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September 29-30, 2021

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**MINUTES OF THE
STATE BOARD OF EDUCATION MEETING**

Atlanta, Georgia
Scott Sweeney, Chairman

September 29-30, 2021
Richard Woods, Superintendent

CALL TO ORDER

The State Board of Education convened on Wednesday, September 29, 2021 at 12:00 p.m. Chairman Scott Sweeney called the meeting to order at 12:06 p.m.

ATTENDEES

State Board of Education:

In-person:

Mr. Mike Long	Mr. Scott Sweeney	Ms. Lisa Kinnemore
Dr. Stan DeJarnett	Mr. Mike Royal	
Mr. Matt Donaldson	Ms. Helen Rice	
Ms. Martha Zoller	Mr. Leonte Benton	

Via Teleconference:

Mr. Jason Downey

At 12:06 p.m., a motion was made by Mr. Matt Donaldson and seconded by Mr. Mike Long then a unanimous affirmative vote was given to enter into Executive Session for the purpose of discussing appeals, legal, personnel matters, and recommendations that are exempt from disclosure under the Open Records Act.

At 12:46 p.m., a motion was made by Mr. Matt Donaldson and seconded by Mr. Leonte Benton then an affirmative vote was given to exit Executive Session.

At 1:00 p.m., Budget Committee and Rules Committee met to consider items for the State Board meeting. At 2:00 pm, the Charter Schools and District Flexibility Committee met. *(Committee meeting minutes can be found in Appendices 1-3)*

(Please note that the board items in their entirety, with backup material and attachments, can be found on the State Board of Education's Simbli website, September 30, 2021 State Board Meeting.)

CALL TO ORDER

The State Board of Education convened on Thursday, September 30, 2021 at 9:00 a.m. Chairman Scott Sweeney called the meeting to order at 9:04 a.m.

State Board Members

In-person:

Dr. Stan DeJarnett	Mr. Scott Sweeney	Mr. Leonte Benton
Ms. Phenna Petty	Mr. Mike Royal	Mr. Matt Donaldson
Mr. Scott Johnson	Ms. Helen Rice	Ms. Cherie Bonder Dennis (GaTOTY)
Mr. Mike Long	Ms. Lisa Kinnemore	

Via Teleconference:

Mr. Kenneth Mason
Mr. Jason Downey

Others participating: Supt. Woods

Guest Recognition

Chairman Scott Sweeney acknowledged the guests in the audience who included John McFarland, Colquitt County High School; Megan Swingle, Decoding Dyslexia Georgia; Tom Cabala, Mercer University; Tim Hobbs, Colquitt County Schools; Angela Palm, Georgia School Board Association; Buddy Costley, GAEL; Joseph Barrell; Bruce Beckett, Gwinnett College; Shannon Dowdy; Donovan Head, GOSA; and Joy Hawkins, GOSA. Dr. Barbara Wall, State CTAE Director, was also present.

Inspiration

Tim Hobbs, CTAE Director for Colquitt County Schools, spoke briefly about the CTAE program in Colquitt County and introduced John McFarland who is the Dual Enrollment Construction teacher at Southern Regional Technical College and teaches construction at Colquitt County High School. Mr. McFarland gave a presentation on his students’ work with the “The Forgotten Initiative,” a non-profit that provides beds to foster children. Since 2019, Mr. McFarland’s students have built beds in the school’s construction lab that are distributed to local children in need.

Invocation/Pledge

Ms. Kinnemore provided the invocation and led the pledge of allegiance to the flag.

Public Hearing

A hearing on State Board of Education Rule 160-4-2-.32 Student Support Team was held. Ms. Meagan Swingle parent volunteer and Communications Chair from Decoding Dyslexia Georgia spoke about SB 48 and its screening rule. She relayed her experience with having her child screened for dyslexia and advocated for early screening.

Superintendent's Report to the Board

Superintendent Woods introduced the 2022 Georgia Teacher of the Year and ex-officio member of the State Board, Cherie Bonder Dennis. Ms. Dennis then introduced herself, shared how she became involved in education, and relayed her excitement over being Georgia's Teacher of the Year.

Superintendent Woods also introduced Dr. Bronwyn Ragan-Martin, Deputy Superintendent of the new Rural Education and Innovation Division of the Department of the Education. Dr. Ragan-Martin expressed her excitement about her new role at the Department and aims to "change the world" in rural Georgia by providing resources to students.

Pat Schofill, Director Pupil Transportation and Facilities, spoke about school bus safety ahead of School Bus Safety and Driver Appreciation Week in October. Mr. Schofill highlighted the positive gains in school bus safety in Georgia and presented the state winners of the school bus safety poster contest. Huyen Pham, student at North Brook Middle School in Gwinnett County, was recognized for winning the national school bus safety poster contest. Huyen along with her father; her teacher, Ms. Tricia Boston; her Principal, Dr. Brooks Baggett; and the Fine Arts Director at Gwinnett County, Dr. David DuBose were in attendance at the meeting. The Superintendent offered his congratulations on her national achievement and Mr. Schofill presented Huyen with a framed copy of her winning poster which included a first place ribbon.

Chair's Report

Mr. Scott Sweeney mentioned the upcoming October Board retreat, thanked Mr. Long for his assistance, and asked the Board for agenda items.

ACTION ITEMS

AGENDA

By motion of Mr. Scott Johnson and a second from Ms. Lisa Kinnemore, a unanimous affirmative vote was made to approve the Agenda for the September 30, 2021 State Board meeting.

CONSENT AGENDA

By motion of Mr. Matt Donaldson and a second from Mr. Stan DeJarnett, a unanimous affirmative vote was made to approve the Consent Agenda for the September 30, 2021, State Board Meeting.

1. **FP – Grant – FY22 American Rescue Plan Homeless Children and Youth I (ARP-HCY I)**. The State Board of Education authorized the State School Superintendent to award a grant to 174 local educational agencies (LEA) at a cost not to exceed \$5,219,304 in Federal Funds for activities proposed under the FY22 American Rescue Plan Homeless Children and Youth I (ARP-HCY I) plan. (Appendices 4-5)
2. **FP – Grant – FY22 Georgia Network for Educational and Therapeutic Support (GNETS) Allocations**. The State Board of Education authorized the State School Superintendent to award a grant to Georgia Network for Educational and Therapeutic Support at a cost not to exceed \$1,500,000.00 in Federal Funds for the purpose of providing students with disabilities who exhibit severe social, emotional/behavioral challenges with therapeutic supports. (Appendices 6)
3. **FBO – Contract Amendment – Research Triangle Institute, Inc.** The State Board of Education authorized the State School Superintendent to amend the contract with Research Triangle Institute, Inc. to increase the total maximum compensation amount from \$980,000 to \$1,057,920, that was approved at the December 10, 2020, State Board Meeting.
4. **FBO – Grant Amendment– FY2022 USDA Fresh Fruit and Vegetable Program Grant Oct21-Jun22**. The State Board of Education authorized the State School Superintendent to amend the grant with 42 School Food Authorities (SFAs) by the amount of \$0.00 for a cost not to exceed \$5,120,625.00 in Federal Funds for the purpose of participation in the School Year 2021-2022 Fresh Fruit and Vegetable Program (FFVP). (Appendices 7-8)
5. **PFEA - Grant - Law Enforcement Teaching Students (LETS) Grant**. The State Board of Education authorized the State School Superintendent to award a grant to four Local Education Agencies (LEAs) at a cost not to exceed \$160,000 in State Funds for the Law Enforcement Teaching Students (LETS) character development pilot program. (Appendix 9)
6. **PFEA – Grant – State Facilities Grant for Charter Schools**. That the State Board of Education authorize the State School Superintendent to award a grant to the attached list of Charter schools at a cost not to exceed \$4,396,000 in State Funds for the Charter Schools Facilities Grant. (Appendix 10)
7. **PFEA – Grant – Building Opportunities in Out-of-School Time (BOOST) Grant Awards**. The State Board of Education authorized the State School Superintendent to

award a grant to the attached list of grantees at a cost not to exceed \$27,000,244 in Federal Funds for BOOST Grants. (Appendices 11-12)

8. **SI – Grant – FY22 Title I, Part A, 1003 School Improvement Supporting Unlimited Critical and Comprehensive Educational Success for Students (SUCCESS) Grant.** The State Board of Education authorized the State School Superintendent to award a grant to Local Educational Agencies (LEA) with schools identified as Targeted Support and Improvement (TSI) and Comprehensive Support and Improvement (CSI) at a cost not to exceed \$4,938,154 in Federal Funds for school improvement efforts and supports that meet the needs of specific sub-groups. (Appendix 13)
9. **TL – Grant - FY22 ESSER III ARP Equipment Grants for Career, Technical and Agricultural Education (CTAE).** The State Board of Education authorized the State School Superintendent to award a grant to the attached list of Local Education Agencies (LEAs) at a cost not to exceed \$4,931,061 in Federal Funds for CTAE Equipment Grants for Middle and High School Programs. (Appendix 14)
10. **TL - Grant - Artificial Intelligence for Georgia (AI4GA) Middle Schools Grant.** The State Board of Education authorized the State School Superintendent to receive a grant from National Science Foundation by way of Carnegie-Melon University in the amount of \$205,976 in Federal Funds for Middle School Artificial Intelligence (AI) Pilot. (Appendix 15)
11. **TL - Grant - Literacy for Learning, Living, and Leading in Georgia (L4GA) Literacy Plan Supplemental Awards.** The State Board of Education authorized the State School Superintendent to award a grant to selected Local Educational Agencies (LEAs) at a cost not to exceed \$18,298,488 in Federal Funds to supplement the implementation of their L4GA literacy plans. (Appendix 16)
12. **TS – Grant – K12 Network - Equipment for Utilizing Peachnet Bandwidth.** The State Board of Education authorized the State School Superintendent to award a grant to 43 eligible local education agencies listed in the attached allocation sheet at a cost not to exceed \$1,720,000 in Other Funds for the reimbursement of network equipment procured by districts to fully utilize the expanded bandwidth the GaDOE provides to each district. (Appendix 17)
13. **FBO - \$50,000.01 - \$250,000 Contracts.** The State Board of Education authorized the State School Superintendent to receive, enter into, or amend contract transactions with vendors specified in the accompanying attachments at a cost not to exceed the amounts provided in each attachment. (Appendices 18-35)

14. **TL - State Board Rule - 160-4-2-.12 Comprehensive Health and Physical Education (Initiate)**. The State Board of Education authorized the State School Superintendent to initiate rulemaking procedures in accordance with the Georgia Administrative Procedure Act so as to amend State Board of Education Rule 160-4-2-.12 COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION PROGRAM PLAN. (Appendices 36-38)
15. **PFEA - State Board Rule - 160-5-1-.15 Awarding Units of Credit and Acceptance of Transfer Credit and/or Grades (Initiate)**. The State Board of Education authorized the State School Superintendent to initiate rulemaking procedures in accordance with the Georgia Administrative Procedure Act so as to amend State Board of Education Rule 160-5-1-.15 AWARDING UNITS OF CREDIT AND ACCEPTANCE OF TRANSFER CREDIT AND/OR GRADES. (Appendices 39-41)
16. **TL - Standards - Information Technology Pathway Course Revisions (Approval to Post)**. The State Board of Education granted permission for the posting of the Georgia Standards of Excellence for Advanced Cybersecurity; Digital Design; Embedded Computing; Game Design: Animation & Simulation; Information Technology Essentials; Information Technology Support; Introduction to Cybersecurity; Introduction to Hardware Technology; Networking Fundamentals; Networking Systems and Support; Programming, Games, Apps, and Society; Web Design; and Web Development for public review and comment. (Appendices 42-55)
17. **GFPE – Appointment to the Board of Directors**. The State Board of Education appointed Jodie Snow to the Georgia Foundation for Public Education Board of Directors as provided in O.C.G.A. 20-2-14-1. (Appendix 56)
18. **PFEA – District Flexibility Contract Amendments – Innovative Assessment Demonstration Authority (IADA) Georgia Kindergarten Inventory of Developing Skills (GKIDS) Waiver**. The State Board of Education approved contract amendments for the identified Charter Systems that are participating in the IADA pilot to allow for the waiver of the GKIDS 2.0 and the use of the MAP assessment for the state-required first-grade readiness assessment. (Appendices 57-59)
19. **Executive Session Meeting – August 25, 2021**. The State Board of Education approved the minutes of the August 25, 2021 State Board Meeting.
20. **State Board Meeting Minutes – August 2021**. The State Board of Education approved the minutes of the August State Board Meeting.
21. **Personnel**. The State Board of Education approved the August Personnel Report as presented. (Appendix 60)

22. **EAP - Individual Student Waiver - Case # 22-0033.** The State Board of Education approved Individual Student Waiver Case #22-0033.
23. **EAP - Individual Student Waiver - Case # 22-0034.** The State Board of Education approved Individual Student Waiver Case #22-0034.
24. **EAP - Individual Student Waiver - Case # 22-0036.** The State Board of Education approved Individual Student Waiver Case #22-0036.
25. **EAP - Individual Student Waiver - Case # 22-0037.** The State Board of Education approved Individual Student Waiver Case #22-0037.
26. **EAP - Individual Student Waiver - Case # 22-0038.** The State Board of Education approved Individual Student Waiver Case #22-0038.
27. **EAP - Individual Student Waiver - Case # 22-0039.** The State Board of Education approved Individual Student Waiver Case #22-0039.
28. **EAP - Individual Student Waiver - Case # 22-0040.** The State Board of Education approved Individual Student Waiver Case #22-0040.
29. **EAP - Individual Student Waiver - Case # 22-0041.** The State Board of Education approved Individual Student Waiver Case #22-0041.
30. **EAP - Individual Student Waiver - Case # 22-0044.** The State Board of Education approved Individual Student Waiver Case #22-0044.
31. **EAP - Individual Student Waiver - Case # 22-0045.** The State Board of Education approved Individual Student Waiver Case #22-0045.
32. **EAP - Individual Student Waiver - Case # 22-0047.** The State Board of Education approved Individual Student Waiver Case #22-0047.
33. **EAP - Individual Student Waiver - Case # 22-0048.** The State Board of Education approved Individual Student Waiver Case #22-0048.
34. **EAP - Individual Student Waiver - Case # 22-0049.** The State Board of Education approved Individual Student Waiver Case #22-0049.
35. **EAP - Individual Student Waiver - Case # 22-0050.** The State Board of Education approved Individual Student Waiver Case #22-0050.

36. EAP - Individual Student Waiver - Case # 22-0052. The State Board of Education approved Individual Student Waiver Case #22-0052.

EXECUTIVE COMMITTEE ITEMS

1. Individual Legal Case #2022-01. Upon motion from Ms. Lisa Kinnemore and a second from Mr. Matt Donaldson, the State Board of Education unanimously voted to reverse the decision of the local board in Case Number 2022-01. (Appendix 61)

ADJOURNMENT

At 10:29 a.m., by motion of Mr. Scott Johnson and a second from Mr. Matt Donaldson, a unanimous affirmative vote was given to adjourn. The next regular State Board meeting is scheduled for November 3-4, 2021.

Respectfully Submitted,

Julie James
Recording Secretary



**Budget Committee Meeting Minutes
September 30, 2021
2056 Conference Room @ 1:11 pm**

Meeting called to order: 1:11 pm
Meeting adjourned 1:42 pm

Attendees:

Rusk Roam	Barbara Wall	Stan DeJarnett
Jason Downey (phone)	Matt Cordoza	David Turner
Mike Royal	Stephanie Johnson	Leonte Benton
Shaun Owen	Matt Jones	Caitlin Dooley
Keith Osborn	Matt Donelson	Amber Todd
Meghan Frick	Allan Mueller	

All items were unanimously approved.

Board Items

1. FP – Grant – FY22 American Rescue Plan Homeless Children and Youth I (ARP-HCY I)- **Shaun Owen**
2. FP – Grant – FY22 Georgia Network for Educational and Therapeutic Support (GNETS) Allocations- **Shaun Owen**
3. FBO – Contract Amendment – Research Triangle Institute, Inc.- **Rusk Roam**
4. FBO – Grant Amendment– FY2022 USDA Fresh Fruit and Vegetable Program Grant Oct21-Jun22 – **Rusk Roam**
5. PFEA - Grant - Law Enforcement Teaching Students (LETS) Grant- **Tiffany Taylor**
6. PFEA – Grant – State Facilities Grant for Charter Schools- **Allan Mueller**



7. PFEA – Grant – Building Opportunities in Out-of-School Time (BOOST) Grant Awards- **Tiffany Taylor**

8. SI – Grant – FY22 Title I, Part A, 1003 School Improvement Supporting Unlimited Critical and Comprehensive Educational Success for Students (SUCCESS) Grant – **Stephanie Johnson**

9. TL – Grant - FY22 ESSER III ARP Equipment Grants for Career, Technical and Agricultural Education (CTAE) – **Barbara Wall**

10. TL - Grant - Artificial Intelligence for Georgia (AI4GA) Middle Schools Grant- **Caitlin Dooley**

11. TL - Grant - Literacy for Learning, Living, and Leading in Georgia (L4GA) Literacy Plan Supplemental Awards- **Caitlin Dooley**

12. TS – Grant – K12 Network - Equipment for Utilizing Peach-net Bandwidth- **Kevin Osborn**

13. FBO - \$50,000.01 - \$250,000 Contracts- **Rusk Roam**

Items for Information

1. FBO- \$50k and Under Report for July and August 2021- **Rusk Roam**

**State Board of Education Rules Committee
State Board Room, Twin Towers East
September 29, 2021, 1:00 PM**

MINUTES

State Board Members Present: Phenna Petty, Lisa Kinnemore, Helen Rice, Mike Long, Scott Johnson, Martha Zoller, Scott Sweeney, Sherry Dennis (Teacher of the Year)

AGENDA

I. Action Items

- 1. (Adoption) State Board Rule - Rule 160-4-2-.32 Student Support Team**
– Continue to work and revise the rule and include more key stakeholder groups.
- 2. (Initiation) State Board Rule - 160-4-2-.12 Comprehensive Health and Physical Education**
– Moved to consent agenda.
- 3. (Initiation) State Board Rule - 160-5-1-.15 Awarding Units of Credit and Acceptance of Transfer Credit and/or Grades**
– Moved to consent agenda.
- 4. (Approval to Post) Standards - Information Technology Pathway Course Revisions**
– Moved to consent agenda.
- 5. Appointment to the Board of Directors – Georgia Foundation for Public Education**
– Moved to consent agenda.

CHARTER SCHOOLS AND DISTRICT FLEXIBILITY COMMITTEE MEETING

Georgia Department of Education
205 Jesse Hill Jr. Dr. SE
Atlanta, Georgia 30334
September 29, 2021 • 2:00 P.M.
MINUTES

CALL TO ORDER

The Charter School and District Flexibility Committee convened on September 29, 2021 at 2:10 pm.

ATTENDEES

State Board of Education:

Mr. Leonte Benton	Ms. Phenna Petty
Dr. Stan DeJarnett, Chair	Ms. Helen Rice
Mr. Matt W. Donaldson	Mr. Mike Royal
Mr. Scott Johnson	Mr. Scott Sweeney
Ms. Lisa Kinnemore	Ms. Martha Zoller
Mr. Mike Long	
Ms. Cherie Dennis (ex-officio member)	

Others participating:

Mr. Richard Woods	Ms. Tiffany Taylor
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DISTRICT FLEXIBILITY CONTRACT AMENDMENTS

1. IADA GKIDS Waiver
 - Ms. Taylor presented the district flexibility contract amendments information for Calhoun City Schools, Colquitt County Schools, and Chattahoochee County Schools, who are members of the Georgia Measure of Academic Progress (GMAP) consortium and participating in the Innovative Assessment Demonstration Authority (IADA) pilot.
 - The IADA GKIDS waiver was placed on the consent agenda for the September 30, 2021 State Board meeting.

STRATEGIC WAIVER SCHOOL SYSTEMS

2. Mitchell County Schools and Monroe County Schools

- Ms. Taylor presented the SWSS contract amendments information for Mitchell County Schools and Monroe County Schools.
- The Mitchell County Schools and Monroe County Schools contract amendments were placed on the consent agenda for the September 30, 2021 State Board meeting.

ADJOURNMENT

Dr. DeJarnett adjourned the meeting at 2:14 pm.

LEA Code	LEA Name	FY22 ARP-HCY I Allocation
601	Appling County School District	\$29,996
602	Atkinson County School District	\$29,996
603	Bacon County School District	\$29,996
604	Baker County School District	\$29,996
605	Baldwin County School District	\$29,996
606	Banks County School District	\$29,996
609	Ben Hill County School District	\$29,996
610	Berrien County School District	\$29,996
612	Bleckley County School District	\$29,996
613	Brantley County School District	\$29,996
614	Brooks County School District	\$29,996
615	Bryan County School District	\$29,996
616	Bulloch County School District	\$29,996
617	Burke County School District	\$29,996
618	Butts County School District	\$29,996
620	Camden County School District	\$29,996
621	Candler County School District	\$29,996
624	Charlton County School District	\$29,996
626	Chattahoochee County School District	\$29,996
628	Cherokee County School District	\$29,996
630	Clay County School District	\$29,996
632	Clinch County School District	\$29,996
634	Coffee County School District	\$29,996
637	Cook County School District	\$29,996
638	Coweta County School District	\$29,996
639	Crawford County School District	\$29,996
640	Crisp County School District	\$29,996
641	Dade County School District	\$29,996
645	Dodge County School District	\$29,996
646	Dooly County School District	\$29,996
649	Early County School District	\$29,996
650	Echols County School District	\$29,996
651	Effingham County School District	\$29,996
652	Elbert County School District	\$29,996
653	Emanuel County School District	\$29,996
654	Evans County School District	\$29,996
655	Fannin County School District	\$29,996
656	Fayette County School District	\$29,996
659	Franklin County School District	\$29,996
661	Gilmer County School District	\$29,996
662	Glascock County School District	\$29,996
663	Glynn County School District	\$29,996
665	Grady County School District	\$29,996
666	Greene County School District	\$29,996
668	Habersham County School District	\$29,996

American Resuce Plan Homeless Children and Youth I Grant

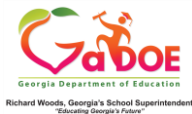
LEA Code	LEA Name	FY22 ARP-HCY I Allocation
670	Hancock County School District	\$29,996
672	Harris County School District	\$29,996
673	Hart County School District	\$29,996
674	Heard County School District	\$29,996
677	Irwin County School District	\$29,996
678	Jackson County School District	\$29,996
679	Jasper County School District	\$29,996
680	Jeff Davis County School District	\$29,996
681	Jefferson County School District	\$29,996
682	Jenkins County School District	\$29,996
683	Johnson County School District	\$29,996
684	Jones County School District	\$29,996
685	Lamar County School District	\$29,996
686	Lanier County School District	\$29,996
687	Laurens County School District	\$29,996
688	Lee County School District	\$29,996
690	Lincoln County School District	\$29,996
691	Long County School District	\$29,996
693	Lumpkin County School District	\$29,996
694	Macon County School District	\$29,996
696	Marion County School District	\$29,996
697	Mcduffie County School District	\$29,996
698	Mcintosh County School District	\$29,996
699	Meriwether County School District	\$29,996
700	Miller County School District	\$29,996
701	Mitchell County School District	\$29,996
702	Monroe County School District	\$29,996
703	Montgomery County School District	\$29,996
704	Morgan County School District	\$29,996
707	Newton County School District	\$29,996
708	Oconee County School District	\$29,996
709	Oglethorpe County School District	\$29,996
711	Peach County School District	\$29,996
712	Pickens County School District	\$29,996
713	Pierce County School District	\$29,996
714	Pike County School District	\$29,996
715	Polk County School District	\$29,996
716	Pulaski County School District	\$29,996
717	Putnam County School District	\$29,996
718	Quitman County School District	\$29,996
719	Rabun County School District	\$29,996
720	Randolph County School District	\$29,996
723	Schley County School District	\$29,996
724	Screven County School District	\$29,996
725	Seminole County School District	\$29,996

American Resuce Plan Homeless Children and Youth I Grant

LEA Code	LEA Name	FY22 ARP-HCY I Allocation
726	Griffin-Spalding County School District	\$29,996
727	Stephens County School District	\$29,996
728	Stewart County School District	\$29,996
729	Sumter County School District	\$29,996
730	Talbot County School District	\$29,996
731	Taliaferro County School District	\$29,996
732	Tattnall County School District	\$29,996
733	Taylor County School District	\$29,996
734	Telfair County School District	\$29,996
735	Terrell County School District	\$29,996
737	Tift County School District	\$29,996
738	Toombs County School District	\$29,996
739	Towns County School District	\$29,996
740	Treutlen County School District	\$29,996
742	Turner County School District	\$29,996
743	Twiggs County School District	\$29,996
744	Union County School District	\$29,996
745	Thomaston-Upson County School District	\$29,996
746	Walker County School District	\$29,996
748	Ware County School District	\$29,996
749	Warren County School District	\$29,996
750	Washington County School District	\$29,996
751	Wayne County School District	\$29,996
752	Webster County School District	\$29,996
753	Wheeler County School District	\$29,996
754	White County School District	\$29,996
755	Whitfield County School District	\$29,996
756	Wilcox County School District	\$29,996
757	Wilkes County School District	\$29,996
758	Wilkinson County School District	\$29,996
759	Worth County School District	\$29,996
763	Bremen City School District	\$29,996
764	Buford City School District	\$29,996
765	Calhoun City School District	\$29,996
769	Chickamauga City School District	\$29,996
771	Commerce City School District	\$29,996
773	Decatur City School District	\$29,996
776	Gainesville City School District	\$29,996
779	Jefferson City School District	\$29,996
784	Pelham City School District	\$29,996
785	Rome City School District	\$29,996
786	Social Circle City School District	\$29,996
789	Thomasville City School District	\$29,996
791	Trion City School District	\$29,996
793	Vidalia City School District	\$29,996

American Resuce Plan Homeless Children and Youth I Grant

LEA Code	LEA Name	FY22 ARP-HCY I Allocation
799	State Schools	\$29,996
891	DJJ	\$29,996
7820108	Mountain Education Charter High School	\$29,996
7820110	Odyssey School	\$29,996
7820121	Utopian Academy for the Arts Charter School	\$29,996
7820212	Cherokee Charter Academy	\$29,996
7820412	Georgia Connections Academy	\$29,996
7820612	Ivy Preparatory Academy, Inc	\$29,996
7820613	Foothills Charter High School	\$29,996
7820614	International Charter School of Atlanta	\$29,996
7820615	Scintilla Charter Academy	\$29,996
7820616	Georgia School for Innovation and the Classics	\$29,996
7820617	Dubois Integrity Academy	\$29,996
7820618	Coastal Plains Education Charter School	\$29,996
7830103	Statesboro STEAM Academy	\$29,996
7830210	Pataula Charter Academy	\$29,996
7830310	Fulton Leadership Academy	\$29,996
7830410	Atlanta Heights Charter School	\$29,996
7830610	Coweta Charter Academy	\$29,996
7830611	Cirrus Charter Academy	\$29,996
7830612	Southwest Georgia S.T.E.M. Charter Academy	\$29,996
7830613	Brookhaven Innovation Academy	\$29,996
7830614	Liberty Tech Charter Academy	\$29,996
7830615	Genesis Academy for Boys	\$29,996
7830616	Genesis Academy for Girls	\$29,996
7830617	Resurgence Hall	\$29,996
7830618	School for Arts-Infused Learning (SAIL)	\$29,996
7830619	International Academy of Smyrna	\$29,996
7830620	International Charter Academy of Georgia	\$29,996
7830621	SLAM Academy	\$29,996
7830628	Ethos Classical	\$29,996
7830623	Academy For Classical Education	\$29,996
7830624	Spring Creek Charter Academy	\$29,996
7830630	Baconton Community Charter School	\$29,996
7830625	Yi Hwang Acadmy of Language Excellence	\$29,996
7830632	Atlanta Unbound Academy	\$29,996
7830633	Delta STEAM	\$29,996
7830626	Furlow Charter School	\$29,996
7830634	Georgia Fugees Academy Charter School	\$29,996
TOTAL	174 LEAs	\$5,219,304



Allowable Activities to be Funded by FY22 American Rescue Plan Homeless I and II Grant Awards

Funding under the ARP Homeless I and II programs must adhere to the allowable uses of funds described in McKinney-Vento Act. Under section 723(d) of the McKinney-Vento Act, LEAs may use subgrant funds for activities that support the purposes of the program.

