work

	and Students	tool/app/resource and how it will benefit a student's learning and/or a teacher's instruction.	tool/app is relevant to student learning and instruction.	tool/app is relevant to a student's learning and a teacher's instruction.		
25.00%	Post Design	Uses many design & formatting features and/or the post contains appropriately labeled screenshots/videos	Includes several design & formatting features; subheadings, bullets, paragraphs to enhance appeal	predominantly text and contains very few design features to enhance its visual appeal	Still in draft or template format	No evidence of work

Project Rubric:

Criteria Weight	Rubric Criteria	4	3	2	1	0
		<b>Advanced</b>	<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Needs Improvement</b>	<b>Unacceptable</b>
		100%	85%	75%	65%	0%
25.00%	Content	Well written, synthesizes learned content and constructs new meaning.	Recognition of multiple perspectives, development of an engaging and exciting narrative, innovative and interesting viewpoint, proofreading and editing (no visible errors)	Recognizes multiple and diverse perspectives (and uses a variety of sources to do this), balances subjectivity and objectivity, cites sources correctly, develops a compelling narrative, includes detailed examples, proofread with few errors	Recognizes only a single perspective, uses only a single source or type of source, fails to cite sources (or does so incorrectly), lacks a compelling narrative or detailed examples, poorly proofread or poorly written	No evidence of work
25.00%	Functionality & Accessibility	Superior functionality, training included as part of the program, intuitive	Multilingual features, user guide / tour, features to improve access for hearing-/vision-impaired visitors	Functional (no broken links or apps), user-friendly	Broken components, difficult / not intuitive to use	No evidence of work
25.00%	Aesthetics & Organization	Top-notch design and layout, unique and creative	Intuitive design and layout	Pleasant to look at and use (including a pleasant color scheme), organized layout, shows consistency in its layout, fonts, and other components	Displeasing color scheme or layout, outdated in its design scheme	No evidence of work

25.00%	Engagement & Relevance	Goes above and beyond in its engagement and relevance, strong emotional response from users	Brings about positive responses from users	Interactive, relevant and relatable, targeted to a public audience	Static (not interactive / engaging), doesn't take advantage of the digital format/tools, incomplete, not relevant or accessible to a public audience	No evidence of work
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### *Alignment to North Carolina Digital Learning Standards (NCDLS)*

The NCDLS competencies can be found [here](#). The Student Help Desk is aligned with all seven of these standards.

#### Empowered Learner:

- NC.DLS.EL.1.a
- NC.DLS.EL.1.b
- NC.DLS.EL.1.c
- NC.DLS.EL.1.d

#### Digital Citizenship:

- NC.DLS.DC.2.a
- NC.DLS.DC.2.b
- NC.DLS.DC.2.c
- NC.DLS.DC.2.d

#### Knowledge Construction:

- NC.DLS.KC.3.a
- NC.DLS.KC.3.b
- NC.DLS.KC.3.c
- NC.DLS.KC.3.d

#### Innovative Design:

- NC.DLS.ID.4.a
- NC.DLS.ID.4.b
- NC.DLS.ID.4.c
- NC.DLS.ID.4.d

#### Computational Thinking:

- NC.DLS.CT.5.a
- NC.DLS.CT.5.b
- NC.DLS.CT.5.c
- NC.DLS.CT.5.d

#### Creative Communication:

- NC.DLS.CC.6.a
- NC.DLS.CC.6.b
- NC.DLS.CC.6.c
- NC.DLS.CC.6.d

Global Collaboration:

- NC.DLS.GC.7.a
- NC.DLS.GC.7.b
- NC.DLS.GC.7.c
- NC.DLS.GC.7.d

### *Alignment to International Society for Technology in Education (ISTE) Standards*

[Click here](#) to view the ISTE Standards for Students. The Student Help Desk is aligned with all six of these standards.

### *Academic Integrity*

Students are required to comply with the School Policy on Academic Integrity found in the Code of Student Conduct. Students are required to exercise honesty in completing any assignment. Please refer to the School Academic Integrity resource page for a detailed explanation of the policies on academic integrity and some of the common understandings related to those policies.

Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course. Examples include online discussions of class topics and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

### *FERPA Notice*

Under the Federal Family Education Rights and Privacy Act of 1974 (FERPA), a student's education records are protected from disclosure to third parties. Because of the public nature of web-based assignments in this course and due to the possibility that some student assignments may be viewed by third parties online, we are required to collect your e-signature acknowledging your awareness and acceptance of this course format.

### *Course Evaluations*

Online class evaluations will be available for students to complete during the last two weeks of the semester for full-semester courses and the last week of shorter sessions. Students will receive an email directing them to a website to complete class evaluations.

## *Syllabus Modification Statement*

This syllabus represents a flexible agreement, outlining the topics covered and the order they will be covered in. This syllabus may be modified over the course of the semester based on the needs of the class and external factors such as COVID-19. All syllabus modifications will be subject to review and feedback from students one week before they are finalized.