- (1) Supplemental educational services, such as tutoring and other academic enrichment programs;
- (2) Expedited evaluations for various educational services, such as eligibility for educational programs for gifted and talented students, special education and related services for children with disabilities, English language acquisition, vocational education, school lunch, and appropriate programs or services under the Elementary and Secondary Education Act;
- (3) Professional development activities for educators and pupil services personnel working with homeless students;
- (4) Health referral services, such as medical, dental, and mental;
- (5) Defraying the excess cost of transportation in order to enable students to attend the school of origin;
- (6) Early childhood education programs for pre-school-aged homeless children;
- (7) Services and assistance to attract, engage, and retain homeless children and youth and unaccompanied youth in public school programs;
- (8) Before and after-school, mentoring, and summer programs with educational activities;
- (9) Payment of fees and costs associated with tracking, obtaining, and transferring records of homeless children and youth;
- (10) Education and training for parents of homeless children and youth about rights and resources;
- (11) Development of coordination between schools and agencies providing services;
- (12) Provision of pupil services (including violence prevention counseling) and referrals for such services;
- (13) Activities to address needs that may arise from domestic violence;
- (14) Adaptation of space and purchase of supplies for non-school facilities to provide services listed above;
- (15) Provision of school supplies, including those to be distributed at shelters or other appropriate locations; and
- (16) Other extraordinary or emergency assistance needed to enable homeless students to attend school.

Activities under both ARP Homeless I and II may include any expenses necessary to facilitate the identification, enrollment, retention, or educational success of homeless children and youth to enable homeless children and youth to attend school and participate fully in school activities, such as:

- (1) providing wraparound services (which could be provided in collaboration with and/or through contracts with community-based organizations, and could include academic supports, trauma-informed care, social-emotional support, and mental health services);
- (2) purchasing needed supplies (e.g., personal protective equipment, eyeglasses, school supplies, personal care items);
- (3) providing transportation to enable homeless children and youth to attend school and participate fully in school activities;
- (4) purchasing cell phones or other technological devices for unaccompanied, homeless children and youth to enable such children and youth to attend school and fully participate in school activities;
- (5) providing access to reliable, high-speed internet for students through the purchase of internet-connected devices/equipment, mobile hotspots, wireless service plans, or installation of Community Wi-Fi Hotspots (e.g., at homeless shelters), especially in underserved communities;
- (6) paying for short-term, temporary housing (e.g., a few days in a motel) when such emergency housing is the only reasonable option for COVID-safe temporary housing and when necessary to enable homeless children and youth to attend school and participate fully in school activities (including summer school); and
- (7) providing store cards/prepaid debit cards to purchase materials necessary for students to participate fully in school activities.

Georgia Network for Educational and Therapeutic Support (GNETS)
FY22 Allocations for American Rescue Plan Funds

	GNETS	Fiscal Agent	FY22 GNETS Grant Allocations	Federal
611	Elam Academy	Bibb County	\$62,500	
625	Coastal Ga Comprehensive Academy	Chatham County	\$62,500	
631	South Metro	Clayton County	\$62,500	
633	H.A.V.E.N.	Cobb County	\$62,500	
640	Flint Area Learning Program	Crisp County	\$62,500	
644	Dekalb-Rockdale	DeKalb County	\$62,500	
647	Oaktree	Dougherty County	\$62,500	
886	Horizon Academy	Coastal Plains RESA	\$62,500	
706	Woodall	Muscogee County	\$62,500	
721	Sand Hills	Richmond County	\$62,500	
726	Mainstay Academy	Spalding County	\$62,500	
736	Pathways	Thomas County	\$62,500	
868	Riverquest	Central Savannah River RESA	\$62,500	
880	Cedarwood	First District RESA	\$62,500	
880	Coastal Academy	First District RESA	\$62,500	
876	Heartland Academy	Heart of Georgia RESA	\$62,500	
856	North Metro	Metro RESA	\$62,500	
852	Northstar	North Georgia RESA	\$62,500	
858	Rutland	Northeast Georgia RESA	\$62,500	
850	Northwest GA	Northwest Georgia RESA	\$62,500	
866	GNETS of Oconee	Oconee RESA	\$62,500	
888	Harrell Learning Center	Okefenokee RESA	\$62,500	
854	Futures	Pioneer RESA	\$62,500	
860	Burwell	West Georgia RESA	\$62,500	
			1,500,000	

FY22 FFVP Grant - Amended School Allocations

School Food Authority (SFA)	School	Free & Reduced Price Eligibility	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended October 1, 2021 - June 30, 2022 Allocation
Atlanta Public Schools	Barack and Michelle Obama Elementary School	100.00%	301	\$ 2,666.00	\$ 15,783.00	\$ 15,814.78
Atlanta Public Schools	Bazoline Usher-Collier Elementary School	100.00%	418	\$ 3,703.00	\$ 21,918.00	\$ 21,962.05
Atlanta Public Schools	Beecher Hills Elementary School	98.42%	295	\$ 2,613.00	\$ 15,469.00	\$ 15,499.53
Atlanta Public Schools	Benteen Elementary School	100.00%	285	\$ 2,525.00	\$ 14,944.00	\$ 14,974.12
Atlanta Public Schools	Boyd Elementary School	100.00%	486	\$ 4,305.00	\$ 25,484.00	\$ 25,534.82
Atlanta Public Schools	Cascade Elementary School	100.00%	418	\$ 3,703.00	\$ 21,918.00	\$ 21,962.05
Atlanta Public Schools	Cleveland Avenue Elementary School	100.00%	315	\$ 2,790.00	\$ 16,517.00	\$ 16,550.35
Atlanta Public Schools	Continental Colony Elementary School	100.00%	464	\$ 4,110.00	\$ 24,330.00	\$ 24,378.92
Atlanta Public Schools	Deerwood Academy	86.81%	664	\$ 5,882.00	\$ 34,817.00	\$ 34,887.08
Atlanta Public Schools	Dobbs Elementary School	100.00%	451	\$ 3,994.00	\$ 23,649.00	\$ 23,695.89
Atlanta Public Schools	Dunbar Elementary School	100.00%	347	\$ 3,074.00	\$ 18,195.00	\$ 18,231.65
Atlanta Public Schools	F.L. Stanton Elementary School	100.00%	242	\$ 2,144.00	\$ 12,689.00	\$ 12,714.87
Atlanta Public Schools	Fickett Elementary School	100.00%	530	\$ 4,695.00	\$ 27,791.00	\$ 27,846.62
Atlanta Public Schools	Gideons Elementary School	76.56%	358	\$ 3,171.00	\$ 18,772.00	\$ 18,809.60
Atlanta Public Schools	Harper Archer Elementary School	100.00%	698	\$ 6,183.00	\$ 36,600.00	\$ 36,673.47
Atlanta Public Schools	Heritage Academy Elementary School	100.00%	457	\$ 4,048.00	\$ 23,963.00	\$ 24,011.14
Atlanta Public Schools	Humphries Elementary School	100.00%	262	\$ 2,321.00	\$ 13,738.00	\$ 13,765.69
Atlanta Public Schools	Hutchinson Elementary School	100.00%	430	\$ 3,809.00	\$ 22,547.00	\$ 22,592.54
Atlanta Public Schools	John Hope-Charles Walter Hill Elementary School	100.00%	389	\$ 3,445.00	\$ 20,398.00	\$ 20,438.37
Atlanta Public Schools	Kimberly Elementary School	100.00%	406	\$ 3,596.00	\$ 21,289.00	\$ 21,331.56
Atlanta Public Schools	M.A. Jones Elementary School	100.00%	532	\$ 4,712.00	\$ 27,896.00	\$ 27,951.70
Atlanta Public Schools	Michael Hollis Innovation Academy	100.00%	742	\$ 6,573.00	\$ 38,907.00	\$ 38,985.26
Atlanta Public Schools	Miles Elementary Schools	100.00%	582	\$ 5,155.00	\$ 30,518.00	\$ 30,578.74
Atlanta Public Schools	Parkside Elementary School	79.17%	598	\$ 5,297.00	\$ 31,357.00	\$ 31,419.39
Atlanta Public Schools	Perkerson Elementary School	91.87%	407	\$ 3,605.00	\$ 21,341.00	\$ 21,384.10
Atlanta Public Schools	Peyton Forest Elementary School	100.00%	467	\$ 4,136.00	\$ 24,488.00	\$ 24,536.55
Atlanta Public Schools	Scott Elementary School	100.00%	399	\$ 3,534.00	\$ 20,922.00	\$ 20,963.77
Atlanta Public Schools	Slater Elementary School	80.66%	561	\$ 4,969.00	\$ 29,417.00	\$ 29,475.38
Atlanta Public Schools	Thomasville Heights Elementary School	100.00%	376	\$ 3,330.00	\$ 19,716.00	\$ 19,755.34
Atlanta Public Schools	Toomer Elementary School	86.06%	507	\$ 4,491.00	\$ 26,585.00	\$ 26,638.18
Atlanta Public Schools	Tuskegee Airmen Global Academy	100.00%	603	\$ 5,341.00	\$ 31,619.00	\$ 31,682.09

School Food Authority (SFA)	School	Free & Reduced Price Eligibility	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended October 1, 2021 - June 30, 2022 Allocation
Atlanta Public Schools	West Manor Elementary School	100.00%	281	\$ 2,489.00	\$ 14,734.00	\$ 14,763.96
Bibb County Schools	Alexander II Magnet School	64.40%	481	\$ 4,260.00	\$ 25,222.00	\$ 25,272.12
Bibb County Schools	Bernd Elementary School	100.00%	441	\$ 3,906.00	\$ 23,124.00	\$ 23,170.49
Bibb County Schools	Bruce Elementary School	100.00%	432	\$ 3,827.00	\$ 22,652.00	\$ 22,697.62
Bibb County Schools	Burdell Elementary School	100.00%	482	\$ 4,270.00	\$ 25,274.00	\$ 25,324.66
Bibb County Schools	Carter Elementary School	68.73%	453	\$ 4,013.00	\$ 23,753.00	\$ 23,800.98
Bibb County Schools	Hartley Elementary School	100.00%	492	\$ 4,358.00	\$ 25,798.00	\$ 25,850.07
Bibb County Schools	Heard Elementary School	62.27%	574	\$ 5,085.00	\$ 30,098.00	\$ 30,158.41
Bibb County Schools	Heritage Elementary School	80.24%	656	\$ 5,811.00	\$ 34,398.00	\$ 34,466.76
Bibb County Schools	Ingram Pye Elementary School	100.00%	438	\$ 3,880.00	\$ 22,967.00	\$ 23,012.86
Bibb County Schools	John Lewis Elementary School	100.00%	657	\$ 5,820.00	\$ 34,450.00	\$ 34,519.30
Bibb County Schools	Lane Elementary School	96.50%	472	\$ 4,181.00	\$ 24,750.00	\$ 24,799.25
Bibb County Schools	MLK Elementary School	100.00%	656	\$ 5,811.00	\$ 34,398.00	\$ 34,466.76
Bibb County Schools	Porter Elementary School	75.52%	389	\$ 3,445.00	\$ 20,398.00	\$ 20,438.37
Bibb County Schools	Rosa Taylor Elementary School	99.78%	591	\$ 5,235.00	\$ 30,990.00	\$ 31,051.60
Bibb County Schools	Skyview Elementary School	65.17%	448	\$ 3,969.00	\$ 23,491.00	\$ 23,538.27
Bibb County Schools	Southfield Elementary School	100.00%	816	\$ 7,228.00	\$ 42,788.00	\$ 42,873.28
Bibb County Schools	Union Elementary School	100.00%	515	\$ 4,562.00	\$ 27,004.00	\$ 27,058.50
Bibb County Schools	Veterans Elementary School	100.00%	790	\$ 6,998.00	\$ 41,424.00	\$ 41,507.22
Bibb County Schools	Vineville Elementary School	69.20%	577	\$ 5,111.00	\$ 30,255.00	\$ 30,316.03
Bibb County Schools	Williams Elementary School	100.00%	353	\$ 3,127.00	\$ 18,510.00	\$ 18,546.90
Burke County Schools	Blakeney Elementary School	100.00%	772	\$ 6,839.00	\$ 40,480.00	\$ 40,561.49
Burke County Schools	SGA Elementary School	100.00%	268	\$ 2,374.00	\$ 14,053.00	\$ 14,080.93
Burke County Schools	Waynesboro Primary School	100.00%	1018	\$ 9,016.00	\$ 53,381.00	\$ 53,486.52
Butts County Schools	Daughtry Elementary School	95.82%	525	\$ 4,650.00	\$ 27,529.00	\$ 27,583.91
Butts County Schools	Jackson Elementary School	100.00%	557	\$ 4,934.00	\$ 29,207.00	\$ 29,265.22
Butts County Schools	Stark Elementary School	95.18%	613	\$ 5,430.00	\$ 32,143.00	\$ 32,207.50
Cirrus Academy Charter School	Cirrus Academy Charter School	100.00%	514	\$ 4,553.00	\$ 26,952.00	\$ 27,005.96
Clarke County Schools	Alps Road Elementary School	100.00%	377	\$ 3,340.00	\$ 19,768.00	\$ 19,807.88
Clarke County Schools	Fowler Drive Elementary School	100.00%	467	\$ 4,136.00	\$ 24,488.00	\$ 24,536.55
Clarke County Schools	Gaines Elementary School	100.00%	554	\$ 4,908.00	\$ 29,049.00	\$ 29,107.60
Clarke County Schools	Howard B. Stroud Elementary School	100.00%	416	\$ 3,685.00	\$ 21,813.00	\$ 21,856.97
Clarke County Schools	Judia J. Harris Elementary School	90.67%	487	\$ 4,314.00	\$ 25,536.00	\$ 25,587.36

School Food Authority (SFA)	School	Free & Reduced Price Eligibility	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended October 1, 2021 - June 30, 2022 Allocation
Clarke County Schools	Winterville Elementary School	93.00%	423	\$ 3,747.00	\$ 22,180.00	\$ 22,224.75
Clay County Schools	Clay County Elementary School	100.00%	151	\$ 1,337.00	\$ 7,918.00	\$ 7,933.66
Clayton County Schools	Anderson Elementary School	100.00%	545	\$ 4,827.00	\$ 28,578.00	\$ 28,634.73
Clayton County Schools	Brown Elementary School	93.14%	711	\$ 6,298.00	\$ 37,282.00	\$ 37,356.50
Clayton County Schools	Harper Elementary School	100.00%	849	\$ 7,520.00	\$ 44,518.00	\$ 44,607.13
Clayton County Schools	Haynie Elementary School	98.72%	891	\$ 7,893.00	\$ 46,720.00	\$ 46,813.84
Clayton County Schools	Huie Elementary School	100.00%	792	\$ 7,016.00	\$ 41,529.00	\$ 41,612.30
Clayton County Schools	Kemp Primary School	90.32%	664	\$ 5,882.00	\$ 34,817.00	\$ 34,887.08
Clayton County Schools	Lee Street Elementary School	100.00%	619	\$ 5,483.00	\$ 32,458.00	\$ 32,522.75
Clayton County Schools	Morrow Elementary School	87.06%	542	\$ 4,801.00	\$ 28,420.00	\$ 28,477.11
Clayton County Schools	Mount Zion Elementary School	100.00%	550	\$ 4,871.00	\$ 28,840.00	\$ 28,897.43
Clayton County Schools	Mount Zion Primary School	100.00%	633	\$ 5,607.00	\$ 33,192.00	\$ 33,258.32
Clayton County Schools	Riverdale Elementary School	100.00%	764	\$ 6,767.00	\$ 40,061.00	\$ 40,141.16
Clayton County Schools	Roberta T. Smith Elementary School	94.96%	972	\$ 8,609.00	\$ 50,968.00	\$ 51,069.64
Clayton County Schools	Unidos Dual Language Elementary School	77.51%	450	\$ 3,986.00	\$ 23,596.00	\$ 23,643.35
Cobb County Schools	Belmont Hills Elementary School	91.46%	363	\$ 3,216.00	\$ 19,034.00	\$ 19,072.31
Cobb County Schools	City View Elementary School	93.96%	1059	\$ 9,379.00	\$ 55,531.00	\$ 55,640.70
Cobb County Schools	Green Acres Elementary School	93.53%	618	\$ 5,474.00	\$ 32,405.00	\$ 32,470.21
Cobb County Schools	LaBelle Elementary School	93.66%	410	\$ 3,631.00	\$ 21,499.00	\$ 21,541.72
Cobb County Schools	Riverside Elementary School	96.63%	534	\$ 4,730.00	\$ 28,001.00	\$ 28,056.78
Fannin County Schools	Blue Ridge Elementary School	57.14%	420	\$ 3,720.00	\$ 22,023.00	\$ 22,067.13
Fannin County Schools	East Fannin Elementary School	64.00%	375	\$ 3,322.00	\$ 19,663.00	\$ 19,702.79
Fannin County Schools	West Fannin Elementary School	65.77%	523	\$ 4,633.00	\$ 27,424.00	\$ 27,478.83
Fayette County Schools	North Fayette Elementary School	56.15%	659	\$ 5,837.00	\$ 34,555.00	\$ 34,624.38
Fayette County Schools	Spring Hill Elementary School	59.10%	709	\$ 6,280.00	\$ 37,177.00	\$ 37,251.42
Fulton County Schools	Asa Hilliard Elementary School	100.00%	545	\$ 4,827.00	\$ 28,578.00	\$ 28,634.73
Fulton County Schools	Bethune Elementary School	100.00%	629	\$ 5,572.00	\$ 32,982.00	\$ 33,048.15
Fulton County Schools	Brookview Elementary School	100.00%	501	\$ 4,438.00	\$ 26,270.00	\$ 26,322.93
Fulton County Schools	C.H. Gullatt Elementary School	100.00%	739	\$ 6,546.00	\$ 38,750.00	\$ 38,827.64
Fulton County Schools	Campbell Elementary School	90.41%	681	\$ 6,032.00	\$ 35,709.00	\$ 35,780.28
Fulton County Schools	College Park Elementary School	100.00%	652	\$ 5,775.00	\$ 34,188.00	\$ 34,256.59
Fulton County Schools	Conley Hills Elementary School	100.00%	539	\$ 4,774.00	\$ 28,263.00	\$ 28,319.48
Fulton County Schools	Feldwood Elementary School	98.07%	716	\$ 6,342.00	\$ 37,544.00	\$ 37,619.20

School Food Authority (SFA)	School	Free & Reduced Price Eligibility	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended October 1, 2021 - June 30, 2022 Allocation
Fulton County Schools	Hamilton E. Holmes Elementary School	100.00%	626	\$ 5,545.00	\$ 32,825.00	\$ 32,890.53
Fulton County Schools	Hapeville Elementary School	100.00%	617	\$ 5,465.00	\$ 32,353.00	\$ 32,417.66
Fulton County Schools	Heritage Elementary School	100.00%	500	\$ 4,429.00	\$ 26,218.00	\$ 26,270.39
Fulton County Schools	Lake Forest Elementary School	100.00%	754	\$ 6,678.00	\$ 39,537.00	\$ 39,615.75
Fulton County Schools	Love T. Nolan Elementary School	100.00%	708	\$ 6,271.00	\$ 37,125.00	\$ 37,198.88
Fulton County Schools	Mimosa Elementary School	91.44%	713	\$ 6,315.00	\$ 37,387.00	\$ 37,461.58
Fulton County Schools	Oakley Elementary School	85.52%	770	\$ 6,820.00	\$ 40,376.00	\$ 40,456.41
Fulton County Schools	Palmetto Elementary School	100.00%	376	\$ 3,330.00	\$ 19,716.00	\$ 19,755.34
Fulton County Schools	Parklane Elementary School	100.00%	423	\$ 3,747.00	\$ 22,180.00	\$ 22,224.75
Fulton County Schools	Renaissance Elementary School	73.19%	611	\$ 5,412.00	\$ 32,038.00	\$ 32,102.42
Fulton County Schools	S.L. Lewis Elementary School	100.00%	587	\$ 5,199.00	\$ 30,780.00	\$ 30,841.44
Fulton County Schools	Seaborn Lee Elementary School	94.97%	478	\$ 4,234.00	\$ 25,064.00	\$ 25,114.50
Furlow Charter Schools	Furlow Charter School	85.75%	317	\$ 2,808.00	\$ 16,622.00	\$ 16,655.43
Genesis Innovation Academy-Boys	Genesis Innovation Academy for Boys	54.75%	316	\$ 2,799.00	\$ 16,570.00	\$ 16,602.89
Genesis Innovation Academy-Girls	Genesis Innovation Academy for Girls	58.43%	332	\$ 2,940.00	\$ 17,409.00	\$ 17,443.54
Glynn County Schools	Altama Elementary School	80.53%	488	\$ 4,322.00	\$ 25,589.00	\$ 25,639.90
Glynn County Schools	Burroughs-Molette Elementary School	98.03%	812	\$ 7,192.00	\$ 42,578.00	\$ 42,663.12
Glynn County Schools	Goodyear Elementary School	97.15%	491	\$ 4,349.00	\$ 25,746.00	\$ 25,797.53
Gordon County Schools	Red Bud Elementary School	62.50%	552	\$ 4,889.00	\$ 28,945.00	\$ 29,002.51
Grady County Schools	Northside Elementary School	100.00%	395	\$ 3,499.00	\$ 20,712.00	\$ 20,753.61
Grady County Schools	Southside Elementary School	100.00%	677	\$ 5,997.00	\$ 35,499.00	\$ 35,570.11
Greene County Schools	Greene County Primary School	100.00%	434	\$ 3,844.00	\$ 22,757.00	\$ 22,802.70
Hall County Schools	Chicopee Woods Elementary School	96.04%	732	\$ 6,484.00	\$ 38,383.00	\$ 38,459.86
Hall County Schools	Friendship Elementary School	54.66%	644	\$ 5,704.00	\$ 33,769.00	\$ 33,836.27
Hall County Schools	Lanier Elementary School	51.89%	476	\$ 4,217.00	\$ 24,959.00	\$ 25,009.41
Hall County Schools	Lula Elementary School	56.16%	422	\$ 3,738.00	\$ 22,128.00	\$ 22,172.21
Hall County Schools	Lyman Hall Elementary School	97.63%	760	\$ 6,732.00	\$ 39,851.00	\$ 39,931.00
Hall County Schools	McEver Elementary School	83.37%	499	\$ 4,420.00	\$ 26,165.00	\$ 26,217.85
Hall County Schools	Myers Elementary School	85.19%	594	\$ 5,261.00	\$ 31,147.00	\$ 31,209.23
Hall County Schools	Riverbend Elementary School	61.15%	399	\$ 3,534.00	\$ 20,922.00	\$ 20,963.77
Hall County Schools	Sardis Elementary School	59.14%	629	\$ 5,572.00	\$ 32,982.00	\$ 33,048.15
Hall County Schools	Sugar Hill Elementary School	84.18%	651	\$ 5,766.00	\$ 34,136.00	\$ 34,204.05
Hall County Schools	White Sulphur Elementary School	90.65%	460	\$ 4,074.00	\$ 24,121.00	\$ 24,168.76

School Food Authority (SFA)	School	Free & Reduced Price Eligibility	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended October 1, 2021 - June 30, 2022 Allocation
Haralson County Schools	Buchanan Primary School	90.54%	449	\$ 3,977.00	\$ 23,544.00	\$ 23,590.81
Jackson County Schools	East Jackson Elementary School	60.63%	574	\$ 5,085.00	\$ 30,098.00	\$ 30,158.41
Jackson County Schools	Maysville Elementary School	78.01%	382	\$ 3,383.00	\$ 20,031.00	\$ 20,070.58
Jackson County Schools	South Jackson Elementary School	69.47%	701	\$ 6,209.00	\$ 36,758.00	\$ 36,831.09
Lumpkin County Schools	Long Branch Elementary School	60.60%	467	\$ 4,136.00	\$ 24,488.00	\$ 24,536.55
Marietta City Schools	Dunleith Elementary School	87.63%	558	\$ 4,943.00	\$ 29,259.00	\$ 29,317.76
Marietta City Schools	Hickory Hills Elementary School	68.89%	360	\$ 3,189.00	\$ 18,877.00	\$ 18,914.68
Marietta City Schools	Lockheed Elementary School	81.57%	727	\$ 6,439.00	\$ 38,121.00	\$ 38,197.15
Marietta City Schools	Park Street Elementary School	88.14%	531	\$ 4,704.00	\$ 27,843.00	\$ 27,899.16
Marietta City Schools	Sawyer Road Elementary School	74.22%	640	\$ 5,669.00	\$ 33,559.00	\$ 33,626.10
Meriwether County Schools	Mountain View Elementary School	90.72%	766	\$ 6,785.00	\$ 40,166.00	\$ 40,246.24
Meriwether County Schools	Unity Elementary School	98.17%	453	\$ 4,013.00	\$ 23,753.00	\$ 23,800.98
Mitchell County Schools	Mitchell County Elementary School	100.00%	314	\$ 2,781.00	\$ 16,465.00	\$ 16,497.81
Mitchell County Schools	Mitchell County Primary School	100.00%	277	\$ 2,453.00	\$ 14,525.00	\$ 14,553.80
Montgomery County Schools	Montgomery County Elementary School	98.99%	430	\$ 3,809.00	\$ 22,547.00	\$ 22,592.54
Muscogee County Schools	Dimon Elementary School	88.33%	405	\$ 3,587.00	\$ 21,237.00	\$ 21,279.02
Muscogee County Schools	Forrest Road Elementary School	100.00%	420	\$ 3,720.00	\$ 22,023.00	\$ 22,067.13
Muscogee County Schools	J.D. Davis Elementary School	100.00%	354	\$ 3,136.00	\$ 18,562.00	\$ 18,599.44
Muscogee County Schools	St. Mary's Road Magnet Academy	100.00%	502	\$ 4,446.00	\$ 26,323.00	\$ 26,375.47
Muscogee County Schools	Waddell Elementary School	100.00%	463	\$ 4,101.00	\$ 24,278.00	\$ 24,326.38
Newton County Schools	Middle Ridge Elementary School	91.14%	666	\$ 5,900.00	\$ 34,922.00	\$ 34,992.16
Pelham City Schools Charter Schools	Pelham Elementary School	100.00%	706	\$ 6,253.00	\$ 37,020.00	\$ 37,093.79
Putnam County Schools	Putnam County Elementary School	100.00%	687	\$ 6,086.00	\$ 36,023.00	\$ 36,095.52
Putnam County Schools	Putnam County Primary School	100.00%	819	\$ 7,254.00	\$ 42,945.00	\$ 43,030.90
Quitman County Schools	Quitman County Elementary School	100.00%	135	\$ 1,196.00	\$ 7,079.00	\$ 7,093.01
Richmond County Schools	Copeland Elementary School	100.00%	578	\$ 5,120.00	\$ 30,308.00	\$ 30,368.57
Richmond County Schools	Diamond Lakes Elementary School	100.00%	592	\$ 5,244.00	\$ 31,042.00	\$ 31,104.15
Richmond County Schools	Meadowbrook Elementary School	100.00%	489	\$ 4,332.00	\$ 25,641.00	\$ 25,692.44
Richmond County Schools	Merry Elementary School	98.24%	412	\$ 3,649.00	\$ 21,604.00	\$ 21,646.80
Richmond County Schools	Monte Sano Elementary School	100.00%	412	\$ 3,649.00	\$ 21,604.00	\$ 21,646.80
Richmond County Schools	Wheless Elementary School	100.00%	438	\$ 3,880.00	\$ 22,967.00	\$ 23,012.86
Richmond County Schools	Willis Foreman Elementary School	81.45%	293	\$ 2,595.00	\$ 15,364.00	\$ 15,394.45
Sumter County Schools	Sumter County Elementary School	100.00%	614	\$ 5,438.00	\$ 32,196.00	\$ 32,260.04

School Food Authority (SFA)	School	Free & Reduced Price Eligibility	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended October 1, 2021 - June 30, 2022 Allocation
Sumter County Schools	Sumter County Intermediate School	100.00%	854	\$ 7,565.00	\$ 44,780.00	\$ 44,869.83
Sumter County Schools	Sumter County Primary School	100.00%	764	\$ 6,767.00	\$ 40,061.00	\$ 40,141.16
Talbot County Schools	Central Elementary/High School	100.00%	216	\$ 1,913.00	\$ 11,326.00	\$ 11,348.81
Taylor County Schools	Taylor County Primary School	100.00%	359	\$ 3,180.00	\$ 18,824.00	\$ 18,862.14
Taylor County Schools	Taylor County Upper Elementary School	90.23%	402	\$ 3,561.00	\$ 21,079.00	\$ 21,121.40
Terrell County Schools	Cooper-Carver Elementary School	100.00%	588	\$ 5,209.00	\$ 30,832.00	\$ 30,893.98
The Savannah Classical Academy	The Savannah Classical Academy	76.17%	195	\$ 1,727.00	\$ 10,225.00	\$ -
Thomasville City Schools	Harper Elementary School	100.00%	315	\$ 2,790.00	\$ 16,517.00	\$ 16,550.35
Thomasville City Schools	Scott Elementary School	100.00%	353	\$ 3,127.00	\$ 18,510.00	\$ 18,546.90
Toombs County Schools	Lyons Primary School	100.00%	545	\$ 4,827.00	\$ 28,578.00	\$ 28,634.73
Toombs County Schools	Lyons Upper Elementary School	100.00%	470	\$ 4,163.00	\$ 24,645.00	\$ 24,694.17
Toombs County Schools	Toombs Central Elementary School	91.00%	508	\$ 4,500.00	\$ 26,637.00	\$ 26,690.72
Treutlen County Schools	Treutlen Elementary School	100.00%	588	\$ 5,209.00	\$ 30,832.00	\$ 30,893.98
Vidalia City Schools	J.D. Dickerson Primary School	100.00%	503	\$ 4,456.00	\$ 26,375.00	\$ 26,428.02
Walker County Schools	Chattanooga Valley Elementary School	63.87%	501	\$ 4,438.00	\$ 26,270.00	\$ 26,322.93
Walker County Schools	Cherokee Ridge Elementary School	69.24%	569	\$ 5,040.00	\$ 29,836.00	\$ 29,895.71
Walker County Schools	Gilbert Elementary School	81.00%	521	\$ 4,615.00	\$ 27,319.00	\$ 27,373.75
Walker County Schools	Naomi Elementary School	77.62%	353	\$ 3,127.00	\$ 18,510.00	\$ 18,546.90
Walker County Schools	North Lafayette Elementary School	61.70%	436	\$ 3,862.00	\$ 22,862.00	\$ 22,907.78
Walker County Schools	Rock Spring Elementary School	60.15%	404	\$ 3,579.00	\$ 21,184.00	\$ 21,226.48
Walker County Schools	Rossville Elementary School	90.65%	428	\$ 3,791.00	\$ 22,443.00	\$ 22,487.46
Walker County Schools	Saddle Ridge Elementary/Middle School	53.51%	699	\$ 6,191.00	\$ 36,653.00	\$ 36,726.01
Walker County Schools	Stone Creek Elementary School	84.56%	447	\$ 3,959.00	\$ 23,439.00	\$ 23,485.73
			97,655	\$ 865,000.00	\$ 5,120,625.00	\$ 5,120,625.00

Grant Period		Jul-Sep	Oct-Jun	Total-SY22
Student Enrollment		97,655	97,460	
Allocation	\$	865,000.00	\$ 5,120,625.00	\$ 5,985,625.00
Per Student Allocation	\$	8.8577	\$ 52.5408	\$ 61.40

FY22 FFVP Grant - Amended School Food Authority (SFA) Allocations

SFA	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended Oct 1, 2021 - June 30, 2022 Allocation
Atlanta Public Schools	14,271	\$ 126,409.00	\$ 748,311.00	\$ 749,809.56
Bibb County Schools	10,713	\$ 94,897.00	\$ 561,744.00	\$ 562,869.45
Burke County Schools	2,058	\$ 18,229.00	\$ 107,914.00	\$ 108,128.94
Butts County Schools	1,695	\$ 15,014.00	\$ 88,879.00	\$ 89,056.63
Cirrus Academy Charter School	514	\$ 4,553.00	\$ 26,952.00	\$ 27,005.96
Clarke County Schools	2,724	\$ 24,130.00	\$ 142,834.00	\$ 143,121.11
Clay County Schools	151	\$ 1,337.00	\$ 7,918.00	\$ 7,933.66
Clayton County Schools	8,982	\$ 79,560.00	\$ 470,979.00	\$ 471,921.34
Cobb County Schools	2,984	\$ 26,430.00	\$ 156,470.00	\$ 156,781.72
Fannin County Schools	1,318	\$ 11,675.00	\$ 69,110.00	\$ 69,248.75
Fayette County Schools	1,368	\$ 12,117.00	\$ 71,732.00	\$ 71,875.80
Fulton County Schools	12,165	\$ 107,751.00	\$ 637,883.00	\$ 639,158.65
Furlow Charter Schools	317	\$ 2,808.00	\$ 16,622.00	\$ 16,655.43
Genesis Innovation Academy-Boys	316	\$ 2,799.00	\$ 16,570.00	\$ 16,602.89
Genesis Innovation Academy-Girls	332	\$ 2,940.00	\$ 17,409.00	\$ 17,443.54
Glynn County Schools	1,791	\$ 15,863.00	\$ 93,913.00	\$ 94,100.55
Gordon County Schools	552	\$ 4,889.00	\$ 28,945.00	\$ 29,002.51
Grady County Schools	1,072	\$ 9,496.00	\$ 56,211.00	\$ 56,323.72
Greene County Schools	434	\$ 3,844.00	\$ 22,757.00	\$ 22,802.70
Hall County Schools	6,266	\$ 55,502.00	\$ 328,563.00	\$ 329,220.56
Haralson County Schools	449	\$ 3,977.00	\$ 23,544.00	\$ 23,590.81
Jackson County Schools	1,657	\$ 14,677.00	\$ 86,887.00	\$ 87,060.08
Lumpkin County Schools	467	\$ 4,136.00	\$ 24,488.00	\$ 24,536.55
Marietta City Schools	2,816	\$ 24,944.00	\$ 147,659.00	\$ 147,954.85
Meriwether County Schools	1,219	\$ 10,798.00	\$ 63,919.00	\$ 64,047.22
Mitchell County Schools	591	\$ 5,234.00	\$ 30,990.00	\$ 31,051.61
Montgomery County Schools	430	\$ 3,809.00	\$ 22,547.00	\$ 22,592.54
Muscogee County Schools	2,144	\$ 18,990.00	\$ 112,423.00	\$ 112,647.44
Newton County Schools	666	\$ 5,900.00	\$ 34,922.00	\$ 34,992.16
Pelham City Schools Charter Schools	706	\$ 6,253.00	\$ 37,020.00	\$ 37,093.79
Putnam County Schools	1,506	\$ 13,340.00	\$ 78,968.00	\$ 79,126.42
Quitman County Schools	135	\$ 1,196.00	\$ 7,079.00	\$ 7,093.01
Richmond County Schools	3,214	\$ 28,469.00	\$ 168,530.00	\$ 168,866.07
Sumter County Schools	2,232	\$ 19,770.00	\$ 117,037.00	\$ 117,271.03
Talbot County Schools	216	\$ 1,913.00	\$ 11,326.00	\$ 11,348.81
Taylor County Schools	761	\$ 6,741.00	\$ 39,903.00	\$ 39,983.54
Terrell County Schools	588	\$ 5,209.00	\$ 30,832.00	\$ 30,893.98
The Savannah Classical Academy	195	\$ 1,727.00	\$ 10,225.00	\$ -
Thomasville City Schools	668	\$ 5,917.00	\$ 35,027.00	\$ 35,097.25
Toombs County Schools	1,523	\$ 13,490.00	\$ 79,860.00	\$ 80,019.62
Treutlen County Schools	588	\$ 5,209.00	\$ 30,832.00	\$ 30,893.98

SFA	Enrollment Verified	July 1, 2021 - September 30, 2021 Allocation	October 1, 2021 - June 30, 2022 Allocation	Amended Oct 1, 2021 - June 30, 2022 Allocation
Vidalia City Schools	503	\$ 4,456.00	\$ 26,375.00	\$ 26,428.02
Walker County Schools	4,358	\$ 38,602.00	\$ 228,516.00	\$ 228,972.75
TOTAL	97,655	\$ 865,000.00	\$ 5,120,625.00	\$ 5,120,625.00

Law Enforcement Teaching Students (LETS) Pilot Program

<u>LEA Name</u>	<u>Grant Award</u>
Dougherty County	\$40,000
Savannah Chatham County	\$40,000
Tattnall County	\$40,000
Toombs County	\$40,000
Total cost	\$160,000

FY 22 Charter Schools Facilities Grant					
# All	Charter School	FY 22 Award Amount	County / District Served	Charter Type	Grades Served
1	Atlanta Classical Academy	\$ 50,528	APS	Local	K-12
2	Atlanta Neighborhood Charter School (ES)	\$ 50,528	APS	Local	K-5
3	Atlanta Neighborhood Charter School (MS)	\$ 50,528	APS	Local	6-8
4	Centennial Academy	\$ 50,528	APS	Local	K-8
5	Charles R. Drew Charter School (ES)	\$ 50,528	APS	Local	K-5
6	Charles R. Drew Charter School (JA/SA)	\$ 50,528	APS	Local	8-12
7	KIPP Atlanta Collegiate	\$ 50,528	APS	Local	9-12
8	KIPP Soul Academy	\$ 50,528	APS	Local	6-8
9	KIPP Soul Primary	\$ 50,528	APS	Local	K-4
10	KIPP STRIVE Academy	\$ 50,528	APS	Local	5-8
11	KIPP Strive Primary	\$ 50,528	APS	Local	K-3
12	KIPP Vision	\$ 50,528	APS	Local	5-8
13	KIPP Vision - Primary	\$ 50,528	APS	Local	K-4
14	KIPP WAYS	\$ 50,528	APS	Local	5-8
15	KIPP WAYS - Primary	\$ 50,528	APS	Local	K-3
16	The Kindezi School	\$ 50,528	APS	Local	K-8
17	The Kindezi School Old 4th Ward	\$ 50,528	APS	Local	K-8
18	Wesley International Academy	\$ 50,528	APS	Local	K-8
19	Westside Atlanta	\$ 50,528	APS	Local	K-5
20	Coastal Empire Montessori	\$ 50,528	Chatham	Local	K-5
21	Savannah Classical Academy	\$ 50,528	Chatham	Local	K-8
22	Savannah Classical Academy High School	\$ 50,528	Chatham	Local	9-10
23	Susie King Taylor Community School	\$ 50,528	Chatham	Local	K-8
24	Tybee Island Maritime Academy	\$ 50,528	Chatham	Local	K-5
25	7 Pillars Career Academy	\$ 50,528	Clayton	Local	6-10
26	Utopian Academy for the Arts Elementary School	\$ 50,528	Clayton	Local	K-5
27	DeKalb Academy of Technology & the Environment (D.A.T.E.)	\$ 50,528	DeKalb	Local	K-8
28	DeKalb PATH Academy	\$ 50,528	DeKalb	Local	5-8
29	DeKalb Preparatory Academy	\$ 50,528	DeKalb	Local	K-8
30	International Community School	\$ 50,528	DeKalb	Local	K-5
31	Leadership Preparatory Academy	\$ 50,528	DeKalb	Local	K-8
32	Tapestry Public Charter School	\$ 50,528	DeKalb	Local	6-10
33	The GLOBE Academy	\$ 50,528	DeKalb	Local	K-3
34	The GLOBE Academy	\$ 50,528	DeKalb	Local	K-3
35	The Museum School of Avondale Estates	\$ 50,528	DeKalb	Local	K-8
36	Brighten Academy	\$ 50,528	Douglas	Local	K-8
37	Amana Academy	\$ 50,528	Fulton	Local	K-8
38	Chattahoochee Hills Charter	\$ 50,528	Fulton	Local	K-8
39	Fulton Academy of Science and Technology (FAST)	\$ 50,528	Fulton	Local	K-7
40	Hapeville Charter Middle School	\$ 50,528	Fulton	Local	6-8
41	Hapeville Charter High School	\$ 50,528	Fulton	Local	9-12
42	KIPP South Fulton Academy	\$ 50,528	Fulton	Local	5-8
43	Rise College Prep School	\$ 50,528	Fulton	Local	6-8
44	Rise Grammar School	\$ 50,528	Fulton	Local	K-3

# All	Charter School	FY 22 Award Amount	County / District Served	Charter Type	Grades Served
45	Skyview Charter School (GA HS for Accelerated Learning)	\$ 50,528	Fulton	Local	9-12
46	The Main Street Academy	\$ 50,528	Fulton	Local	K-8
47	Lake Oconee Academy	\$ 50,528	Greene	Local	K-12
48	New Life Academy of Excellence	\$ 50,528	Gwinnett	Local	K-8
49	North Metro Academy for Performing Arts	\$ 50,528	Gwinnett	Local	K-8
50	Cherokee Charter Academy	\$ 50,528	Cherokee	State - SCSC	K-8
51	Coastal Plains Charter High School	\$ 50,528	Candler	State - Special	9-12
52	DuBois Integrity Academy	\$ 50,528	Clayton	State - SCSC	K-5
53	Foothills Charter High School	\$ 50,528	Madison	State - Special	9-12
54	Georgia School for Innovation & the Classics	\$ 50,528	Richmond/statewide	State - SCSC	K-8
55	International Charter School of Atlanta	\$ 50,528	Fulton/Statewide	State - SCSC	K-5
56	Ivy Preparatory Academy at Kirkwood	\$ 50,528	DeKalb	State - SCSC	K-8
57	Mountain Education Center	\$ 50,528	Elbert	State - Special	9-12
58	Odyssey School	\$ 50,528	Coweta	State - SCSC	K-8
59	Scintilla Charter Academy	\$ 50,528	Lowndes, Valdosta City	State - SCSC	K-5
60	Utopian Academy for the Arts	\$ 50,528	Clayton	State - SCSC	6-8
61	Atlanta Heights Charter School	\$ 50,528	APS	State - SCSC	K-8
62	Brookhaven Innovation Academy	\$ 50,528	DeKalb/Statewide	State - SCSC	K-6
63	Cirrus Academy Charter School	\$ 50,528	Statewide	State - SCSC	K-8
64	Coweta Charter Academy	\$ 50,528	Coweta	State - SCSC	K-8
65	Ethos Classical	\$ 50,528	APS	State - SCSC	K-5
66	Fulton Leadership Academy	\$ 50,528	Fulton	State - SCSC	6-12
67	Genesis Academy for Boys	\$ 50,528	Statewide	State - SCSC	K-12
68	Genesis Academy for Girls	\$ 50,528	Statewide	State - SCSC	K-12
69	International Academy of Smyrna	\$ 50,528	Cobb	State - SCSC	K-8
70	International Charter Academy of Georgia	\$ 50,528	Statewide	State - SCSC	K-5
71	Liberty Tech Charter School	\$ 50,528	Fayette/Statewide	State - SCSC	3-8
72	Pataula Charter Academy	\$ 50,528	Baker, Clay, Calhoun, Early, Randolph	State - SCSC	K-12
73	Resurgence Hall	\$ 50,528	Fulton	State - SCSC	K-8
74	School for Arts-Infused Learning (SAIL)	\$ 50,528	Statewide	State - SCSC	K-6
75	SLAM Academy of Atlanta	\$ 50,528	APS	State - SCSC	K-12
76	Southwest Georgia STEM	\$ 50,528	Randolph/Statewide	State - SCSC	K-5
77	Spring Creek Charter Academy	\$ 50,528	Decatur, Miller, Seminole	State - SCSC	K-12
78	Statesboro STEAM	\$ 50,528	Bullock	State - SCSC	6-12
79	Academy for Classical Education	\$ 50,528	Bibb	State - SCSC	K-11
80	Baconton Community Charter School	\$ 50,528	Mitchell	State - SCSC	PK-12
81	Atlanta Unbound Academy	\$ 50,528	Fulton	State - SCSC	K-4/6-8
82	Delta STEAM Academy	\$ 50,528	Douglas	State - SCSC	K-7
83	Furlow Charter School	\$ 50,528	Sumter	State - SCSC	K-11
84	Georgia Fugees Charter School	\$ 50,528	DeKalb	State - SCSC	6-12

# All	Charter School	FY 22 Award Amount	County / District Served	Charter Type	Grades Served
85	Yi Hwang Academy of Language Excellence	\$ 50,528	Statewide	State - SCSC	K-5
86	Atlanta SMART Academy	\$ 50,528	Statewide	State - SCSC	5-7
87	Northwest Classical Academy Charter School	\$ 50,528	Statewide	State - SCSC	K-6
	Total	\$ 4,396,000			

**Building Opportunities for Out-of-School Time (BOOST) Grants
Statewide Grants - 2021-2022 Funding Recommendations**

Organization	Organization City	Organization County	Counties to be Served	Type of Program	Amount Recommended
Communities In Schools of Georgia, Inc.	Atlanta	Fulton	Baldwin, Ben Hill, Berrien, Burke, Candler, Catoosa, Cobb, Dodge, Dooly, Dougherty, Douglas, Glascock, Hancock, Laurens, Muscogee, Troup, Turner, Washington	Year-round	\$ 1,125,000.00
Georgia Alliance of Boys & Girls Clubs	Macon	Bibb	Baldwin, Bartow, Bibb, Brooks, Bulloch, Candler, Carroll, Chatham, Chattahoochee, Chattooga, Cherokee, Clarke, Clay, Clinch, Cobb, Cobb, Coffee, Colquitt, Cook, Coweta, Crawford, DeKalb, Dougherty, Douglas, Fannin, Floyd, Forsyth, Fulton, Gilmer, Glynn, Gordon, Grady, Greene, Gwinnett, Habersham, Hall, Houston, Johnson, Jones, Lamar, Lanier, Laurens, Lowndes, Macon, McDuffie, McIntosh, Mitchell, Monroe, Murray, Newton, Paulding, Pickens, Polk, Pulaski, Richmond, Rockdale, Sumter, Thomas, Toombs, Walton, Washington, Wayne, Whitfield, Wilkinson	Year-round	\$ 4,500,000.00
Georgia Recreation and Park Association Inc	Conyers	Rockdale	Appling, Bacon, Baldwin, Barrow, Bartow, Bibb, Brantley, Bryan, Bulloch, Burke, Butts, Camden, Candler, Carroll, Catoosa, Chatham, Cherokee, Clarke, Clayton, Cobb, Coffee, Colquitt, Columbia, Cook, Coweta, Crisp, Dawson, Decatur, DeKalb, Dodge, Dooly, Dougherty, Douglas, Early, Effingham, Emanuel, Evans, Fannin, Fayette, Floyd, Forsyth, Fulton, Gilmer, Glynn, Gordon, Greene, Gwinnett, Habersham, Haralson, Harris, Hart, Heard, Henry, Houston, Jackson, Jasper, Jeff Davis, Jefferson, Jenkins, Johnson, Jones, Lamar, Laurens, Lee, Liberty, Lowndes, Madison, McDuffie, Miller, Mitchell, Morgan, Murray, Muscogee, Oconee, Oglethorpe, Paulding, Peach, Pickens, Pierce, Rabun, Richmond, Rockdale, , Screven, Spalding, Stephens, Sumter, Tattnall, Telfair, Thomas, Tift, Toombs, Treutlen, Troup, Turner, Union, Upson, Walker, Walton, Ware, Washington, Wayne, Wheeler, White, Whitfield, Wilkinson	Year-round	\$ 4,050,000.00
Georgia State Alliance of YMCAs	Atlanta	Fulton	Barrow, Bartow, Brantley, Bryan, Bulloch, Burke, Catoosa, Chatham, Cherokee, Clarke, Cobb, Colquitt, Columbia, Dawson, Decatur, DeKalb, Dougherty, Effingham, Fayette, Floyd, Forsyth, Fulton, Glynn, Gwinnett, Hall, Hart, Jefferson, Lee, Liberty, Lincoln, Long, Lowndes, McDuffie, McIntosh, Muscogee, Newton, Pierce, Rabun, Richmond, Thomas, Tift, Towns, Walker, Ware	Year-round	\$ 4,500,000.00
					\$ 14,175,000.00

**Building Opportunities for Out-of-School Time (BOOST) Grants
Community Grants - 2021-2022 Funding Recommendations**

Organization	Organization City	Organization County	Type of Program	Application Rank Percentlie	Amount Recommended
21st Century Leaders, Inc.	Decatur	DeKalb	Summer	90.20%	\$ 47,700.00
Africa's Children's Fund	Atlanta	DeKalb	Year-round	60.60%	\$ 332,500.00
After-School All-Stars	Atlanta	Fulton	Year-round	91.70%	\$ 427,500.00
Agape Youth & Family Center	Atlanta	Fulton	Year-round	98.50%	\$ 107,100.00
ARTPORTUNITY KNOCKS	Atlanta	Fulton	Year-round	73.30%	\$ 427,500.00
Association of Village Pride, Inc.	Fayetteville	Fayette	Year-round	80.50%	\$ 192,600.00
Atlanta Music Project	Atlanta	Fulton	Year-round	73.30%	\$ 192,600.00
Augusta Richmond County Juvenile Court	Augusta	Richmond	Year-round	76.60%	\$ 107,100.00
Boy Scouts of America, Inc. Atlanta Area Council	Atlanta	Cobb	Year-round	81.50%	\$ 333,883.00
Boy Scouts of America, Inc. Northeast Georgia Council	Lawrenceville	Gwinnett	Year-round	87.80%	\$ 286,851.00
Bread of Life Development Ministries, Inc.	Conyers	Rockdale	Year-round	91.70%	\$ 422,681.00
Breakthrough Atlanta Inc	Atlanta	Fulton	Summer	91.20%	\$ 96,300.00
CS Georgia Youth Foundation	Atlanta	DeKalb	Year-round	56.30%	\$ 142,800.00
Camp Twin Lakes	Atlanta	Fulton	Summer	98.00%	\$ 225,000.00
Carrie Steele Pitts Home, Inc.	Atlanta	Fulton	Year-round	88.80%	\$ 107,100.00
Catholic Charities Atlanta	Smyrna	Cobb	Afterschool	56.70%	\$ 7,500.00
Center For Pan Asian Community Services	Atlanta	DeKalb	Year-round	82.50%	\$ 99,666.00
Center For The Visually Impaired	Atlanta	Fulton	Summer	61.60%	\$ 7,500.00
City of Refuge Inc	Atlanta	Fulton	Year-round	95.10%	\$ 50,400.00
City of Victory Inc	Sylvania	Screven	Year-round	54.30%	\$ 83,300.00
Clarkston Community Center, Inc.	Clarkston	DeKalb	Year-round	52.90%	\$ 43,379.00
Code Calloway Inc	Augusta	richmond	Afterschool	66.50%	\$ 29,500.00
Corners Outreach	Peachtree Corners	Gwinnett	Year-round	95.60%	\$ 426,150.00
Create Your Dreams	Atlanta	Fulton	Year-round	77.60%	\$ 50,400.00
Crisp County Community Council Inc	Cordele	Crisp	Afterschool	55.30%	\$ 19,600.00
Deep Center Incorporated	Savannah	Chatham	Afterschool	89.80%	\$ 214,200.00
East Atlanta Kids Club	Atlanta	DeKalb	Year-round	93.20%	\$ 107,100.00
Educational Advisory Foundation Inc	Atlanta	Fulton	Afterschool	71.80%	\$ 107,100.00
Elachee Nature Science Center	Gainesville	Hall	Summer	63.50%	\$ 126,182.00
Extra Special People, Inc.	Watkinsville	Oconee	Year-round	78.10%	\$ 152,000.00
Family Connection of Columbia County Inc	Grovetown	Columbia	Year-round	78.10%	\$ 25,200.00
Family Connection of Turner County, Inc.	Ashburn	Turner	Year-round	66.00%	\$ 59,500.00
Family Literacy of Georgia	Morrow	Clayton	Summer	97.00%	\$ 25,200.00
Family Support Circle, Inc	Stockbridge	Henry	Year-round	63.10%	\$ 332,500.00
Fugees Family Inc	Columbus	Muscogee	Year-round	51.90%	\$ 83,300.00
FullCircle Program Inc	Cumming	Forsyth	Year-round	68.40%	\$ 83,720.00
Future Seekers, Inc.	East Point	Fulton	Year-round	82.50%	\$ 214,200.00

**Building Opportunities for Out-of-School Time (BOOST) Grants
Community Grants - 2021-2022 Funding Recommendations**

Organization	Organization City	Organization County	Type of Program	Application Rank Percentlie	Amount Recommended
GENTS&GLAM Community, Family and Youth Services	Baxley	Appling	Year-round	94.10%	\$ 95,200.00
Georgia Tech- CEISMC	Atlanta	Fulton	Year-round	73.30%	\$ 304,000.00
Girls Incorporated of Greater Atlanta	Marietta	Cobb	Year-round	93.20%	\$ 427,500.00
Girls On the Run International	Valdosta	Lowndes	Afterschool	82.00%	\$ 59,500.00
Harvest Rain Early Learning Academy	Fairburn	Fulton	Year-round	86.40%	\$ 100,800.00
HealthMPowers, Inc.	Norcross	Gwinnett	Afterschool	75.20%	\$ 124,992.00
Helping Empower Youth Incorporated	Atlanta	Fulton	Year-round	83.40%	\$ 107,100.00
Hope for Youth Inc	Atlanta	Fulton	Year-round	64.50%	\$ 186,178.00
Horizons Atlanta	Atlanta	Fulton	Summer	63.50%	\$ 192,500.00
Inspiring Scholars Academy, LLC	Douglasville	Douglas	Year-round	59.20%	\$ 83,300.00
International Rescue Committee	Atlanta	DeKalb	Year-round	92.70%	\$ 44,800.00
Jessye Norman School of the Arts (JNSA)	Augusta	Richmond	Year-round	88.30%	\$ 214,200.00
Kennesaw State University Research and Service Foundation, Inc.	Kennesaw	Cobb	Year-round	70.30%	\$ 332,449.00
LaAmistad, Inc.	Atlanta	Fulton	Afterschool	66.50%	\$ 59,500.00
LIFT Youth Center Inc	Ringgold	Catoosa	Afterschool	51.40%	\$ 74,900.00
Lincoln County Community Partnership Inc	Lincolnton	Lincoln	Summer	58.70%	\$ 9,800.00
Los Niños Primero	Atlanta	Fulton	Year-round	78.10%	\$ 190,400.00
McIntosh Trail Community Service Board	Griffin	Butts	Year-round	85.90%	\$ 48,780.00
Men About Change, Inc.	Macon	Bibb	Year-round	98.50%	\$ 427,500.00
Mercy Housing Southeast	Atlanta	Fulton	Year-round	73.30%	\$ 44,800.00
Metamorphosis Powerhouse Company	McDonough	Henry	Year-round	71.30%	\$ 192,600.00
Mothers Raising Sons	Ellenwood	Clayton	Year-round	76.60%	\$ 427,500.00
New American Pathways Inc	Atlanta	DeKalb	Year-round	69.40%	\$ 71,400.00
New Church Development Commission	Atlanta	Fulton	Afterschool	86.80%	\$ 12,600.00
New Neighbors Network	Comer	Madison	Afterschool	57.70%	\$ 7,500.00
Next Generation Focus	Cumming	Forsyth	Year-round	83.40%	\$ 190,400.00
Nobis Works, Inc.	Marietta	Cobb	Summer	90.20%	\$ 43,200.00
North Broad Youth Center	Rome	Floyd	Afterschool	70.80%	\$ 53,100.00
Odyssey Atlanta	Atlanta	Fulton	Summer	84.90%	\$ 102,150.00
Ohoopsee Regional Library System Jeff Davis Library dba Vidalia Toombs County Library	Vidalia	Toombs	Year-round	52.90%	\$ 26,455.00
Onesource Learning & Development Center	Snellville	Gwinnett	Year-round	96.60%	\$ 192,600.00
Paint Love	Decatur	DeKalb	Summer	89.30%	\$ 22,500.00
Positive Growth	Clarkston	DeKalb	Year-round	99.50%	\$ 50,400.00
Rainbow Village	Duluth	Gwinnett	Year-round	52.90%	\$ 21,000.00
Raising Expectations	Atlanta	Fulton	Year-round	87.30%	\$ 95,200.00

**Building Opportunities for Out-of-School Time (BOOST) Grants
Community Grants - 2021-2022 Funding Recommendations**

Organization	Organization City	Organization County	Type of Program	Application Rank Percentlie	Amount Recommended
Reach for Excellence	Atlanta	Fulton	Year-round	67.40%	\$ 28,000.00
Restoration Atl Mission, Inc.	Atlanta	Fulton	Year-round	81.00%	\$ 93,600.00
Rockdale County	Conyers	Rockdale	Summer	68.90%	\$ 9,800.00
Safe Harbor Children's Shelter, Inc.	Brunswick	Glynn	Year-round	95.60%	\$ 107,100.00
Savannah Country Day School Inc- Horizons Savannah	Savannah	Chatham	Summer	84.90%	\$ 107,100.00
Soccer in the Streets, Inc.	Atlanta	Fulton	Year-round	60.10%	\$ 285,000.00
South GA Starz Academy Inc	Albany	Dougherty	Year-round	72.30%	\$ 107,100.00
Southside Recreation Center Inc	Valdosta	Lowndes	Year-round	72.30%	\$ 50,400.00
Spectrum Autism Support Group, Inc.	Suwanee	Gwinnett	Summer	61.60%	\$ 41,300.00
STAR House Foundation	Roswell	Fulton	Afterschool	76.20%	\$ 53,100.00
STEM Atlanta Women, Inc.	Atlanta	Fulton	Year-round	57.20%	\$ 105,000.00
Swem International Inc	Atlanta	DeKalb	Year-round	52.40%	\$ 163,125.00
Teach O'Rea Preparatory	Stone Mountain	DeKalb	Year-round	59.20%	\$ 39,200.00
Team Up Mentoring, Inc.	Monroe	Walton	Year-round	78.10%	\$ 53,615.00
The Drake House	Roswell	Fulton	Year-round	69.40%	\$ 29,400.00
The Elaine Clark Center for Exceptional Children	Chamblee	DeKalb	Year-round	62.60%	\$ 16,100.00
The Study Hall	Atlanta	Fulton	Year-round	78.10%	\$ 50,400.00
The Vashti Center Inc	Thomasville	Thomas	Year-round	75.70%	\$ 25,200.00
Think Big Youth Organization	Midway	Liberty	Year-round	54.80%	\$ 83,300.00
Thomasville Community Resource Center	Thomasville	Thomas	Year-round	94.60%	\$ 202,500.00
Time2Give Inc	Atlanta	Fulton	Year-round	60.60%	\$ 330,504.00
Together Friends Organization Inc.	Riverdale	Clayton	Year-round	67.40%	\$ 71,400.00
Urban League of Greater Atlanta	Atlanta	Fulton	Year-round	97.50%	\$ 50,400.00
VOX Teen Communications Inc.	Atlanta	Fulton	Year-round	58.20%	\$ 31,500.00
Wesleyan College	Macon	Bibb	Summer	65.00%	\$ 19,600.00
Wilkes County Community Partnership, Inc.	Washington	Wilkes	Year-round	55.80%	\$ 166,484.00
Young Women's Christian Organization of Athens, Georgia, Inc.	Athens	Clarke	Summer	65.00%	\$ 21,000.00
Youth Empowerment through Learning, Leading, and Serving, Inc.	Atlanta	Fulton	Year-round	83.40%	\$ 50,400.00
					\$ 12,825,244.00

FY22 Title 1, Section 1003 School Improvement
SUCCESS Grant Recommended Awards

District	Final Score (out of 110)	Recommended Funding
Charter	83	\$ 250,000
Cirrus Academy	90.3	\$ 250,000
Clay	67.5	\$ 250,000
Dekalb	88	\$ 258,916
Dooly	80.8	\$ 250,055
Fulton	97.5	\$ 627,618
Meriwether	93.3	\$ 250,000
Murray	100.8	\$ 800,000
Randolph	74.5	\$ 235,700
Richmond	82	\$ 999,865
Rome City	86.6	\$ 250,000
SAIL Academy	72.1	\$ 16,000
Savannah-Chatham	81.3	\$ 250,000
Thomas County	89.1	\$ 250,000
TOTAL		\$ 4,938,154

FY22 ESSER III ARP CTAE Equipment Grant		
System Number	System Name	Grant Amount
601	Appling County	100,000
602	Atkinson County	91,744
604	Baker County	100,000
610	Berrien County	99,380
614	Brooks County	96,688
617	Burke County	80,165
624	Charlton County	52,392
629	Clarke County	99,829
653	Colquitt County	38,960
636	Columbia County	88,000
637	Cook County	100,000
638	Coweta County	100,000
643	Decatur County	98,750
648	Douglas County	12,200
649	Early County	100,000
650	Echols County	69,399
651	Effingham County	100,000
652	Elbert County	27,478
657	Floyd County	91,067
661	Gilmer County	13,216
668	Habersham County	99,830
671	Haralson County	82,775
674	Heard County	73,850
677	Irwin County	100,000
679	Jasper County	85,411
680	Jeff Davis County	100,000
688	Lee County	47,195
690	Lincoln County	59,561
693	Lumpkin County	100,000
700	Miller County	99,956
701	Mitchell County	100,000
705	Murray County	91,000
712	Pickens County	84,130
714	Pike County	74,700

FY22 ESSER III ARP CTAE Equipment Grant

System Number	System Name	Grant Amount
716	Pulaski County	94,231
720	Randolph County	100,000
722	Rockdale County	100,000
723	Schley County	90,986
724	Screven County	99,969
725	Seminole County	100,000
735	Terrell County	77,006
738	Toombs County	81,750
739	Towns County	100,000
743	Twiggs County	97,920
747	Walton County	99,247
750	Washington County	100,000
753	Wheeler County	100,000
755	Whitfield County	100,000
757	Wilkes County	100,000
758	Wilkinson County	36,951
763	Bremen City	100,000
765	Calhoun City	95,325
767	Cartersville City	100,000
771	Commerce City	100,000
784	Pelham City	100,000
789	Thomasville City	100,000
791	Trion City	100,000
	Total	4,931,061

**OFFICE OF LIEUTENANT GOVERNOR**

240 STATE CAPITOL

ATLANTA, GEORGIA 30334

GEOFF DUNCAN
LIEUTENANT GOVERNOR

September 23, 2021

Scott Sweeney, Chairman, State Board of Education
Richard Woods, State School Superintendent, Georgia Department of Education
Georgia Department of Education
205 Jesse Hill Jr. Dr. SE
Atlanta, GA 30334

Dear Chairman Sweeney and Superintendent Woods,

It is my pleasure to provide this letter of support for the National Science Foundation funded Artificial Intelligence for Georgia Middle Schools (AI4GA) grant project. Computer technology and artificial intelligence are new and undiscovered fields of information and it is a high priority for my office to ensure that our future generations are equipped to handle the ever-increasing technological world. By investing in tech studies at an earlier age, it allows our students to become informed in new career pathways of which they have to choose.

The AI4GA grant project plays a vital role in working to address the reshaping of our modern world. The overall approach of the Innovative Technology Experiences for Students and Teachers to support projects that teach program elements and pursue the advancement of our STEM fields. Their drive for new and innovative projects will create an environment advantageous to our technological industry and the future of Georgia.

You and your team at the Department of Education have done a tremendous job laying the foundation for this new education program and I'm thankful for your commitment to presenting real solutions to the technological divide in Georgia. With this in mind and knowing the prospects that Georgia has to offer, I fully support your application for funding from the National Science Foundation.

I look forward to hearing of your continued success. Please do not hesitate to contact my office if I can be of further assistance.

Sincerely,

Geoff Duncan
Lt. Governor

ESSER L4GA Supplemental Funding Requests

District	Birth to 5	Elementary	Middle	High	Total
Atkinson County	\$63,680	\$147,488	\$63,680	\$63,680	\$338,528
Brantley County	\$182,492	\$497,500	\$398,000	\$130,756	\$1,208,748
Carrollton City	\$127,660	\$347,521	\$138,383	\$146,490	\$760,054
Clinch County	\$63,680	\$136,679	\$127,360	\$63,680	\$391,399
Coffee County	\$363,393	\$953,264	\$245,660	\$372,083	\$1,934,400
Douglas County	\$127,320	\$402,798	\$226,632	\$222,959	\$979,709
Fannin County	\$63,680	\$137,863	\$63,680	\$78,680	\$343,903
Floyd County	\$210,163	\$559,301	\$318,400	\$264,371	\$1,352,235
Glynn County	\$515,116	\$1,115,849	\$357,978	\$410,547	\$2,399,490
Jones County	\$112,042	\$327,384	\$127,360	\$136,396	\$703,181
Laurens County	\$148,370	\$339,377	\$156,741	\$173,418	\$817,907
Lumpkin County	\$163,394	\$404,649	\$136,746	\$150,302	\$855,091
Marion County	\$63,680	\$91,211	\$63,680	\$63,680	\$282,251
Morgan County	\$132,625	\$313,956	\$110,618	\$130,891	\$688,089
Paulding County	\$347,668	\$957,729	\$334,994	\$285,992	\$1,926,383
Pelham City	\$63,680	\$93,136	\$63,680	\$63,680	\$284,176
Seminole County	\$99,500	\$127,711	\$99,500	\$99,500	\$426,211
Thomasville City	\$80,127	\$229,529	\$63,680	\$65,222	\$438,557
Towns County	\$99,500	\$99,500	\$99,500	\$99,500	\$398,000
Twiggs County	\$99,500	\$99,500	\$99,500	\$99,500	\$398,000
Wilkinson County	\$99,500	\$199,000	\$99,500	\$99,500	\$497,500
Worth County	\$128,912	\$332,002	\$203,728	\$210,036	\$874,677
	\$3,355,680	\$7,912,946	\$3,599,000	\$3,430,863	\$18,298,488
Grade Band	Earmark	Per Pupil Allocation	Total per Grade Band		
Birth to Age Five	15%	\$ 106.10	\$3,355,680		
K-5	40%	\$ 231.36	\$7,912,946		
Middle	20%	\$ 142.00	\$3,599,000		
High	20%	\$ 134.80	\$3,430,863		
			\$18,298,488		

Grant Allocations - Equipment Grant Reimbursements To Utilize Increased Peachnet Bandwidth

Equipment needs

All districts will have their bandwidth doubled at a cost of \$7,594,000

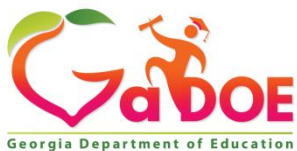
43 districts below will need to upgrade their current equipment to handle increased capacity. Cost per district up to \$40,000 for a cost of up to \$1,720,000

Total cost - \$9,314,000

<u>System Name</u>	<u># of schools</u>	<u>Old Bandwidth in Megabytes Per Second (MBPS)</u>	<u>New Bandwidth in MBPS</u>	<u>Equipment Reimbursement</u>
Appling County	6	600	1,200	\$40,000
Baldwin County	6	1,000	1,200	\$40,000
Brantley County	7	700	1,400	\$40,000
Brooks County	6	400	1,200	\$40,000
Bryan County	10	1,000	2,000	\$40,000
Carrollton City	4	1,000	800	\$40,000
Chatham County	57	5,200	11,400	\$40,000
Chattooga County	5	600	1,000	\$40,000
Clayton County	66	6,100	13,200	\$40,000
Cobb County	111	20,000	22,200	\$40,000
Crisp County	5	600	1,000	\$40,000
DeKalb County	130	13,200	26,000	\$40,000
Emanuel County	6	700	1,200	\$40,000
Franklin County	6	600	1,200	\$40,000
Fulton County	107	17,000	21,400	\$40,000
Gainesville City	8	800	1,600	\$40,000
Gordon County	10	1,100	2,000	\$40,000
Grady County	7	700	1,400	\$40,000
Gwinnett County	139	12,900	27,800	\$40,000
Habersham County	14	1,000	2,800	\$40,000
Haralson County	7	600	1,400	\$40,000
Harris County	7	700	1,400	\$40,000
Jackson County	10	1,200	2,000	\$40,000
Jefferson County	5	600	1,000	\$40,000
Jones County	7	1,000	1,400	\$40,000
Laurens County	8	800	1,600	\$40,000
Lee County	8	800	1,600	\$40,000
Madison County	7	700	1,400	\$40,000
McDuffie County	6	600	1,200	\$40,000
Meriwether County	8	700	1,600	\$40,000
Muscogee County	53	5,400	10,600	\$40,000
Peach County	6	600	1,200	\$40,000
Pickens County	6	700	1,200	\$40,000

Grant Allocations - Equipment Grant Reimbursements To Utilize Increased Peachnet Bandwidth

System Name	# of schools	Old Bandwidth in Megabytes Per Second (MBPS)	New Bandwidth in MBPS	Equipment Reimbursement
Richmond County	54	5,700	10,800	\$40,000
Rome City	8	900	1,600	\$40,000
Stephens County	6	2,000	1,200	\$40,000
Sumter County	7	700	1,400	\$40,000
Tattnall County	6	700	1,200	\$40,000
Thomas County	7	600	1,400	\$40,000
Valdosta City	8	800	1,600	\$40,000
Ware County	9	900	1,800	\$40,000
Wayne County	8	800	1,600	\$40,000
White County	6	700	1,200	\$40,000
Total cost				\$1,720,000



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
 "Educating Georgia's Future"

Vendor

Presidio Networked Solutions

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 10/1/2022	\$147,260	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	0

Contract Scope and Objective

Presidio will outfit remaining conference rooms in the Twin Towers with the installation of technology equipment/cabling to enable recording of webinars, professional learning, and training videos as GaDOE continues to expand virtual options for school and district support.

Performance, Criteria, and Results

Performance through this statewide contract will be monitored by GaDOE program staff along with the Department of Administrative Services to ensure the timely selection and installation of technology equipment, along with the selection of high-quality, reasonably priced equipment to ensure the best possible value for Georgia taxpayers.

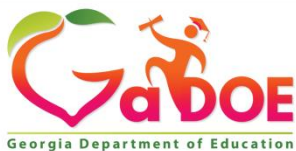
Contract Procurement Process

Non-bid process:

- Sole Source justification
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
- Other (Please describe below.)

Program Name and Contact

Office of Communications
 Meghan Frick, Director of Communications



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 New Contract

September 2021

Vendor

Georgia Career and Technical Student Organizations (CTSOs)

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 6/30/2022	\$200,000	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	0

Contract Scope and Objective

CTSOs enrich the curriculum in the CTAE pathways. The activities of each CTSO are co-curricular components of the CTAE curriculum. The CTSO organizations are non-profit entities that maintain an affiliation with their corresponding national organization (Exception Georgia CTI). These funds will assist Georgia CTSOs with operation and membership expenses to reduce membership costs for students. The \$200,000.00 amount will be divided among the nine CTSOs as listed below.

Georgia Career and Technical Instruction (CTI) - \$16,970.00

Georgia DECA, Inc. - \$20,131.12

Georgia Future Business Leaders of America (FBLA) - \$24,788.04

Georgia HOSA Future Health Professionals - \$20,469.54

Georgia SkillsUSA - \$18,469.74

Georgia Technology Student Association (TSA) - \$24,032.30

Georgia First Robotics - \$15,574.28

Georgia FFA - \$33,131.87

Georgia Family, Career and Community Leaders of America (FCCLA) - \$26,432.39

Total Budget - \$200,000.00

Performance, Criteria, and Results

Georgia CTSO executive directors will provide a detailed report of how the funds will be distributed to eligible recipients. Georgia CTSOs will show an increase in affiliated memberships.

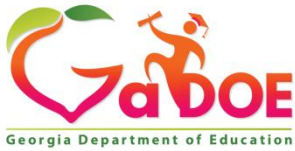
Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Nonprofit Providing Services
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Career, Technical and Agricultural Education Division
Dr. Barbara Wall, State CTAE Director



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

Certiport - GMetrix

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$248,750	<input type="checkbox"/> State <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Other	0

Contract Scope and Objective

Certiport will provide unlimited practice exams for schools that purchase the GMetrix software through the volume discount pricing program. There were 199 schools who ordered GMetrix at \$1,250 for a total of \$248,750. This includes unlimited technical support and access to resources to guide teachers on how to use the software.

Performance, Criteria, and Results

The contract will be monitored through conference calls between the Certiport Deployment Team and the Georgia Department of Education Program Specialist. Continuous email and phone communications will occur with the Certiport team and the Program Specialist to address any issues or concerns. The Certiport Deployment Team will also communicate directly with schools as needed.

The contract performance will be measured by the number of certification downloads for the value of the state contract and the total number of student, faculty, and staff certifications earned. The vendor performance will be measured by the number of test centers successfully administering exams and the customer support provided to each test center. For school year 2020-21, 4,135 students earned a Microsoft Office Specialist certification which is a 36% decrease from 2019-20. The decrease is due to 1) the effects of the pandemic on school instruction and 2) the technical obstacles in testing in a remote environment. GMetrix is an excellent online resource tool for teachers to use in a virtual environment. According to Certiport, students who use GMetrix pass the MOS Word exams at a rate of 70% whereas students without this opportunity pass at a lower rate of 19%. The pass rates for PowerPoint are 90% with GMetrix and 67% without GMetrix.

Contract Procurement Process

Non-bid process:

- Sole Source justification
 Intergovernmental contract
 Statewide contract
 Exempt (Please select from the list below)
 Other (Please describe below.)
- Provide sole source justification here.
 Learning Resources
 Click here to enter text.

Program Name and Contact

Career, Technical and Agricultural Education (CTAE)
Dr. Barbara Wall, CTAE State Director



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 New Contract

September 2021

Vendor

Liberty County School System

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$100,000	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	0

Contract Scope and Objective

To provide educational services for a free appropriate public education to ensure that an identified student receives therapeutic services and supports in an out-of-state residential treatment facility as deemed medically necessary.

Performance, Criteria, and Results

- Liberty County will ensure that educational services are provided to an identified student who receives therapeutic treatment at residential treatment facility out of state.
- Liberty County will remit payment of expenditures up to \$12,045.00 incurred per this contractual agreement.
- Liberty County School System will provide documentation verifying payment of \$12,045.00 for educational services provided on behalf of the identified student to the state director or his/her designee.
- GaDOE will verify and approve the documentation for expenditures paid by Liberty County School System. Upon approval of expenditure payment responsibility, GaDOE will be responsible for reimbursing Liberty County for educational services exceeding \$12,045.00, but not more than \$100,000.00.
- Liberty County will invoice the GaDOE quarterly or more frequently, as needed, for reimbursements directly related to educational services provided for the identified student at the residential treatment facility.
- All invoices must have documentation for verification of the expenditures.
- All invoices from Liberty County School System must be for services provided during the agreement period.
- All final invoices for reimbursement must be submitted within 30 days of the contract end date unless reasonably noted otherwise by Liberty County or the Treatment Center.

Contract Procurement Process

Non-bid process:

Sole Source justification

Provide sole source justification here.

Intergovernmental contract

Statewide contract

Exempt (Please select from the list below)

[Choose an item.](#)

Other (Please describe below.)

[Click here to enter text.](#)

Program Name and Contact

Office of Federal Programs
Shaun Owen, Deputy Superintendent



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 Recurring Contract

September 2021

Vendor

Garrett Consulting, LLC

Contract Details

Contract Term	Contract Amount	Funding Source	Renewal # or Number of Years
11/1/2021 – 10/31/2022	\$102,500	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	3/4

Changes from Previous Year

Additional technical assistance and deliverables are added to the contract to provide support for structuring and proposal development for the State Personnel Development Grant (SPDG).

Previous Year Performance, Criteria, and Results

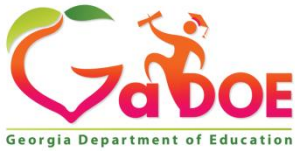
The contractor will survey the GA SPDG participants, analyze the survey data, and report the results. The contractor will provide interim and annual reporting on outcome data. The contractor will produce a comprehensive evaluation report, presenting all outcome and pertinent output data. In addition, the contractor will provide technical assistance with processes and organizational practices that will lead to proposal development with an evaluation component.

Current Year Performance, Criteria, and Results

Garrett Consulting, LLC met all performance criteria and deliverables for previous contracts, including contributions toward data collection, research, interpretation, and evaluation for the Annual Performance Report (APR). The work satisfied all elements of the contract.

Program Name and Contact

Georgia's Tiered System of Supports for Students
Shaun Owen, Deputy Superintendent, Office of Federal Programs



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
 "Educating Georgia's Future"

Vendor

Southwest Georgia Learning Resources System (Southwest GLRS)

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/15/2021 – 10/14/2022	\$14,124	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	5

Contract Scope and Objective

Southwest GLRS will reimburse the State Schools Georgia Mobile Audiology Program for the travel costs incurred in providing audiological services for 73 children in the Southwest GLRS. These services include:

- Initial audiological assessments for children who are deaf and hard of hearing, including a full annual evaluation and all related testing, an audiological report, and recommendations for follow-up.
- Access to professional learning support for the teachers of the 73 students, which may be available only virtually.
- Meetings as needed with Southwest GLRS, but no less than three times a year, to discuss logistics and troubleshoot.
- Collaboration with any local audiologists, school staff, administration, and others as needed to ensure coordinated services for children.

Performance, Criteria, and Results

The Georgia Mobile Audiology director will ensure that services are provided in accordance with their policies, and Georgia Department of Education Accounts Receivable will monitor accuracy and timeliness of Southwest GLRS payment.

Contract Procurement Process

Non-bid process:**

- Sole Source justification
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
- Other (Please describe below.)

Bid process:**

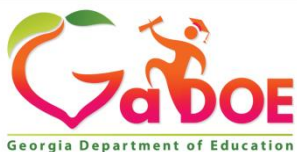
- Request for Quote (RFQ)

*** Board item can include only the section that is applicable to the contract.*

Program Name and Contact

State Schools

Dr. Kenney Moore, Director



\$50,000.01-\$250,000 Recurring Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

Coastal Plains RESA

Contract Details

Contract Term	Contract Amount	Funding Source	Renewal # or Number of Years
10/15/2020 – 10/14/2022	\$15,800	<input type="checkbox"/> State <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Other	1 of 4

Changes from Previous Year

None

Previous Year Performance, Criteria, and Results

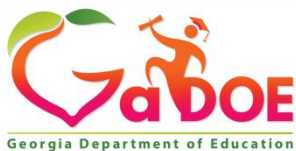
The vendor has faithfully reimbursed the Georgia Mobile Audiology program for all travel costs incurred in providing audiological services for students in the Coastal Plains RESA in accordance with the contract.

Current Year Performance, Criteria, and Results

The vendor has faithfully reimbursed the Georgia Mobile Audiology program for all travel costs incurred in providing audiological services for students in the Coastal Plains RESA in accordance with the contract.

Program Name and Contact

State Schools
Dr. Kenney Moore



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

Board of Regents of the University System of Georgia

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 6/30/2022	\$135,184	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	N/A

Contract Scope and Objective

To provide Georgia Transfer Articulation Cooperative Services (GATRACS) - an online college to high school course review, matching, and approval system to support students who participate in the Dual Enrollment (DE) Program.

Performance, Criteria, and Results

58,350 students from 183 different school districts used the DE program during the 2020-2021 school year. This represents an increase of 12.4% increase over the previous year. The number of students participating in the DE program for the past four years has increased at a rate of 7,557 students per year. Students took a total of 232,043 college courses. This represents 21,851 more courses than the number the DE students took in 2019-2020 or 10.4% increase.

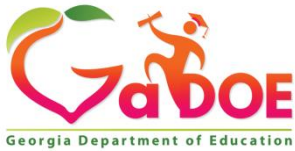
Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Choose an item.
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Office of Teaching and Learning, Division of Curriculum and Instruction
Caitlin McMunn Dooley, Ph.D., Deputy Superintendent, Office of Teaching and Learning



\$50,000.01-\$250,000 Recurring Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

GRE4T Grant - Georgia Association of Educational Leaders (GAEL)

Contract Details

Contract Term	Contract Amount	Funding Source	Renewal # or Number of Years
10/1/2021 – 7/31/2022	\$248,256.41	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	2/3

Contract Objective

To provide coaching for leaders and teachers to implement personalized learning to schools/districts.

Changes in Contract Amount from Previous Year

Previous year contract: \$126,125.01

This year contract amount: \$ 248,256.41

Difference: \$122,131.40

The number of schools working in implementing personalized learning increased from 5 to 55. The number of attendees to the convenings will increase from 80 to 240 participants and the number of convenings will increase from 2 to 3.

Previous Year Performance, Criteria, and Results

GAEL is a partner in Georgia's ReStart: Embrace, Engage, Expand, and Enhance Learning with Technology (GRE4T) initiative focused on building statewide human and organizational infrastructure for personalized learning. During the first year of the GRE4T initiative, GAEL completed the following contractual milestones

- Attended the leadership consortium sessions to leverage organizational strengths, promote a shared vision, shape collective efforts, and ensure an understanding of initiative goals.
- Supported three GRE4T Network Improvement Communities (NIC) convenings by leading the Principal's Learning Network at the convenings.
- Participated in the design of the GRE4T framework and its updates by sharing feedback collected during the NIC convenings. GAEL joined other GRE4T partners to analyze the data from the pilot schools to check quality and integrity of the GRE4T service framework, supports, coaching services, NIC structure and language, resources, and alignment to personalized learning standards.
- Completed the online project Monitoring and Reflection form.
- Attended professional development on personalized learning and how to calibrate and administrate the Readiness Assessment to acquire mastery knowledge of administering readiness assessment and coaching personalized learning through professional development.
- Supported the administration of the GRE4T Readiness Assessment at school/district level by presenting, modeling, and interpreting the GRE4T Readiness Assessment with the personalized learning school design teams.
- Acted as an instructional designer by modeling evidence-based personalized learning practices and strategies for leaders.
- Supported the implementation of personalized learning at school/district level by providing

professional coaching for leaders to support the process through planning, data mining, and small group work.

GAEL provided resources to school leaders and teachers and the data collected on the usefulness of these resources were part of GAEL deliverables. All services provided by GAEL met the expectation criteria. All pilot schools showed satisfaction with their services.

Current Year Performance, Criteria, and Results

GAEL will continue supporting schools/districts through the second year of the GRE4T initiative by:

- Leading the organization of the NIC convenings for the Principal's Network.
- Provide leadership coaching to school leaders participating in the GRE4T initiative.
- Build leadership personalized learning modules.
- Provide support and planning to build sustainability for personalized learning.
- Disaggregate and analyze data from all events led by all organizations.
- Participate and collaboratively reflect and strategize next steps as part of the overall evaluation process to promote transparency and collective unity efforts.
- Provide facility/location for three convenings.

Program Name and Contact

GRE4T Grant

Caitlin McMunn Dooley, Ph.D., Deputy Superintendent, Office of Teaching and Learning



\$50,000.01-\$250,000 Recurring Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

GRE4T Grant - Georgia Leadership Institute of School Improvement (GLISI)

Contract Details

Contract Term	Contract Amount	Funding Source	Renewal # or Number of Years
10/1/2021 – 7/31/2022	\$156,250	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	2/3

Contract Objective

To work with schools/districts in the designing of a customized plan of action for the implementation of personalized learning.

Changes in Contract Amount from Previous Year

Previous year contract: \$254,676.80

This year contract: \$156,250

Difference: - \$98,426.80

The reduction in the contract amount is a consequence of GLISI's work being heavily concentrated on building the infrastructure for personalized learning as described in the GRE4T grant scope of work. GLISI's work during the second year will focus on maintaining and making adjustments to the infrastructure that may be needed a result of the increase of districts/schools implementing personalized learning.

Previous Year Performance, Criteria, and Results

GLISI is a partner in Georgia's ReStart: Embrace, Engage, Expand, and Enhance Learning with Technology (GRE4T) initiative focused on building statewide human and organizational infrastructure for personalized learning. During the first year of the GRE4T initiative, the GLISI team performed the following contractual duties:

- Planned and facilitated leadership consortium meetings to leverage organizational strengths, promote a shared vision, shape collective efforts, and ensure an understanding of initiative goals.
- Led three GRE4T Network Improvement Communities (NIC) convenings by using mastery knowledge of improvement science, personalized learning, event logistics, and initiative expectations to design, customize, and deliver services for teachers and leaders.
- Led the design of the GRE4T framework and following updates.
- Joined other GRE4T partners for the Sense-Making session at the end of the pilot period. This session used pilot data from the 2020-21 school year to check quality and integrity of the GRE4T service framework, supports, coaching services, NIC structure, resources, and alignment to personalized learning standards.
- Led GRE4T evaluation planning by analyzing and synthesizing data from school services, meetings, and convenings.
- Completed online project Monitoring and Reflection form.
- Performed synchronization calls with the Georgia Department of Education (GaDOE) GRE4T staff to discuss action items, monitor progress, and support implementation of GRE4T initiatives.

- Participated in the calibration of the GRE4T Readiness Assessment tool.
- Provided professional coaching for teachers and leaders to implemented personalized learning at the school/district level through empathy mapping, design charrettes, and/or NIC touchpoint coaching supports.

GLISI data reports, planning agendas, meeting notes, and dashboard were presented as deliverables, and all services met the expectation criteria. GLISI provided resources directly to school leaders and teachers to ensure information about GRE4T was widely disseminated. Overall, the GRE4T pilot schools showed satisfaction with their services.

Current Year Performance, Criteria, and Results

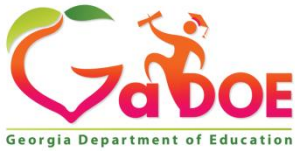
GLISI will continue to form part of the GRE4T initiative leadership consortium during the second year of the grant. GLISI activities will include:

- Provide NIC convening leadership by gathering intelligence about participant strengths, learning preferences, points of resistance and unique contextual challenges to inform responsive convening design in concert with GRE4T GaDOE team.
- Lead District Level Network support for district level personnel participating in the GRE4T Initiative.
- Collaborate with leaders to develop plans for implementation of personalized learning.
- Plan and organize conference logistics at the summer convenings at the Georgia Association of Educational Leaders (GAEL) conference.

Program Name and Contact

GRE4T Grant

Caitlin McMunn Dooley, Ph.D., Deputy Superintendent, Office of Teaching and Learning



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

American Association of Adapted Sports Programs, Inc. (AAASP)

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 6/30/2022	\$150,000	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

This contract will support students with disabilities by providing them with opportunities to participate in wheelchair sports. Funding for the AAASP has been appropriated by the Georgia General Assembly.

AAASP will assist Georgia schools in extending to students with physical disabilities the opportunity to achieve the same or similar benefits of athletic participation offered to their non-disabled peers through participation in wheelchair basketball, wheelchair team handball and wheelchair football.

Performance, Criteria, and Results

AAASP will:

- assist Georgia schools in extending to students with physical disabilities the opportunity to achieve the same or similar benefits of athletic participation offered to their non-disabled peers through participation in wheelchair basketball, wheelchair team handball and wheelchair football.
- organize, administrate and conduct an estimated 33 sanctioned regular season varsity and junior varsity competitions in the Fall Sport of Wheelchair Team Handball plus the Wheelchair Team Handball State Championship event.
- provide a final report that will include a summary of AAASP's activities, number of students served, and number of districts served.

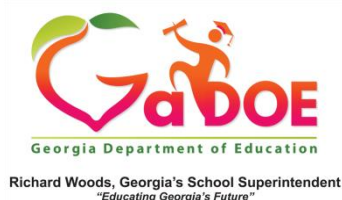
Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Nonprofit Providing Services
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Curriculum and Instruction - Health and Physical Education
Caitlin McMunn Dooley, Ph.D., Deputy Superintendent, Office of Teaching and Learning



\$50,000.01-\$250,000 New Contract

September 2021

Vendor

PW Educational Tools, LLC

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$249,000	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

SparkISCRAM is an educational tool that will provide the state, districts, schools, classrooms, teachers, students with access to Georgia Department of Education (GaDOE) curriculum content such as standards, curriculum maps, lessons, activities, etc in an engaging environment. The tool is customizable to meet the needs of state level users all the way down to a student user.

Performance, Criteria, and Results

Contract is monitored by the Associate Superintendent of Technology Services based on approved project plan containing milestones and deliverables. Performance is measured each time a project milestone listed in the statement of work is achieved. The Knowledge and Resource Manager will verify the items completions upon invoice submission.

Contract Procurement Process

Non-bid process:

- Sole Source justification

PW Educational Tools is the sole supplier that has the capabilities to perform this type of service in one package as well as integrate with active current GaDOE tools. PW Educational Tools has developed this unique product to help provide a space that offers the ability for state, district, school, and classroom students to locate standards and resources, to evaluate standards and resources, to access and personalize GaDOE created curriculum materials and activities, assign digital content, consume digital content, and receive instant feedback on learning activities in one integrated application.

- Intergovernmental contract
 Statewide contract
 Exempt (Please select from the list below)

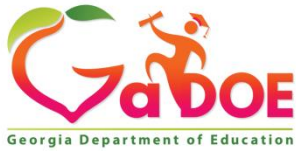
[Choose an item.](#)

- Other (Please describe below.)

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Program Name and Contact

Dr. Keith Osburn, Deputy Superintendent, Office of Technology Services



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 New Contract

September 2021

Vendor

Emory University

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	11/1/2021 – 6/30/2022	\$50,600	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

Emory University will provide technical assistance, content area expertise, and structured planning workshops to LEAs participating in the process of planning to establish a school-based health center.

Performance, Criteria, and Results

Up to four LEAs will be granted \$10,000 each to facilitate participation in the school-based health center planning and development process. Districts were selected through an application process that included

- evidence of need
- a strategic plan including clinic development and community collaboration
- data analysis
- letters of support from key partners.

Each LEA will submit periodic financial reports and progress reports. Emory University will be funded \$10,600 to provide technical assistance, content area expertise, and structured planning and training workshops to participating LEAs .

Contract Procurement Process

Non-bid process:

- Sole Source justification
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
- Other (Please describe below.)

Program Name and Contact

Office of Whole Child Supports
 Ashley Harris, Director of Whole Child Supports & Strategic Partnerships



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

Georgia Department of Early Care and Learning (DECAL)

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$200,000	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

To provide mental health awareness training to schools, districts, and RESAs.
Scope: This contract for services is between the Georgia Department of Education (GaDOE) and Georgia Department of Early Care and Learning (DECAL) for the provision of mental health awareness training to schools, districts, and RESAs in the state of Georgia through the RESA/GaDOE Mental Health Awareness Training (MHAT) Project.

Performance, Criteria, and Results

DECAL will provide trainings for schools, districts, and RESAs as approved and scheduled by the Office of Whole Child Supports (OWCS) staff and will include evaluations as part of each training delivered. OWCS staff will regularly review evaluation data and will process monthly invoices for trainings delivered.

Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Choose an item.
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Office of Whole Child Supports
Ashley Harris, Director of Whole Child Supports & Strategic Partnerships



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 New Contract

September 2021

Vendor

Department of Behavioral Health and Developmental Disabilities (DBHDD) Office of Behavioral Health and Prevention (OBHP)

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/15/2021 – 10/14/2022	\$247,500	<input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

Objective: To facilitate the implementation of Sources of Strength in schools where the community is identified as highly impacted by the opioid crisis, as defined by the Department of Behavioral Health and Developmental Disabilities (DBHDD) Office of Behavioral Health and Prevention (OBHP).

Scope: The Office of Whole Child Supports will assist DBHDD OBHP in the identification of schools, provision of training and support, and coordination of stipends for implementing schools.

Performance, Criteria, and Results

The Office of Whole Child Supports will provide monthly invoices to DBHDD for reimbursement of trainer payments, school stipends, and administrative costs. DBHDD will remit payment in a timely manner.

Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Choose an item.
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Office of Whole Child Supports
Ashley Harris, Director of Whole Child Supports & Strategic Partnerships



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 New Contract

August 2021

Vendor

Georgia State University School of Social Work Child Welfare Training Collaborative

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$250,000	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

Objective: To provide mental health awareness training to schools, districts, and RESAs.
Scope: This contract for services is between the Georgia Department of Education (GaDOE) and Georgia State University (GSU) School of Social Work Child Welfare Training Collaborative (CWTC) for the provision of mental health awareness training to schools, districts, and RESAs in the state of Georgia through the RESA/GaDOE Mental Health Awareness Training (MHAT) Project.

Performance, Criteria, and Results

CWTC will provide trainings for schools, districts, and RESAs as approved and scheduled by the Office of Whole Child Supports (OWCS) staff and will include evaluations as part of each training delivered. OWCS staff will regularly review evaluation data and will process monthly invoices for trainings delivered.

Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Choose an item.
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Office of Whole Child Supports
Ashley Harris, Director, Whole Child Supports & Strategic Partnerships



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

\$50,000.01-\$250,000 New Contract

September 2021

Vendor

National Alliance on Mental Illness (NAMI) Georgia Inc.

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$100,000	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

To provide mental health awareness training to schools, districts, and RESAs.
Scope: This contract for services is between the Georgia Department of Education (GaDOE) and NAMI (National Alliance on Mental Illness) Georgia Inc. for the provision of mental health awareness training to schools, districts, and RESAs in the state of Georgia through the RESA/GaDOE Mental Health Awareness Training (MHAT) Project.

Performance, Criteria, and Results

NAMI will provide trainings for schools, districts, and RESAs as approved and scheduled by the Office of Whole Child Supports (OWCS) staff and will include evaluations as part of each training delivered. OWCS staff will regularly review evaluation data and will process monthly invoices for trainings delivered.

Contract Procurement Process

Non-bid process:

- Sole Source justification
Provide sole source justification here.
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
Nonprofit Providing Services
- Other (Please describe below.)
Click here to enter text.

Program Name and Contact

Office of Whole Child Supports
Ashley Harris, Director of Whole Child Supports & Strategic Partnerships



\$50,000.01-\$250,000 New Contract

September 2021

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Vendor

National Mental Health Association of Georgia dba Mental Health America of Georgia

Contract Details

Contract Type	Contract Term	Contract Amount	Funding Source	Number of Possible Renewals
NEW	10/1/2021 – 9/30/2022	\$100,000	<input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Other	4

Contract Scope and Objective

Objective: To provide mental health awareness training to schools, districts, and RESAs.
 Scope: This contract for services is between the Georgia Department of Education (GaDOE) and National Mental Health Association of Georgia dba Mental Health America of Georgia (MHAG) for the provision of mental health awareness training to schools, districts, and RESAs in the state of Georgia through the RESA/GaDOE Mental Health Awareness Training (MHAT) Project.

Performance, Criteria, and Results

MHAG will provide trainings for schools, districts, and RESAs as approved and scheduled by the Office of Whole Child Supports (OWCS) staff and will include evaluations as part of each training delivered. OWCS staff will regularly review evaluation data and will process monthly invoices for trainings delivered.

Contract Procurement Process

Non-bid process:

- Sole Source justification
- Intergovernmental contract
- Statewide contract
- Exempt (Please select from the list below)
- Other (Please describe below.)

Program Name and Contact

Office of Whole Child Supports
 Ashley Harris, Director, Whole Child Supports & Strategic Partnerships

Code: IDB

160-4-2-.12 COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION PROGRAM PLAN.**(1) DEFINITIONS.**

(a) **Alcohol and other drug use education** – a planned program of instruction that provides information about the use, misuse and abuse of alcohol, tobacco, legal and illegal drugs.

(b) **Disease prevention education** – a planned program of instruction that provides information on how to prevent chronic and infectious diseases, including sexually transmitted diseases.

(c) **Psychomotor skills** – skills that use hands-on practice to support cognitive learning for cardiopulmonary resuscitation (CPR) and use of an automated external defibrillator (AED).

(d) **Sex education/AIDS education** – a planned program that shall include instruction relating to the handling of peer pressure, promotion of high self-esteem, local community values, and abstinence from sexual activity as an effective method of preventing acquired immune deficiency syndrome and the only sure method of preventing pregnancy and sexually transmitted diseases. This instruction shall emphasize abstinence from sexual activity until marriage and fidelity in marriage as important personal goals.

(e) **Fitness assessment program** – annual assessment measuring and reporting health related fitness in the areas of aerobic capacity, body composition, flexibility, muscular strength, and muscular endurance.

(2) REQUIREMENTS.

(a) The local board of education shall develop and implement an accurate, comprehensive health and physical education program that shall include information and concepts in the following areas.

1. Alcohol and other drug use
2. Disease prevention
3. Environmental health
4. Nutrition
5. Personal health

6. Sex education/AIDS education
7. Safety
8. Mental health
9. Growth and development
10. Consumer health
11. Community health
12. Health careers
13. Family living
14. Motor skills
15. Physical fitness
16. Lifetime sports
17. Outdoor education
18. Fitness assessment

(b) Each school containing any grade K-5 shall provide a minimum of 90 contact hours of instruction at each grade level K-5 in health and physical education.

(c) Each school containing any grade 6-12 shall make available instruction in health and physical education.

(d) Each school containing any grade K-12 shall provide alcohol, tobacco, vapor products, and other drug use education on an annual basis at each grade level.

(e) Each local board of education shall develop procedures to allow parents and legal guardians to exercise the option of excluding their child from sex education and AIDS prevention instructional programs.

1. Sex education and AIDS education shall be a part of a comprehensive health program.

2. Sex education shall also include annual age-appropriate sexual abuse and assault awareness and prevention education in kindergarten through grade 9.

3. Prior to the parent or legal guardian making a choice to allow his or her child or

ward to take the specified unit of instruction, he or she shall be told what instruction is to be provided and have the opportunity to review all instructional materials to be used, print and nonprint. Any parent or legal guardian of a child to whom a course of study in sex education is to be taught shall have the right to elect, in writing, that such child not receive such course of study.

(f) Each local board of education shall establish a committee to review periodically sex/AIDS education instructional materials and make recommendations concerning age/grade level use. Recommendations made by the committee shall be approved by the local board of education before implementation. The committee shall be composed primarily of nonteaching parents who have children enrolled in the local public schools and who represent the diversity of the student body augmented by others such as educators, health professionals and other community representatives. The committee shall also include a male and female student currently attending the 11th or 12th grade in the public schools.

(g) ~~Beginning in the 2011-2012 school year, e~~Each local school system shall conduct an annual fitness assessment program, as approved and funded by the State Board of Education, one time each school year for students in grades one through 12, to be conducted only during a physical education course that is taught by a certificated physical education teacher in which a student is enrolled. Such assessments shall include methods deemed by the State Board of Education as appropriate to ascertain levels of student physical fitness. Each local school system shall report the individual results of the fitness assessment to the parent or guardian of each student assessed and the aggregate results of the fitness assessments by school to the State Board of Education annually in a format approved and funded by the State Board of Education. The minimum required contents of the report shall be determined by the State Board of Education.

(h) ~~Beginning in the 2013-2014 school year, e~~Each local board of education which operates a school with grades nine through 12 shall provide instruction in cardiopulmonary resuscitation and the use of an automated external defibrillator to its students as a requirement within one of the required health or physical education courses (Health (17.011), Health and Personal Fitness (36.051), or Advanced Personal Fitness (36.061)) to satisfy this requirement. Such instruction shall incorporate the psychomotor skills necessary to perform cardiopulmonary resuscitation and to use an automated external defibrillator. Each local board of education shall report adherence to this requirement as determined by the Georgia Department of Education. The instructional program shall include either of the following:

1. An instructional program developed by the American Heart Association or the American Red Cross, or
2. An instructional program which is nationally recognized and is based on the most current national evidence based emergency cardiovascular care guidelines for

cardiopulmonary resuscitation and the use of an automated external defibrillator.

(i) Each local board of education which operates a school with grades 6 through 12 shall provide instruction in human trafficking awareness on an annual basis at each grade level.

Authority O.C.G.A. §§ 20-2-142(b), (c); 20-2-143; 20-2-149.1; 20-2-777.

Adopted: ~~August 23, 2018~~

Effective: ~~September 12, 2018~~

Code: IDB

160-4-2-.12 COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION PROGRAM PLAN.**(1) DEFINITIONS.**

(a) **Alcohol and other drug use education** – a planned program of instruction that provides information about the use, misuse and abuse of alcohol, tobacco, legal and illegal drugs.

(b) **Disease prevention education** – a planned program of instruction that provides information on how to prevent chronic and infectious diseases, including sexually transmitted diseases.

(c) **Psychomotor skills** – skills that use hands-on practice to support cognitive learning for cardiopulmonary resuscitation (CPR) and use of an automated external defibrillator (AED).

(d) **Sex education/AIDS education** – a planned program that shall include instruction relating to the handling of peer pressure, promotion of high self-esteem, local community values, and abstinence from sexual activity as an effective method of preventing acquired immune deficiency syndrome and the only sure method of preventing pregnancy and sexually transmitted diseases. This instruction shall emphasize abstinence from sexual activity until marriage and fidelity in marriage as important personal goals.

(e) **Fitness assessment program** – annual assessment measuring and reporting health related fitness in the areas of aerobic capacity, body composition, flexibility, muscular strength, and muscular endurance.

(2) REQUIREMENTS.

(a) The local board of education shall develop and implement an accurate, comprehensive health and physical education program that shall include information and concepts in the following areas.

1. Alcohol and other drug use
2. Disease prevention
3. Environmental health
4. Nutrition
5. Personal health

6. Sex education/AIDS education
7. Safety
8. Mental health
9. Growth and development
10. Consumer health
11. Community health
12. Health careers
13. Family living
14. Motor skills
15. Physical fitness
16. Lifetime sports
17. Outdoor education
18. Fitness assessment

(b) Each school containing any grade K-5 shall provide a minimum of 90 contact hours of instruction at each grade level K-5 in health and physical education.

(c) Each school containing any grade 6-12 shall make available instruction in health and physical education.

(d) Each school containing any grade K-12 shall provide alcohol, tobacco, vapor products, and other drug use education on an annual basis at each grade level.

(e) Each local board of education shall develop procedures to allow parents and legal guardians to exercise the option of excluding their child from sex education and AIDS prevention instructional programs.

1. Sex education and AIDS education shall be a part of a comprehensive health program.

2. Sex education shall also include annual age-appropriate sexual abuse and assault awareness and prevention education in kindergarten through grade 9.

3. Prior to the parent or legal guardian making a choice to allow his or her child or

ward to take the specified unit of instruction, he or she shall be told what instruction is to be provided and have the opportunity to review all instructional materials to be used, print and nonprint. Any parent or legal guardian of a child to whom a course of study in sex education is to be taught shall have the right to elect, in writing, that such child not receive such course of study.

(f) Each local board of education shall establish a committee to review periodically sex/AIDS education instructional materials and make recommendations concerning age/grade level use. Recommendations made by the committee shall be approved by the local board of education before implementation. The committee shall be composed primarily of nonteaching parents who have children enrolled in the local public schools and who represent the diversity of the student body augmented by others such as educators, health professionals and other community representatives. The committee shall also include a male and female student currently attending the 11th or 12th grade in the public schools.

(g) Each local school system shall conduct an annual fitness assessment program, as approved and funded by the State Board of Education, one time each school year for students in grades one through 12, to be conducted only during a physical education course that is taught by a certificated physical education teacher in which a student is enrolled. Such assessments shall include methods deemed by the State Board of Education as appropriate to ascertain levels of student physical fitness. Each local school system shall report the individual results of the fitness assessment to the parent or guardian of each student assessed and the aggregate results of the fitness assessments by school to the State Board of Education annually in a format approved and funded by the State Board of Education. The minimum required contents of the report shall be determined by the State Board of Education.

(h) Each local board of education which operates a school with grades nine through 12 shall provide instruction in cardiopulmonary resuscitation and the use of an automated external defibrillator to its students as a requirement within one of the required health or physical education courses (Health (17.011), Health and Personal Fitness (36.051), or Advanced Personal Fitness (36.061)) to satisfy this requirement. Such instruction shall incorporate the psychomotor skills necessary to perform cardiopulmonary resuscitation and to use an automated external defibrillator. Each local board of education shall report adherence to this requirement as determined by the Georgia Department of Education. The instructional program shall include either of the following:

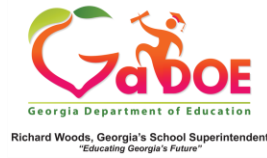
1. An instructional program developed by the American Heart Association or the American Red Cross, or
2. An instructional program which is nationally recognized and is based on the most current national evidence based emergency cardiovascular care guidelines for cardiopulmonary resuscitation and the use of an automated external defibrillator.

(i) Each local board of education which operates a school with grades 6 through 12 shall provide instruction in human trafficking awareness on an annual basis at each grade level.

Authority O.C.G.A. §§ 20-2-142(b), (c); 20-2-143; 20-2-149.1; 20-2-777.

Adopted:

Effective:



SYNOPSIS

Amend Rule

160-4-2-.12 COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION PROGRAM PLAN

State Board of Education Rule 160-4-2-.12 COMPREHENSIVE HEALTH AND PHYSICAL EDUCATION PROGRAM PLAN is being amended to include provisions to comply with House Bill 287, which was passed during the 2021 Legislative Session and subsequently signed into law by the Governor April 27, 2021. The bill includes a requirement to provide for annual age-appropriate vapor and tobacco product awareness and prevention education in grades K -12 and human trafficking awareness and prevention education in grades 6-12.

Code: JBC(4)

160-5-1-.15 AWARDING UNITS OF CREDIT AND ACCEPTANCE OF TRANSFER CREDIT AND/OR GRADES.

(1) DEFINITIONS.

(a) **Accredited School** – an elementary, middle, or secondary school accredited by or holding provisional status from one of the accrediting agencies identified in O.C.G.A. § 20-3-519(6)(A) the Georgia Accrediting Commission, the Georgia Association of Christian Schools, the Association of Christian Schools International, the Southern Association of Independent Schools and/or one of the accrediting agencies that is a member of the Georgia Private School Accreditation Council, and/or one of the regional accrediting agencies and their successors identified in O.C.G.A. § 20-3-519(6)(B). The term does not include entities that are accredited as home study programs or non-traditional educational centers.

(b) **End-of-Course (EOC) Assessment** - Assessments administered at the completion of core high school courses specified by the State Board of Education, in accordance with O.C.G.A. § 20-2-281(f), to measure student achievement in the four content areas of English/Language Arts, Mathematics, Science, and Social Studies.

(c) **Home Study Program** – an educational choice option conducted in Georgia in accordance with O.C.G.A. § 20-2-690(c) or conducted in another state in accordance with the laws applicable to that state.

(d) **Non-traditional Educational Center** – educational institutions that support home study programs or other independent learning initiatives. This term does not include alternative/non-traditional education programs operated by local boards of education.

(e) **Private School** – an educational choice option conducted in Georgia in accordance with O.C.G.A. § 20-2-690(b) or conducted in another state in accordance with the laws applicable to that state.

(f) **Subject Area Competency** - a unit of high school credit awarded to students based on subject area competency as demonstrated by a pre-defined score on state-adopted or approved assessment instruments, instead of or in combination with the completion of courses through traditional classroom instructional minutes as described in section (2)(f) of this rule.

(g) **Unit of Credit** – evidence of course completion as demonstrated by a final course grade of 70 or higher on a numerical scale; or competency-based course credit as demonstrated by a pre-defined score on state-adopted or approved assessment instruments.

(h) **Validation** – the process of verifying credits earned at another educational institution.

(2) **REQUIREMENTS.**

(a) **Applicability.**

(1) Local boards of education shall apply the requirements of this rule to all students regardless of the date in which they first entered ninth grade.

(b) **Awarding Units of Credit for Courses Taken in Georgia Public Schools**

1. Local boards of education shall award units of credit only for courses that include concepts and skills based on the state-adopted curriculum for grades 9-12 approved by the State Board of Education.

2. Local boards of education may award units of credit for courses offered in the middle grades that are based on the state-adopted curriculum for grades 9-12 approved by the State Board of Education.

3. Local boards of education shall not award units of credit for courses in which instruction is based on the state-adopted curriculum for grades K-8.

(c) **Awarding Units of Credit for Dual Enrollment Courses.**

1. Local boards of education shall award units of credit to students for high school courses taken through postsecondary institutions as described in the State Board of Education Rule 160-4-2-.34 DUAL ENROLLMENT – MOVE ON WHEN READY.

(d) **Awarding Units of Credit for Career, Technical and Agricultural Education (CTAE) courses with Embedded Academic Core Standards.**

1. Local boards of education shall award course credit for the CTAE course and course credit for the associated academic core course to students who successfully complete a course or course sequence in the CTAE program of study that includes embedded standards from an academic core subject area as adopted by the State Board of Education.

2. A student shall not earn more than three units of credit for academic core courses by completing CTAE courses that include embedded standards from an academic core subject area.

3. Units of credit earned through CTAE courses that contain embedded standards from an academic core subject area shall be awarded as outlined in the Georgia Department of Education’s *Guidance for Awarding Units of Credit*.

4. Local boards of education shall administer the appropriate End of Course (EOC) assessment to a student taking a CTAE course with embedded academic core courses of an area for which an EOC assessment has been adopted unless the student has already passed such EOC assessment.

(e) Awarding Units of Credit for Mathematics Courses for Students Receiving Special Education Services Under the Individuals with Disabilities Education Act (IDEA).

1. In addition to other provisions of this rule, local boards of education shall award units of credit for mathematics courses that will satisfy the mathematics course requirements in State Board of Education Rule 160-4-2-.48 to a student receiving special education services under IDEA if the student meets all of the following:

(i) Prior to the student entering the ninth grade, the student's Individualized Education Program (IEP) Team identified that the student had a disability that affected mathematics achievement.

(ii) The student successfully earns two units of credit, in accordance with this rule. The first unit of credit will be earned from one of the following: Mathematics I, GPS Algebra, CCGPS Coordinate Algebra, GSE Coordinate Algebra, or GSE Algebra I. The second unit of credit will be earned from one of the following: Mathematics II, GPS Geometry, CCGPS Analytic Geometry, GSE Analytic Geometry, or GSE Geometry.

(iii) The student successfully earns course credit, in accordance with this rule for at least two other state-approved mathematics courses, which may include, but are not limited to, Mathematics Support courses.

2. Local boards of education shall inform parents and students that students who do not complete Mathematics III, GPS Advanced Algebra, CCGPS Advanced Algebra, GSE Advanced Algebra, or GSE Algebra II may not meet the mathematics admission requirements for entry into a University System of Georgia institution or other post-secondary institution without additional coursework.

3. The IEP Team for students who receive Mathematics course credit in accordance with paragraph (2)(e) of this rule shall document that:

(i) The student's disability has precluded the student from achieving grade-level proficiency, as demonstrated by the student's pattern of performance on the state-mandated test in the area of Mathematics;

(ii) The student's progress to date in response to appropriate instruction, including special education and related services designed to address the student's individual needs, is such that, even if significant growth occurs, the IEP team is reasonably

certain that the student will not successfully master the standards in Mathematics III, GPS Advanced Algebra, CCGPS Advanced Algebra, GSE Advanced Algebra, or GSE Algebra II. Additionally, the determination of the student's progress has been based on multiple measurements that are valid for the content area of mathematics and that have been collected over a period of time; and

(iii) The student has access to instruction in the state-adopted curriculum. The student's IEP includes goals that are related to mathematics, support access to the content standards, and are designed to promote the student's progress in the content area state-adopted curriculum.

(f) Subject Area Competency to Receive Course Credit.

1. Local boards of education shall award a unit of credit to a student when:

(i) The student successfully completes courses of study based on the state-adopted curriculum. As provided in State Board of Education Rule 160-4-2-.13 Statewide Passing Score, the student must receive at least a course grade of 70 to be eligible to receive credit for a course; or

(ii) The student successfully demonstrates subject area competency through a pre-defined score on state-adopted or approved assessment instruments as outlined in the Georgia Department of Education's *Guidance for Awarding Units of Credit*. Students may earn no more than three units of credit by demonstrating subject area competency under this paragraph.

(g) Accepting Transfer Credit and Grades.

1. Local boards of education shall accept student course credit earned in an accredited school. The school shall have been accredited or holding provisional status at the time the credit was earned.

(i) Local boards of education shall not substitute courses and exempt students from the required secondary minimum core curriculum unless the student transferred from an accredited secondary school or the courses presented for credit shall meet criteria identified in paragraph (2)(b) of this rule and any applicable local policy.

2. Each local board of education shall adopt a policy for validating credit for courses taken at a nonaccredited schools, home study programs, and non-traditional educational centers. The policy shall include the following:

(i) Definitions consistent with this rule;

(ii) Procedures for determining whether transfer courses meet the state-adopted curriculum;

(iii) Procedures for placing transfer students in elementary and middle grades at the appropriate level and for granting units of credit for high school students;

(iv) Procedures for administering EOC assessment in accordance with the Georgia Department of Education's assessment guidelines and paragraph (2)(h) of this rule; and

(iv) At least one of the following:

(I) A probationary placement based on the student's records in prior school(s), home study programs or non-traditional educational centers and satisfactory performance of the student in a school under the authority of the local board of education for one or more grading periods; or

(II) Student performance on assessments administered by the local board of education. These assessments may be standardized or locally developed and should focus on group placement, subject area and grade level.

(h) End of Course (EOC) Assessment Administration to Transfer Students.

1. Local boards of education shall administer the EOC assessment to students enrolled in a Georgia public school while also enrolled in a private school, home study program, or non-traditional educational center for which they receive graduation credit for one of the required EOC assessment courses. These students must take the EOC assessment regardless of the private school, home study program, or non-traditional educational center's accreditation status.

2. Local boards of education shall not require students who enroll from accredited schools to take and pass the EOC assessment to receive credit for an EOC assessment course unless the student was concurrently enrolled in a Georgia public school while taking the course at an accredited private school.

3. Local boards of education shall require students who enroll from non-accredited private schools, home study programs, or other non-traditional educational centers to take and pass the EOC assessment with a minimum of 70 grade conversion score to receive credit for the course. A student enrolling from a non-accredited school will receive one test administration opportunity to demonstrate proficiency in order to earn credit for a course that requires the EOC assessment. If the student does not pass the EOC assessment on that administration, the local board of education shall not grant credit for that course. If the course is required to be eligible to receive a high school diploma, the student shall enroll in the course and take the EOC assessment at the completion of the course.

(i) Military Dependents.

160-1-5-.15

1. Notwithstanding any other portion of this rule, local boards of education shall utilize O.C.G.A. § 20-17-2 to award course credit for students who are dependents of military personnel as defined by that code section.

Authority O.C.G.A. § 20-2-159.3; 20-2-159.4; 20-2-159.5; 20-2-240; 20-2-281; 20-2-690; 20-3-519; 20-17-2.

Adopted: ~~September 22, 2016~~

Effective: ~~October 12, 2016~~

Code: JBC(4)

160-5-1-.15 AWARDING UNITS OF CREDIT AND ACCEPTANCE OF TRANSFER CREDIT AND/OR GRADES.**(1) DEFINITIONS.**

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(b) **End-of-Course (EOC) Assessment** - Assessments administered at the completion of core high school courses specified by the State Board of Education, in accordance with O.C.G.A. § 20-2-281(f), to measure student achievement in the four content areas of English/Language Arts, Mathematics, Science, and Social Studies.

(c) **Home Study Program** – an educational choice option conducted in Georgia in accordance with O.C.G.A. § 20-2-690(c) or conducted in another state in accordance with the laws applicable to that state.

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(f) **Subject Area Competency** - a unit of high school credit awarded to students based on subject area competency as demonstrated by a pre-defined score on state-adopted or approved assessment instruments, instead of or in combination with the completion of courses through traditional classroom instructional minutes as described in section (2)(f) of this rule.

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2. A student shall not earn more than three units of credit for academic core courses by completing CTAE courses that include embedded standards from an academic core subject area.

3. Units of credit earned through CTAE courses that contain embedded standards from an academic core subject area shall be awarded as outlined in the Georgia Department of Education's *Guidance for Awarding Units of Credit*.

4. Local boards of education shall administer the appropriate End of Course (EOC) assessment to a student taking a CTAE course with embedded academic core courses

of an area for which an EOC assessment has been adopted unless the student has already passed such EOC assessment.

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(ii) The student successfully earns two units of credit, in accordance with this rule. The first unit of credit will be earned from one of the following: Mathematics I, GPS Algebra, CCGPS Coordinate Algebra, GSE Coordinate Algebra, or GSE Algebra I. The second unit of credit will be earned from one of the following: Mathematics II, GPS Geometry, CCGPS Analytic Geometry, GSE Analytic Geometry, or GSE Geometry.

(iii) The student successfully earns course credit, in accordance with this rule for at least two other state-approved mathematics courses, which may include, but are not limited to, Mathematics Support courses.

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(ii) The student's progress to date in response to appropriate instruction, including special education and related services designed to address the student's individual needs, is such that, even if significant growth occurs, the IEP team is reasonably certain that the student will not successfully master the standards in Mathematics III, GPS Advanced Algebra, CCGPS Advanced Algebra, GSE Advanced Algebra, or GSE Algebra II. Additionally, the determination of the student's progress has been

based on multiple measurements that are valid for the content area of mathematics and that have been collected over a period of time; and

(iii) The student has access to instruction in the state-adopted curriculum. The student's IEP includes goals that are related to mathematics, support access to the content standards, and are designed to promote the student's progress in the content area state-adopted curriculum.

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(ii) The student successfully demonstrates subject area competency through a pre-defined score on state-adopted or approved assessment instruments as outlined in the Georgia Department of Education's *Guidance for Awarding Units of Credit*. Students may earn no more than three units of credit by demonstrating subject area competency under this paragraph.

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2. Each local board of education shall adopt a policy for validating credit for courses taken at a nonaccredited schools, home study programs, and non-traditional educational centers. The policy shall include the following:

(i) Definitions consistent with this rule;

(ii) Procedures for determining whether transfer courses meet the state-adopted curriculum;

(iii) Procedures for placing transfer students in elementary and middle grades at the appropriate level and for granting units of credit for high school students;

(iv) Procedures for administering EOC assessment in accordance with the Georgia Department of Education's assessment guidelines and paragraph (2)(h) of this rule; and

(iv) At least one of the following:

(I) A probationary placement based on the student's records in prior school(s), home study programs or non-traditional educational centers and satisfactory performance of the student in a school under the authority of the local board of education for one or more grading periods; or

(II) Student performance on assessments administered by the local board of education. These assessments may be standardized or locally developed and should focus on group placement, subject area and grade level.

(h) End of Course (EOC) Assessment Administration to Transfer Students.

1. Local boards of education shall administer the EOC assessment to students enrolled in a Georgia public school while also enrolled in a private school, home study program, or non-traditional educational center for which they receive graduation credit for one of the required EOC assessment courses. These students must take the EOC assessment regardless of the private school, home study program, or non-traditional educational center's accreditation status.

2. Local boards of education shall not require students who enroll from accredited schools to take and pass the EOC assessment to receive credit for an EOC assessment course unless the student was concurrently enrolled in a Georgia public school while taking the course at an accredited private school.

3. Local boards of education shall require students who enroll from non-accredited private schools, home study programs, or other non-traditional educational centers to take and pass the EOC assessment with a minimum of 70 grade conversion score to receive credit for the course. A student enrolling from a non-accredited school will receive one test administration opportunity to demonstrate proficiency in order to earn credit for a course that requires the EOC assessment. If the student does not pass the EOC assessment on that administration, the local board of education shall not grant credit for that course. If the course is required to be eligible to receive a high school diploma, the student shall enroll in the course and take the EOC assessment at the completion of the course.

(i) Military Dependents.

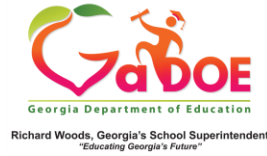
1. Notwithstanding any other portion of this rule, local boards of education shall utilize O.C.G.A. § 20-17-2 to award course credit for students who are dependents of military personnel as defined by that code section.

160-1-5-.15

Authority O.C.G.A. § 20-2-159.3; 20-2-159.4; 20-2-159.5; 20-2-240; 20-2-281; 20-2-690; 20-3-519; 20-17-2.

Adopted:

Effective:



Synopsis of Proposed Amendment to 160-5-1-.15 Awarding Units of Credit and Acceptance of Transfer Credit and/or Grades

House Bill 606 from the 2021 Legislative Session added the Georgia Independent School Association to the list of accrediting agencies in O.C.G.A. § 20-3-519(6)(A). Therefore, State Board of Education Rule 160-5-1-.15 *Awarding Units of Credit and Acceptance of Transfer Credit and/or Grades* is being amended to update the definition of “accredited school” to include all of the accrediting agencies identified in O.C.G.A. §§ 20-3-519(6)(A) and (6)(B).

Georgia Department of Education

Information Technology Career Cluster
Advanced Cybersecurity
Course Number: 11.48200

Course Description:

Advanced Cybersecurity is designed to provide students the advanced concepts and terminology of cybersecurity. The course explores the field of cybersecurity with updated content including new innovations in technology and methodologies. It builds on existing concepts introduced in Introduction to Cybersecurity and expands into malware threats, cryptography, organizational security, and wireless technologies.

Various forms of technologies will be used to expose students to resources, software, and applications of cybersecurity. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Advanced Cybersecurity is the third course in the Cybersecurity career pathway in the Information Technology Career Cluster. Students enrolled in this course should have successfully completed Introduction to Hardware Technology and Introduction to Cybersecurity.

Course Standard 1

IT-ACS-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback

Georgia Department of Education

				Getting Others to Listen
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Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism

International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-ACS-2

Explore concepts of cybersecurity related to legal and ethical decisions.

The following elements should be integrated throughout the content of this course.

- 2.1 Describe internal and external threats to a computer network, methods of avoiding attacks (including patching), and options in dealing with virus attacks.
- 2.2 Investigate potential abuse and unethical uses of computers and networks.
- 2.3 Explain the consequences of illegal, social, and unethical uses of information technologies (e.g., piracy; illegal downloading; licensing infringement; inappropriate uses of software, hardware, and mobile devices).
- 2.4 Differentiate between freeware, shareware, and public domain software copyrights. Determine which industries use open versus proprietary in operating systems.
- 2.5 Discuss computer crimes, terms of use, and legal issues such as copyright laws, fair use laws, and ethics pertaining to scanned and downloaded clip art images, photographs, documents, video, recorded sounds and music, trademarks, and other elements for use in Web publications.
- 2.6 Identify netiquette including the use of e-mail, social networking, blogs, texting, and chatting.
- 2.7 Explain proper netiquette, including the use of e-mail, social networking, blogs, texting, and chatting.
 - a. Discuss who legally owns content on free online services (Gmail, FaceBook, etc.) and the implications associated with relinquishing ownership of personal content.
- 2.8 Discuss the importance of cyber safety and the impact of cyber bullying.
- 2.9 Research and discuss legislation, such as GDPR, COPPA, FERPA, and others, that protects the rights and data of individuals online, including social media sites.

Course Standard 3

IT-ACS-3

Investigate concepts of malicious software threats.

- 3.1 Analyze and differentiate among types of malicious software, such as malware, ransomware, and others.
- 3.2 Identify malicious software code, including strings and SQL injection.
- 3.3 Demonstrate skill in handling malicious software. [NICE 153]
- 3.4 Demonstrate skill in preserving evidence integrity according to standard operating procedures or national standards. [NICE 217].

Course Standard 4

IT-ACS-4

Demonstrate how to analyze and react to various threats and vulnerabilities.

- 4.1 Analyze and differentiate among types of network attacks (e.g., virus, worms, trojans, unpatched software, password cracking, advanced persistent threats, etc.).
- 4.2 Distinguish between different social engineering attacks (e.g., baiting, phishing/spear phishing, pretexting/ blagging, tailgating, quid pro quo, etc.).

- 4.3 Distinguish between reconnaissance/footprinting, infiltration, network breach, network exploitation, and attack for effects (e.g., deceive, disrupt, degrade, and destroy).
- 4.4 Demonstrate an understanding of DoS/DDoS, session hijacking, HTTP spoofing, DNS attacks, switch attacks, man-in-the-middle (MITM) attacks, and cross site scripting, and drive-by-attacks.

Course Standard 5

IT-ACS-5

Apply advanced principles of cryptology.

- 5.1 Use and apply appropriate cryptographic tools and products.
- 5.2 Explain the core concepts of Public Key Infrastructure.
- 5.3 Demonstrate knowledge of network access, identity, and access management (e.g., public key infrastructure [PKI]) and implement PKI, certificate management, and associated components. [NICE 79].
- 5.4 Install and configure Pretty Good Privacy (PGP) and send/receive PGP encrypted email.
- 5.5 Install and view a digital certificate.
- 5.6 Understand and master process to enroll for digital certificates.
- 5.7 Renew, revoke, backup, and restore public and private key certificates.
- 5.8 Install and secure a Certificate Authority (CA).
- 5.9 Backup and restore a Certificate Authority (CA).

Course Standard 6

IT-ACS-6

Apply advanced communications and wireless security techniques.

- 6.1 Implement wireless networks in a secure manner.
- 6.2 Analyze and differentiate among types of wireless attacks.
- 6.3 Configure a wireless Access Point (WPA, WPA-2).
- 6.4 Demonstrate use of InSSIDer and Netstumbler on wireless communications.
- 6.5 Change the power level of a Wireless Local Area Network (WLAN) Access Point.
- 6.6 Demonstrate knowledge of Virtual Private Network (VPN) security and configure Virtual Private Network (VPN). [NICE 148]
- 6.7 Demonstrate knowledge of remote access policy Layer 2 Tunneling Protocol (L2TP) and Point-to-Point Tunneling Protocol (PPTP).

Course Standard 7

IT-ACS-7

Implement organizational security techniques.

- 7.1 Explain the impact and proper use of environmental controls, such as strong passwords, locked server closets, using secured networks, and more.
- 7.2 Explain the importance of security-related awareness and training.
- 7.3 Install environmental controls through Basic Input/Output System (BIOS).
- 7.4 Write organizational security policies (email, wireless, etc.).

Course Standard 8

IT-ACS-8

Implement contingency planning (incident response and disaster recovery) techniques.

- 8.1 Demonstrate knowledge of incident response and handling methodologies. [NICE 61]

- 8.2 Demonstrate knowledge of incident categories, incident responses, and timelines for responses and compare-and-contrast aspects of business continuity. [NICE 60]
- 8.3 Execute disaster recovery plans and procedures.
 - a. Explain how cloud backups in multiple locations helps mitigate disaster recovery.
- 8.4 Demonstrate the ability to capture volatile memory contents.
- 8.5 Perform imaging functions, such as operating system, network, and software configurations.
- 8.6 Restore a machine from a known good backup.

Course Standard 9

IT-ACS-9

Perform security analysis, as well as testing and evaluation.

- 9.1 Analyze and differentiate among types of mitigation and deterrent techniques.
- 9.2 Implement assessment tools and techniques to discover security threats and vulnerabilities.
- 9.3 Explain the proper use of penetration testing versus vulnerability scanning in the context of vulnerability assessments.
- 9.4 Demonstrate skill in conducting vulnerability scans and recognizing vulnerabilities in security systems (e.g., Nessus, Nmap, Retina). [NICE 3]
- 9.5 Conduct a security audit.
- 9.6 View and modify an Address Resolution Protocol (ARP) table and understand the business needs behind the tables.
- 9.7 Perform secure data destruction (e.g., Secure Erase, BCWipe).

Course Standard 10

IT-ACS-10

Implement risk management techniques for personal computer and network systems.

- 10.1 Explain risk-related concepts, such as using public unsecured wi-fi, purchasing online, transmitting person information online, and more.
- 10.2 Perform a risk assessment identifying the weak points of the average home router with a handful of connected devices throughout the house.
- 10.3 Identify mitigations for risks from risk assessment.
- 10.4 Conduct appropriate risk mitigation strategies.

Course Standard 11

IT-ACS-11

Demonstrate how to work with basic methods of network security.

- 11.1 Apply and implement secure network administration principles.
- 11.2 Demonstrate knowledge of how network services and protocols interact to provide network communications in order to securely implement and use common protocols. [NICE 50]
- 11.3 Identify commonly used default network ports.
- 11.4 Set up a Network Address Translation (NAT) device.
- 11.5 Spoof a Media Access Control (MAC) address.
- 11.6 Configure Virtual Private Network (VPN).
- 11.7 Configure a remote access policy Layer 2 Tunneling Protocol (L2TP) and Point-to-Point Tunneling Protocol (PPTP).

- 11.8 Demonstrate knowledge of network protocols (e.g., Transmission Control Protocol and Internet Protocol (TCP/IP), Dynamic Host Configuration Protocol (DHCP) and directory services (e.g., Domain Name System (DNS) by setting up common protocols, e.g., Secure Shell (SSH), netstat, Simple Mail Transfer Protocol (SMTP), nslookup, Telnet, DNS/Bind, FTP, IIS/Web Pages, DHCP/DNS server. [NICE 81]
- 11.9 Locate open ports by completing a port scan.
- 11.10 Demonstrate the knowledge and use of network statistics (netstat), a command purpose.

Course Standard 12

IT-ACS-12

Organize personal online career portfolio for specific career interests.

- 12.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 12.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 12.3 Update all current items in the portfolio.
- 12.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 12.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 12.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 13

IT-ACS-13

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 13.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 13.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 13.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 13.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 13.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Georgia Department of Education

Information Technology Career Cluster
Digital Design
Course Number: 11.45100

Course Description:

Using web design as the platform for product design and presentation, students will create and learn digital media applications using elements of text, graphics, animation, sound, video and digital imaging for various format. The digital media and interactive media projects developed and published showcase the student skills and ability. Emphasis will be placed on effective use of tools for interactive multimedia production including storyboarding, visual development, project management, digital citizenship, and web processes. Students will create and design web sites that incorporate digital media elements to enhance content of web site.

Various forms of technologies will be used to expose students to resources, software, and applications of media. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Digital Design is the second course in the Web and Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Software Technology.

Course Standard 1

IT-DD-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening

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	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship

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				Staying Motivated to Search
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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture

Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-DD-2

Organize personal online career portfolio for specific career interests.

- 2.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 2.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 2.3 Update all current items in the portfolio.
- 2.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 2.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 2.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 3

IT-DD-3

Research, explain, and summarize current state of the web, functions of the web, and future trends emerging on the web.

- 3.1 Compare and contrast web browsers use, function, and purpose for target audience.
- 3.2 Describe the impact of mobile technology on the web and in our daily lives.
- 3.3 Define Web 2.0 and describe how Web 2.0 technologies, browser plug-ins, and other web-based utilities can enhance the user's experience.
- 3.4 Describe the impact of web/internet technologies in daily life.

Course Standard 4

IT-DD-4

Identify logistical, ethical, and legal issues related to digital media and apply concepts to use of text, graphics, animation, sound, video, and digital images in digital products.

- 4.1 Research privacy, legal and ethical issues of digital media ensuring to meet the W3C standards and web accessibility requirements for completed digital products including but not limited to copyright, digital rights management, piracy, trademark, open source, plagiarism, fair use, permission, creative commons license, etc.
- 4.2 Discuss the legal and ethical implications of using social media.

Course Standard 5

IT-DD-5

Develop a plan to create, design, and market a web site with digital content to a specific target market.

- 5.1 Demonstrate an understanding of the phases of web site or digital product development.
 - a. Explain the agile, scrum, waterfall, and prototype models.
- 5.2 Identify concepts in usability for components of web site or digital product.
- 5.3 Construct a product development plan for a digital product to meet customer expectations.
- 5.4 Identify common marketing strategies for web sites for target market, including internet marketing and search engine optimization.
- 5.5 Demonstrate ability to format text using proper tags set by the W3C (strong, emphasize).
- 5.6 Demonstrate ability to use tables to control the layout and appearance of data.
- 5.7 Demonstrate ability to create forms that accepts user inputs.

Course Standard 6

IT-DD-6

Explore and write using the various writing styles used on web sites and in digital content to get the intended message across.

- 6.1 Compare and contrast chunking versus paragraph writing styles noting the benefits of using each style within a website or presentation.
- 6.2 Demonstrate ability to write using inverted pyramid style of writing.
- 6.3 Research and debate the type of writing style that reaches different target audiences.

Course Standard 7

IT-DD-7

Identify and develop model digital products that reveal a professional layout and look by applying design principles to produce professional quality digital products.

- 7.1 Describe and identify graphical elements and the appropriate use of elements on a web site.
- 7.2 Explore and apply color principles to digital products.
- 7.3 Critique work samples for professional quality in look and layout based on design principles.
- 7.4 Explain the difference between graphic elements used in print media and online media.
- 7.5 Apply the concept of how graphics and text help establish a brand or product identity and explain meaning in presentation of graphic. Upload to online career portfolio.
- 7.6 Analyze the look and layout of a website based on the first impression of content and page elements and describe.

Course Standard 8

IT-DD-8

Create and edit images and graphics.

- 8.1 Demonstrate appropriate image capturing techniques and sources.

- 8.2 Apply photographic composition techniques (e.g., rule of thirds, point-of-view, and framing) to taking pictures for use in media project.
- 8.3 Select proper and ethical image-capturing techniques (e.g., royalty-free images, fair-use guidelines).
- 8.4 Apply appropriate image and graphic editing techniques.
- 8.5 Use graphic-editing software to create and edit images for publications and presentations. Upload to online career portfolio.
- 8.6 Understand and apply image composition techniques (e.g., resolution, anti-aliasing, and lighting).
- 8.7 Apply appropriate use of photo editing techniques (e.g., cropping, red eye, layers).
- 8.8 Select appropriate file type and resolution size for digital product use, editing, and storage.
- 8.9 Compare and contrast raster and vector graphics and editing programs.
- 8.10 Use a raster edit program to create and edit digital images and graphics.
- 8.11 Edit digital images to fit digital products.
- 8.12 Create digital images to align to marketing strategy and target audience. Upload to online career portfolio.
- 8.13 Work within a vector editing program to create and edit digital images.
- 8.14 Use virtual reality software to create interactive images (e.g., 360° images, hot spots). Upload to online career portfolio.

Course Standard 9

IT-DD-9

Plan, produce, edit, and publish digital audio.

- 9.1 Describe the current uses for audio on the web.
- 9.2 Explore online/offline options available for creating and editing audio files.
- 9.3 Identify differences between the common audio file types and their proper uses.
- 9.4 Explain why conforming to copyright laws is important (cutting down to acceptable length).
- 9.5 Explore options available for converting file types for publication on web sites and presentations.
- 9.6 Demonstrate ability to appropriately include audio in digital product. Upload to online career portfolio.

Course Standard 10

IT-DD-10

Plan, edit, produce, and post a multimedia-rich video project.

- 10.1 Research and reveal how video can be used to enhance the message intended for an audience.
- 10.2 Explain importance and model use of storyboarding a video project.
- 10.3 Develop an equipment list in creating and making videos with novice users for a professional quality product.
- 10.4 Cite available software for creating videos ranging from free software to paid software, and online compared to downloaded software.
- 10.5 Model the use of avatars as digital video creation.
- 10.6 Demonstrate ability to edit videos including adding subtitles, special effects, and transitions.
- 10.7 Insert or embed a video on web site. Upload to online career portfolio.

Course Standard 11

IT-DD-11

Plan, produce, edit, and publish animations.

- 11.1 Describe the current uses of animation in multimedia and web sites.
- 11.2 Explore online, offline, and mobile tools available to create animations.
- 11.3 Create animations for use in web sites and multimedia productions, including GIFs, animated SVG design, and others. Upload to online career portfolio.

Course Standard 12

IT-DD-12

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 12.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 12.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 12.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 12.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 12.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Georgia Department of Education

Information Technology Career Cluster
Embedded Computing
Course Number: 11.42700

Course Description:

The demand for programming (software development) has gone well beyond desktop computers and the web, into a ubiquitous world of personal devices, smart cars, intelligent factories, and even more. These systems interact with us directly, as well as with each other. This course will focus on the interaction of programming and devices, using data from various sensors and sources in order to make decisions, take actions, and more. A common industry term to describe this work is Internet of Things. Students will show first-hand how programming and machines interact to accomplish common and essential tasks throughout our society.

Various forms of technologies will be used to expose students to resources and application of computer science. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Embedded Computing is the third course in the Internet of Things pathway. Students enrolled in this course should have successfully completed Introduction to Software Technology and Computer Science Principles. After mastery of the standards in this course, students should be prepared to earn an industry-recognized credential in this career area.

Course Standard 1

IT-EC-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear

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Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs

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Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional

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Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-EP-2

Explain Embedded Computing (EC) and the Internet of Things (IoT).

- 2.1 Define the basic terminology of EC/IoT.
- 2.2 Create a glossary of basic EC/IoT terminology.
- 2.3 Compare and contrast microprocessors and microcontrollers.
- 2.4 Research and report on popular microcontrollers and EC/IoT platforms (e.g., Arduino, Raspberry Pi).
- 2.5 Explore the implications of artificial intelligence as it relates to EC and IoT.

Course Standard 3

IT-EP-3

Demonstrate a working knowledge of basic networking protocols for industry, homes, and the internet including speed, power requirements, and popularity in industry and personal devices.

- 3.1 Compare and contrast Radio Frequency (RF) networking technologies, (e.g., Wi-Fi, Bluetooth, BLE, Zigbee, Z-Wave) including speed, power requirements, and popularity in industry and personal devices.
- 3.2 Explain advantages and disadvantages of wireless networking compared to wired networking.
- 3.3 Demonstrate a working knowledge of serial networking technologies used by microcontrollers (e.g., I2C, RS-232, RS-422, RS-485, SPI, master/slave).

Course Standard 4

IT-EP-4

Develop and investigate interfacing circuits.

- 4.1 Explain the difference between a source and a sink.
- 4.2 Identify the differences between analog and digital circuits.
- 4.3 Describe the function of a pull-up resistor.
- 4.4 Calculate the current draw of series and parallel circuits.
- 4.5 Build an operational LED circuit with a switch to turn it on/off, giving examples of why this is helpful in an IoT scenario.
- 4.6 Research and report the current and voltage I/O limitations of the embedded platform/microcontroller used in the class.

- 4.7 Discuss the characteristics of digital input and output ports on a microcontroller.
- 4.8 Demonstrate an understanding of signal conversion from analog to digital and digital to analog for sensors.

Course Standard 5

IT-EP-5

Classify and categorize multiple kinds of sensors.

- 5.1 Classify and explain examples of the following kinds of sensors: temperature, distance, light, sound, contact, pressure, position – GPS (Global Positioning System), encoders, potentiometer, gyro, and accelerometer.
- 5.2 Explain the basic functioning principles of the sensors above and their possible uses.

Course Standard 6

IT-EP-6

Manipulate, connect, and examine performance aspects of motors.

- 6.1 Demonstrate an understanding of stepper motors.
- 6.2 Demonstrate an understanding of servomotors.
- 6.3 Describe the operation of brushed motor controller.
- 6.4 Explain brushless motors and their advantages over older (brush) motors.
- 6.5 Demonstrate an understanding of pulse width modulation (PWM) control of motors.
- 6.6 Demonstrate programmatic control of a motor under variant conditions.

Course Standard 7

IT-EP-7

Investigate and draw connections within the context of programming as it relates to Embedded Computing/Internet of Things.

- 7.1 Explain the importance of code documentation in professional code design.
- 7.2 Identify and create EC/IoT applications with industry standard programming languages.
- 7.3 Analyze the process of software development for an embedded application.
- 7.4 Compare and contrast interpreted and compiled applications.
- 7.5 Define real-time programming and interrupt-driven programming.
- 7.6 Analyze and explain common data types for IoT and embedded applications including Integer, Floating Point, Byte, Boolean, Char, and Pointer types.
- 7.7 Design and diagram a finite state machine (automata) using real-world examples (e.g., Traffic signal, vending machines, assisted GPS on smartphones, various radio/connectivity states).

Course Standard 8

IT-EP-8

Interpret debugging techniques in hardware and software.

- 8.1 Gather, organize, and interpret data to identify simple bugs in EC/IoT applications.
- 8.2 Use proper debugging methods, including systematically changing, then checking, one variable or algorithm at a time. Demonstrate use of selective variable watching and daemon print statements for debugging use as well.
- 8.3 Evaluate use of breakpoints, interrupt, main loop, event driven, and race condition in EC/IoT applications.
- 8.4 Demonstrate understanding of why infinite loops are bad programming design.

- 8.5 Prove how to debug an actual program using a debugging tool and explain the reasons behind the steps taken.

Course Standard 9

IT-EP-9

Compare, contrast, and utilize Cloud Service features.

- 9.1 Define Security/Privacy concerns of EC/IoT applications.
- 9.2 Explore available cloud-based application program interfaces (APIs).
- 9.3 Develop an application that connects with one or more cloud-based services/storage solutions (e.g., Twitter, IFTTT [If This Then That], Dropbox, Google)

Course Standard 10

IT-EP-10

Design an embedded computing application that solves a current problem (e.g., robotics, art-Botics, visual and kinetic art).

- 10.1 Design, develop, and debug an embedded computing application interfacing to an external sensor, switch, LED, or other device.
- 10.2 Design, develop, and debug an external application on a PC or mobile device accessing data from a remote embedded computing device. Upload to online career portfolio.

Course Standard 11

IT-EP-11

Organize personal online career portfolio for specific career interests.

- 11.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 11.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 11.3 Update all current items in the portfolio.
- 11.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 11.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 11.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 12

IT-EP-12

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 12.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.

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- 12.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 12.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 12.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 12.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Draft

**Information Technology Career Cluster
Information Technology Essentials
Course Number: 11.41400**

Course Description:

Can you fix it? What is wrong with it? Students taking this course will develop a skill set to solve computer problems, perform preventive maintenance, and explain functions of purposes of computer elements. Existing in a world full of computer technology, students will gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software.

Various forms of technologies will be used to expose students to resources, software, and applications of computer repair. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Information Technology (IT) Essentials is the second course in the Information Support and Services pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Hardware Technology.

Course Standard 1

IT-ITE-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

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Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism

International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-ITE-2

Review and update personal online career portfolio.

- 2.1 Review and update résumé to reflect new knowledge and skills mastery and additional work experience.
- 2.2 Compose an additional cover letter seeking employment for a position representative of new skills, knowledge, and work experience.
- 2.3 Replace outdated transcripts to reflect current courses successfully completed.
- 2.4 Review and revise existing artifacts to bring them up to date with new skills mastered, as necessary.
- 2.5 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.

Course Standard 3

IT-ITE-3

Work safely with a variety of workplace technologies to solve problems and operate an efficient workplace.

- 3.1 Utilize multiple troubleshooting methods (remote and on-site) to identify problems, refine hypotheses, and repair computer systems.
- 3.2 Operate and maintain computer workstations in a computer repair lab.
- 3.3 Safely use diagnostic equipment in the computer repair lab.
- 3.4 Identify reference material appropriate to the computer industry that can serve as a resource for troubleshooting and using workplace technologies for productivity.
- 3.5 Apply appropriate troubleshooting techniques to identify hardware and software computer problems.
- 3.6 Research past, present, and future computer related technologies.
- 3.7 Utilize appropriate hardware and software troubleshooting tools to identify and isolate computer problems.
- 3.8 Understand appropriate record keeping for repair tracking and analysis of historical troubleshooting methodologies.
- 3.9 Develop a critical mindset towards lifecycle management of hardware, software, and associative tools.

Course Standard 4

IT-ITE-4

Identify the fundamental principles of personal computers by examining the hardware components and the interactions with component.

- 4.1 Identify the names, describe the purpose of and with other computer hardware components, explain the function, and summarize the characteristics of storage devices, motherboards, power supplies, processor/ tablets/ CPUs, memory, display devices, input devices, adapter cards, ports and cables, and cooling systems.

- 4.2 Describe the different peripherals currently available as well as the installation and configured process to operate them.

Course Standard 5

IT-ITE-5

Install, configure, optimize, and upgrade personal computer components.

- 5.1 Add, remove, and configure internal and external storage devices.
- 5.2 Recognize data integrity requirements for storage devices including both legal and historical record keeping purposes.
- 5.3 Describe how to preserve data from storage devices including long term storage and appropriate instances for reusing of storage media.
- 5.4 Drive preparation of internal storage devices including format/file systems and imaging technology.
- 5.5 Install display devices.
- 5.6 Add, remove, and configure basic input and multimedia devices.
- 5.7 Recognize and isolate issues with display, power, basic input devices, storage, memory, thermal, and POST errors (e.g., Basic Input/Output System (BIOS), hardware).
- 5.8 Apply basic troubleshooting techniques, remote and on-site, to check for problems (e.g., thermal issues, error codes, power connections including cables and/or pins, compatibility, functionality, software/drivers) with components.
- 5.9 Develop an understanding of remote support software and remote troubleshooting.

Course Standard 6

IT-ITE-6

Use tools, diagnostic procedures and troubleshooting techniques for personal computer (PC) and laptop components.

- 6.1 Recognize the basic aspects of troubleshooting theory.
- 6.2 Identify and apply basic diagnostic procedures and troubleshooting techniques.
- 6.3 Recognize and isolate issues with display, power, basic input devices, storage, memory, thermal, and POST errors (e.g., Basic Input/Output System (BIOS), hardware) to determine whether it is more advantageous to repair or replace.
- 6.4 Apply basic troubleshooting techniques to check for problems (e.g., thermal issues, error codes, power connections including cables and/or pins, compatibility, functionality, software/drivers) with components to determine whether it is more advantageous to repair or replace.
- 6.5 Recognize the names, purposes, characteristics, and appropriate application of tools.
- 6.6 Develop an understanding of troubleshooting tiers and be able to describe the differentiation between the levels of troubleshooting such as Help Desk and Deskside Technicians.
- 6.7 Use procedures and techniques to diagnose power conditions, video, keyboard, pointer, and wireless card issues.

Course Standard 7

IT-ITE-7

Perform preventive maintenance on personal computer components.

- 7.1 Apply basic aspects of preventive maintenance theory.

- 7.2 Apply common preventive maintenance techniques to computer components.
- 7.3 Develop an understanding of software preventative maintenance cycles such as operating system (OS) patching, application patching, and security system patching.

Course Standard 8

IT-ITE-8

Install, configure, optimize, and upgrade laptops and portable devices.

- 8.1 Identify names, purposes, and characteristics of laptop-specific hardware.
- 8.2 Distinguish between mobile and desktop motherboards and processors including throttling, power management, and Wi-Fi.
- 8.3 Configure power management and the cooling of portable devices.
- 8.4 Demonstrate safe removal of laptop-specific hardware such as peripherals, hot-swappable external devices, and internal components.

Course Standard 9

IT-ITE-9

Install, configure, and upgrade operating systems.

- 9.1 Explain the differences between operating systems (e.g. Mac, Windows, Linux) and describe operating system revision levels, including graphical user interface (GUI), system requirements, application, and hardware compatibility.
- 9.2 Identify names, purposes, and characteristics of the primary operating system components including registry, virtual memory, and file system.
- 9.3 Describe features of operating system interfaces.
- 9.4 Identify the names, locations, purposes, and characteristics of operating system files.
- 9.5 Identify concepts and procedures for creating, viewing, managing disks, directories, and files in operating systems.
- 9.6 State the functions of an operating system.
- 9.7 Apply procedures for upgrading and installing operating systems by installing and adding devices including loading device drivers and required software.

Course Standard 10

IT-ITE-10

Identify tools, diagnostic procedures, and troubleshooting techniques for operating systems.

- 10.1 State and apply basic boot sequences, methods, and utilities for recovering operating systems.
- 10.2 Apply diagnostic procedures and troubleshooting techniques.
- 10.3 Resolve common operational issues such as blue screen, system lock-up, and Windows-specific printing problems (e.g., print spool stalled, incorrect/incompatible driver for print).
- 10.4 Explain common error messages and codes.
- 10.5 Identify the names, locations, purposes, and characteristics of operating system utilities.
- 10.6 Explain and identify ways to research online trouble shooting techniques.
- 10.7 Perform preventive maintenance for operating systems using utilities for performing preventive maintenance on operating systems: for example, software and Windows updates (e.g., service packs), scheduled backups/restore, and restore points.

Course Standard 11

IT-ITE-11

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 11.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 11.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 11.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 11.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 11.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

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Information Technology Career Cluster
Game Design: Animation and Simulation
Course Number: 11.42900

Course Description:

Students completing this course will gain an understanding of the fundamental principles used at every stage of the game creation process. First, game genres and modes of play are explored in terms of the psychology of incentives, motivation to play, and social networking. Next, virtual characters and non-player characters are reviewed from concept drawing to 2D and 3D art, rigging, and animation. Finally, level design, storytelling, and animation are added to develop a virtual world around the characters. These same techniques are at work in training simulator systems, virtual shopping experiences, augmented reality, and many other important career options. Schools offering this program can provide a foundation of traditional drawing, illustration, and art courses to make way for the 2D and 3D animation, storytelling, character development, audio, and game technology.

Various forms of technologies will be used to expose students to resources and application of computer science. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Students taking this program are strongly encouraged to add an internship to their curriculum which will give them real world experience, understanding how the computer game industry works. Game Design: Animation and Simulation is the third course in the Game Design pathway. Students enrolled in this course should have successfully completed Introduction to Software Technology and Computer Science Principles. After mastery of the standards in this course, students should be prepared to earn an industry-recognized credential in this career area.

Course Standard 1

IT-GDAS-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers

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Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites

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Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-GDAS-2

Demonstrate conceptual understanding of the game design process.

- 2.1 Research the evolution of game design and game play, focusing on how emerging technologies have impacted the game industry.
- 2.2 Identify the primary steps in the design process (e.g., conceptualize, prototype, test, analyze).
- 2.3 Evaluate basic gameplay from an existing game.
- 2.4 Compare and contrast the narratives in gameplay and explain how and when the storyline could pertain to game design.
- 2.5 Evaluate and describe various 2D & 3D, single & multi-player genre in games.
- 2.6 Plan and lay out the steps needed to execute a team project, from skills to dependencies and parallelization of tasks.
- 2.7 Compare and contrast game creation tools including scripting languages, extensibility, 2D/3D support and others.

Course Standard 3

IT-GDAS-3

Apply complex and abstract thinking to programming and scripting.

- 3.1 Introduce script binding, components, and prefabricated objects to projects.
- 3.2 Determine appropriate programming and scripting languages to create desired game mechanics, control the environment, user interface (UI), and gameplay.
- 3.3 Demonstrate an understanding of conditional programming statements.
- 3.4 Demonstrate an understanding of object states including states for game, player, item, and other objects in the game universe.
- 3.5 Demonstrate an understanding of iteration programming structures (looping) to manage repeating events.
- 3.6 Retarget motion data and animation setups between character rigs.
- 3.7 Import and use Motion Capture (Mocap) data to drive character animation.
- 3.8 Demonstrate an understanding of Object-Oriented Programming.
- 3.9 Demonstrate an understanding of how to use a mathematical algorithm in a game.

Course Standard 4

IT-GDAS-4

Analyze and synthesize the relationship of mathematics to game design.

- 4.1 Use algebraic, geometric, and trigonometric relationships to define game object characteristics and properties as well as Heads-Up Display (HUD) interface placement and scaling.
- 4.2 Demonstrate functions of linear algebra and vector mathematics (dot product, cross product, quaternions, etc.) to determine character perspective and field of view.
- 4.3 Explain how quaternion calculations are used in video game development.
- 4.4 Apply mathematical concepts to interactive application and video game design.
- 4.5 Explain the use of collision geometry and “hit testing” for physics-based interactions and programming triggers.

Course Standard 5

IT-GDAS-5

Construct two-dimensional models using concepts of physics.

- 5.1 Explore the phenomena and apply Newtonian physics to static & dynamic systems for animation.
- 5.2 Explore mass, velocity, acceleration, torque, force, and other related measurements.
- 5.3 Use physics to create realistic motion of objects and characters (gravity, angular momentum, momentum, friction).
- 5.4 Apply the use of colliders and rigged bodies (kinesthetics).
- 5.5 Demonstrate a working knowledge of two-dimensional digital bitmap art tools.
- 5.6 Demonstrate a working knowledge of two-dimensional digital vector art tools.

Course Standard 6

IT-GDAS-6

Develop three-dimensional models, backgrounds, and scenes.

- 6.1 Create 3D Models with appropriate highlights and shading. Upload to online career portfolio.
- 6.2 Determine the effect of various camera angles and emphasize perspective.
- 6.3 Demonstrate a working knowledge of 3D modeling & animation tools.

Course Standard 7

IT-GDAS-7

Analyze 2D/3D character animation and character controls.

- 7.1 Create character states, and transition between states when a specified event occurs. Upload to online career portfolio.
- 7.2 Manipulate state-based animations and transitions.
- 7.3 Define volumes and entrance/exit events.
- 7.4 Create fire particle events, audio events, and object state events (e.g., inventory levels, timers).
- 7.5 Construct a 2D and 3D maze game and maneuver through it in first and third person.

Course Standard 8

IT-GDAS-8

Explain how to create an Augmented Reality experience.

- 8.1 Understand geo-location, geo-fencing principles, and location event models.
- 8.2 Understand and implement environmental events such as camera inputs, lighting, accelerometers, and audio inputs.
- 8.3 Create a map and navigation for UI (user interface) with transparent overlays superimposed on real world sensors. Upload to online career portfolio. Upload to online career portfolio.
- 8.4 Define how to create an Augmented Reality experience.
- 8.5 Create an asset to use in your Augmented Reality experience (e.g., 3D Model, Animation).

Course Standard 9

IT-GDAS-9

Design an augmented reality experience into a location-based game.

- 9.1 Use the assets created in Standard 8 and incorporate into a location-based game. Upload to online career portfolio.

Course Standard 10

IT-GDAS-10

Design and develop a game in software development teams.

- 10.1 Create a working game development plan with a team to determine game requirements.
- 10.2 Develop a comprehensive fully planned game to include building, versioning, debugging, and optimization. Upload to online career portfolio.
- 10.3 Create a hypothetical technology pipeline for an interactive application or video game project.

Course Standard 11

IT-GDAS-11

Deploy a student-team created game for beta testing.

- 11.1 Coordinate and produce a game that contains lighting and sound.
- 11.2 Demonstrate a working knowledge of video capture, editing, and post-processing tools.
- 11.3 Apply the correct graphic file formats and file interoperability.
- 11.4 Apply video file formats and file interoperability.
- 11.5 Apply audio file formats and file interoperability.
- 11.6 Use interactive and real-time editing within the game.
- 11.7 Deploy the game to a mobile device for testing and peer review.

Course Standard 12

IT-GDAS-12

Organize personal online career portfolio for specific career interests.

- 12.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 12.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 12.3 Update all current items in the portfolio.

- 12.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 12.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 12.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 13

IT-GDAS-13

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 13.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 13.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 13.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 13.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 13.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Georgia Department of Education

Information Technology Career Cluster
Information Technology Support
Course Number: 11.42000

Course Description:

How do you make the device work? Students will apply Information Technology Essentials skills to diagnose and correct computer problems. By building knowledge and skill, students will install, build, upgrade, repair, configure, troubleshoot, and perform preventative maintenance on computer hardware, operating systems, laptops, and portable devices. Practical and hands-on experience of troubleshooting and maintenance will allow students to demonstrate mastery of skills.

Various forms of technologies will be used to expose students to resources, software, and applications of computer repair. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Information Technology Support is the third course in the Information Support and Services pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Hardware Technology and Information Technology Essentials. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Course Standard 1

IT-ITS-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback

Georgia Department of Education

			Getting Others to Listen
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Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism

International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-ITS-2

Apply knowledge and skills to install, configure, optimize, and upgrade printers and scanners.

- 2.1 Identify tools and diagnostic procedures to troubleshoot printers and scanners.
- 2.2 Install and configure printers/scanners to local machine and network.
- 2.3 Gather information about printer/scanner problems and research solution options.
- 2.4 Apply identified solutions to printer/scanner problems.
- 2.5 Isolate and resolve an identified printer/scanner problem including defining the cause, applying the fix, and verifying functionality.
- 2.6 Identify appropriate tools used for troubleshooting and repairing printer/scanner problems.

Course Standard 3

IT-ITS-3

Apply knowledge and skills of network devices to install and configure network devices.

- 3.1 Install and configure physical and wireless network cards.
- 3.2 Install, identify, and obtain wired and wireless connection.
- 3.3 Identify the fundamental principles of networks.
- 3.4 Describe basic networking concepts.
- 3.5 Identify names, purposes and characteristics of the common network cables, network connectors, and for establishing connectivity.
- 3.6 Establish network connectivity.
- 3.7 Demonstrate the ability to share network resources.
- 3.8 Identify tools, diagnostic procedures and troubleshooting techniques for network devices.

Course Standard 4

IT-ITS-4

Identify the fundamentals and principles of security.

- 4.1 Identify names, purposes, and characteristics of hardware and software, wireless security, and data and physical security.
- 4.2 Describe the importance and process of incident reporting.
- 4.3 Recognize and respond appropriately to social engineering situations.
- 4.4 Identify the purposes and characteristics of access control.
- 4.5 Identify the purposes and characteristics of auditing and event logging.

Course Standard 5

IT-ITS-5

Apply knowledge and skills to install, configure, upgrade, and optimize security.

- 5.1 Install, configure, upgrade, and optimize hardware, software, and data security.

- 5.2 Install antivirus and malware software.
- 5.3 Identify tool, diagnostic procedures and troubleshooting techniques for security.
- 5.4 Diagnose and troubleshoot hardware, software, and data security issues.
- 5.5 Diagnose and troubleshoot software and data security issues.
- 5.6 Perform preventative maintenance for computer security.
- 5.7 Implement software security preventative maintenance techniques, such as installing service packs and patches and training users about malicious software prevention technologies.

Course Standard 6

IT-ITS-6

Describe the aspects and importance of safety and environmental issues with computer support and services.

- 6.1 Identify potential safety hazards and take preventive action to maintain a safe and environmentally clean work environment.
- 6.2 Use appropriate repair tools.
- 6.3 Describe methods to handle environmental and human (e.g., electrical, chemical, physical) accidents including incident reporting.
- 6.4 Identify potential hazards and implement proper safety procedures, including precautions and procedures, safe work environment, and equipment handling.

Course Standard 7

IT-ITS-7

Perform maintenance procedures on laptops and portable devices.

- 7.1 Complete maintenance procedures on laptops and portable devices.
- 7.2 Identify appropriate applications for laptop-specific communication connections such as Bluetooth, infrared, cellular WAN and Ethernet.
- 7.3 Identify tools, basic diagnostic procedures, and troubleshooting techniques for laptops and portable devices.
- 7.4 Perform preventative maintenance on laptops and portable devices.
- 7.5 Demonstrate how to restore laptop and portable device to proper function mode.

Course Standard 8

IT-ITS-8

Use job-related professional behavior in language, interaction and communication including notation of privacy, confidentiality, and respect for the customer property.

- 8.1 Demonstrate professional behavior towards customers in language, personal interaction (in person, phone, video conference), and communication methods.
- 8.2 Research privacy laws and legal actions for accessing, sharing, and reporting customer data.
- 8.3 Establish a professional policy for handling privacy, confidentiality, and customer data.
- 8.4 Model professional behavior towards customer's property when completing work.
- 8.5 Display good communication skills and professionalism while working with customers.
- 8.6 Clarify customer statements by asking pertinent questions related to expected job performance using language customer can understand.

Course Standard 9

IT-ITS-9

Organize personal online career portfolio for specific career interests.

- 9.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 9.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 9.3 Update all current items in the portfolio.
- 9.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 9.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 9.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 10

IT-ITS-10

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 10.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 10.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 10.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 10.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 10.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Georgia Department of Education

Information Technology Career Cluster
Introduction to Cybersecurity
Course Number: 11.48100

Course Description:

Introduction to Cybersecurity is designed to provide students the basic concepts and terminology of cybersecurity. The course examines how the concept of security integrates into the importance of user involvement, security training, ethics, trust, application of cybersecurity practices and devices, and best practices management. The fundamental skills cover internal and external threats to network security and design, how to enforce network level security policies, how to protect an organization's information, and a broad range of other topics.

Various forms of technologies will be used to expose students to resources, software, and applications of cybersecurity. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Introduction to Cybersecurity is the second course in the Cybersecurity career pathway of the Information Technology Career Cluster and primarily focuses on the National Cybersecurity Workforce Framework category Protect and Defend and the Computer Network Defense work roles. Students enrolled in this course should have successfully completed Introduction to Hardware Technology.

Course Standard 1

IT-ICS-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude

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	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies

Georgia Department of Education

	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude

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Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-ICS-2

Review and update personal online career portfolio.

- 2.1 Review and update résumé to reflect new knowledge and skills mastery and additional work experience.
- 2.2 Compose an additional cover letter seeking employment for a position representative of new skills, knowledge, and work experience.
- 2.3 Replace outdated transcripts to reflect current courses successfully completed.
- 2.4 Review and revise existing artifacts to bring them up to date with new skills mastered, as necessary.
- 2.5 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.

Course Standard 3

IT-ICS-3

Demonstrate an understanding of cybersecurity concepts and research.

- 3.1 Explain the importance of data security and data classification (confidential, sensitive, etc.).
- 3.2 Explain the concepts of confidentiality, integrity, availability, authentication, and non-repudiation. [NICE 63]
- 3.3 Research current events on breaches; focus on particular Information Assurance (IA) areas that were compromised. [NICE 165]
- 3.4 Explain the importance of physical security.

Course Standard 4

IT-ICS-4

Identify the fundamental principles of networking (wired and wireless), local area networks (elements, perimeter networks, IP addressing, access methods and topologies), client-server and peer-to-peer networking models, and wide area networks.

- 4.1 Define and identify the different types of LANs.
- 4.2 Identify and describe the purpose for a perimeter network.
- 4.3 Identify the different network topologies to include client/server and peer-to-peer distributed networks.
- 4.4 Define and describe Ethernet standards.
- 4.5 Identify wireless devices, wireless settings and configurations, wireless standards, and encryption protocols.

- 4.6 Explain the differences between static and dynamic routing.
- 4.7 Explain how to install and configure Routing and Remote Access Service (RRAS) to function as a network router and how to install the Routing Information Protocol.
- 4.8 Explain the basics about various other wide area networking technologies.
- 4.9 Explain different personal and small business Internet connectivity types.

Course Standard 5

IT-ICS-5

Identify the fundamental principles of the Open Systems Interconnection Model, Internet Protocol IPv4 and IPv6, and common networking services to include Name Resolution Techniques.

- 5.1 Explain the Open Systems Interconnection (OSI) model by defining each of the layers and their functions.
- 5.2 Explain the differences and operation of layer 2 and layer 3 switches.
- 5.3 Differentiate between the OSI model and the TCP model.
- 5.4 Demonstrate how to categorize IPv4 addresses using the Class A, B, and C classifications.
- 5.5 Identify the default gateway and Domain Name System (DNS) server and explain how to configure within a network adapter's Transmission Control Protocol/Internet Protocol (TCP/IP) properties dialog box.
- 5.6 Demonstrate how to define advanced TCP/IP concepts, such as Network Address Translation (NAT) and sub-nets, and how to create a sub-netted network.
- 5.7 Demonstrate the basics of IPv6 and how to configure IPv6 in the command line and define dual stack and tunneling technologies.
- 5.8 Implement Dynamic Host Configuration Protocol (DHCP) to assign IP addresses to client computers demonstrating an understanding of the four-step process known as DORA (discover, offer, request, acknowledgment).
- 5.9 Implement Terminal Services so that client computers can connect remotely to a server and take control of it in the Graphical User Interface (GUI).
- 5.10 Implement Network Policy Service (NPS) as a LAN router and define IPsec and the various types of protocols, including Security Associations (SA), Authentication Header (AH), and Encapsulating Security Payload (ESP).
- 5.11 Explain the function of Domain Name System (DNS) and Windows Internet Name Service (WINS) and explain how to install in Windows Server 2008, as well as how to create forward-lookup zones.

Course Standard 6

IT-ICS-6

Demonstrate how to work with the basic and advanced command prompts.

- 6.1 Manipulate and explain the command prompt as an administrator.
- 6.2 Demonstrate basic TCP/IP commands such as ipconfig and ping to analyze and test a network.
- 6.3 Demonstrate more advanced commands such as netstat, nbtstat, tracert, pathping, route, and netsh to fully examine a computer and configure it in the command line.
- 6.4 Manipulate the Net command in an effort to find out more information about a system, start and stop services, and work with the network configuration.

Course Standard 7

IT-ICS-7

Explore and research network infrastructures and network security.

- 7.1 Differentiate between the Internet, Intranets, and Extranets.
- 7.2 Demonstrate how to set up a virtual private network (VPN).
- 7.3 Explain firewalls and how to initiate port scans on them to see whether they are locked down and what it means if they are.
- 7.4 Explain other perimeter devices and zones, such as proxy servers, internet content filters, Network Intrusion Detection Systems (NIDS), Network Intrusion Prevention Systems (NIPS), and Demilitarized Zones (DMZ).

Course Standard 8

IT-ICS-8

Demonstrate how to work with fundamental components of cybersecurity.

- 8.1 Explain the security function and purpose of network devices and technologies (e.g., Intrusion Detection System (IDS) tools and applications and IDS hardware and software, including open-source tools, and their capabilities. [NICE 3, 59 and 146].
- 8.2 Distinguish and differentiate between network design elements and compounds.
- 8.3 Securely install cabling.
- 8.4 Configure firewalls.
- 8.5 Configure secure network connections (in Windows or Linux).
- 8.6 Justify the use of basic Windows or Linux commands to configure communications (e.g., ipconfig/ifconfig).
- 8.7 Design a basic secure network topology demonstrating knowledge of intrusion detection methodologies and techniques for detecting host- and network-based intrusions via intrusion detection technologies. [NICE 66]

Course Standard 9

IT-ICS-9

Demonstrate how to employ host system and application security.

- 9.1 Compare and contrast common operating systems, e.g., Windows, Linux, OS X.
- 9.2 Compare and contrast common file systems.
 - a. Demonstrate how to protect them by locking them down with a File Integrity Monitor, such as Carbon Black.
- 9.3 Explain the importance of application security.
- 9.4 Demonstrate knowledge of system and application security threats and vulnerabilities (e.g., buffer overflow, mobile code, cross-site scripting, Procedural Language/Structured Query Language [PL/SQL] and injections, race conditions, covert channel, replay, return-oriented attacks, malicious code). [NICE 105]
- 9.5 Install, configure, and maintain (patch) anti-virus software.
- 9.6 Perform command line exercises specific to operating systems.
- 9.7 Demonstrate knowledge of what constitutes a network attack and the relationship to both threats and vulnerabilities and how to differentiate between types of application attacks. [NICE 150]
- 9.8 Justify the need and implement Active X and Java Security.
- 9.9 Discuss protection from buffer overflow attacks.
- 9.10 Recognize, mitigate, and prevent input validation attacks and scripting attacks.
- 9.11 Justify the need for and implement secure cookies.

Course Standard 10

IT-ICS-10

Demonstrate how to implement proper security administration.

- 10.1 Implement appropriate procedures to establish host security.
- 10.2 Secure operating systems (OS), user profiles, and computer permissions.
 - a. Explain the differences between system purposes, such as production system, QA system, development system and others.
- 10.3 Secure firewalls and Web browsers.
- 10.4 Establish a secure baseline for host OS.
- 10.5 Analyze security using Microsoft Baseline Security Analyzer (MBSA).
- 10.6 Demonstrate knowledge of data backup, types of backups (e.g., full, incremental), and recovery concepts and tools such as Microsoft (MS) Backup/Restore. [NICE 29]
- 10.7 Methodically examine and conduct a security audit to review system performance and settings in Windows and Linux.
- 10.8 Demonstrate the ability to select and set both file and folder permissions in Windows and Linux.
- 10.9 Set up shared documents and folders.
- 10.10 View and edit Windows services (disable services).
- 10.11 Secure DNS/BIND, web, email, messaging, FTP servers.

Course Standard 11

IT-ICS-11

Demonstrate how to monitor proper access controls and identity management.

- 11.1 Demonstrate knowledge of host/network access controls (e.g., access control list) to include the function and purpose of authentication services. [NICE 49]
- 11.2 Explain the fundamental concepts and best practices related to authentication, authorization, and access control.
- 11.3 Implement appropriate security controls when performing account management.
- 11.4 Review authentication using Passfaces.com.
- 11.5 Manage user accounts, including basic to advanced protocol procedures.

Course Standard 12

IT-ICS-12

Research and explore basic principles of cryptology.

- 12.1 Summarize general cryptography concepts (symmetric encryption, asymmetric encryption). [NICE 27]
- 12.2 Demonstrate basic cipher systems (e.g., Caesar cipher, Vigenere cipher).
- 12.3 Demonstrate file hashing.
- 12.4 Demonstrate knowledge of current applications of steganography to include concealed identification, authentication, and communications.

Course Standard 13

IT-ICS-13

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

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- 13.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 13.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 13.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 13.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 13.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Draft

Information Technology Career Cluster Introduction to Hardware Technology Course Number 11.****

Course Description: Introduction to Hardware Technology is the foundational course for Information Support & Services, Networking, and Cybersecurity pathways. This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal lives, society, and the business world. Exposure to foundational knowledge in hardware, IT support, networks, and cybersecurity are all taught in a computer lab with hands-on activities and project-focused tasks. Students will not only understand the concepts but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course.

Various forms of technologies will be used to expose students to resources, software, and applications of technology maintenance and repair. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Introduction to Hardware Technology is the first course in the Networking, Cybersecurity, and Information Support and Services pathways and is appropriate for all high school students. The prerequisite for this course is advisor approval.

Course Standard 1

IT-IHT-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening

	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship

				Staying Motivated to Search
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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture

Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-IHT-2

Establish a personal online career portfolio and begin uploading relevant artifacts.

- 2.1 Compare a variety of secure online repositories and select the best one for specific career goals, such as Github for education, Dropbox, Jimdo, Uxfol.io, Portfoliobox and many others.
- 2.2 Establish an account for long-term use to upload professional artifacts over the course of the career pathway.
- 2.3 Upload a professional, true, and accurate résumé and cover letter seeking employment for a position representative of current skills and knowledge.
- 2.4 Upload additional standard job search items, such as digital badges and certificates earned for industry-recognized credentials.
- 2.5 Identify and upload industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 2.6 Organize the portfolio in a manner that makes documents and artifacts easy to locate and access for review.

Course Standard 3

IT-IHT-3

Explore, research, and present findings on positions and career paths in technology and the impact of technology on chosen career area.

- 3.1 Develop technical reading and writing skills to follow instructions.
- 3.2 Work in a team to solve problems and share knowledge.
- 3.3 Use collaborative tools to communicate with team members, such as online meeting platforms, group messaging, and shared online documents and files.
- 3.4 Explore the impact of emerging technologies on careers, including non-traditional technology fields and careers in each of the Georgia Career Clusters.
- 3.5 Research specific IT careers, including post-secondary continuing education options, IT credentials, required job skills, potential salaries in Georgia, and work environment. Upload to online career portfolio.
- 3.6 Explore careers in IT focused on customer relationships.

Course Standard 4

IT-IHT-4

Demonstrate effective professional communication skills (oral, written, and digital) and practices that enable positive relationships with all audiences of a business.

- 4.1 Differentiate between the different audiences of a business, including users, clients, customers, contractors, vendors, and others.
- 4.2 Recognize the importance of each audience to a business.
 - a. Identify organizations' products and services.

- b. Explain the impact of Information Technology (IT) to a business and how it affects the bottom line.
 - c. Communicate how technology can be used to create solutions to business challenges and present to stakeholders in professional business format.
 - d. Demonstrate an ability to provide “value-add” partnership between IT and business.
- 4.3 Demonstrate ability to assist all audiences in a professional manner.
- a. Actively listen to your audience.
 - b. Determine the individual needs of the audience.
 - c. Project a professional business image (e.g., appearance, voice, grammar, word usage, enunciation, nonverbal communication).
 - d. Interact with customers and colleagues in a professional manner (e.g., prompt, friendly, courteous, respectful, helpful, knowledgeable, and understandable).
 - e. Ensure that your assistance promotes the best interests of the company.
- 4.4 Determine the best method to maintain a customer list and communication platform.
- 4.5 Demonstrate understanding of word processing, spreadsheet, presentation, and database software as a communication tool for business.
- 4.6 Develop a working IT vocabulary.

Course Standard 5

IT-IHT-5

Identify, evaluate, select, and use appropriate technology.

- 5.1 Identify hardware device functions, including peripheral devices, input devices, and portable hardware appropriate for specific tasks and emerging hardware as it impacts the workplace and society.
- 5.2 Demonstrate understanding of how to set up a basic computer workstation, including various computer types, internal components, connectors, monitors, keyboards, mice, printers, computer voltage, and power requirements.
- 5.3 Describe trends in emerging, evolving, and future computer technologies and their influence on IT practices, such as mobile technology, computing tablets, and cloud computing.
- 5.4 Recognize online risks and dangers in order to take appropriate actions to protect the business and self while using digital tools and resources.
- 5.5 Demonstrate ability to access, navigate and use online resources and technologies.
- 5.6 Define and demonstrate folder and file management and the importance of data back-up procedures.
- 5.7 Explore hardware devices outside of the traditional PC/laptop scenario such as wearables, IoT devices, smart devices, and the role that these devices are filling in the connected world.

Course Standard 6

IT-IHT-6

Explore and explain the basics of Customer Relationship Management (CRM).

- 6.1 Describe trends in emerging, evolving, and future CRM Systems and their influence on IT practices.
- 6.2 Define and demonstrate the basics and importance of asset management.
- 6.3 Understand the different roles of the IT Helpdesk and the requirements of each.
- 6.4 Demonstrate satisfactory customer service skills in a CRM-based environment.

Course Standard 7

IT-IHT-7

Explore and explain the basic components of computer networks.

- 7.1 Demonstrate understanding of the OSI model and how it relates to network communications.
- 7.2 Describe common network features, such as routing, switching, network security devices, basic topologies, and networking standards.
- 7.3 Illustrate and describe the functions of various types of networks, including wireless.
- 7.4 Explain key issues in data transmission.
- 7.5 Identify factors which affect the range and speed of wireless service.
- 7.6 Explore networking trends and issues affecting business and personal use.

Course Standard 8

IT-IHT-8

Use computational thinking procedures to analyze, troubleshoot, and solve problems.

- 8.1 Apply strategies for identifying routine hardware and software problems current to everyday life.
- 8.2 Identify compatibility issues and describe operational problems caused by hardware errors.
- 8.3 Explain how technology can be used to solve problems.
- 8.4 Explore commonly used documentation tools for design specifications, such as flowcharts and visual and textual storyboards.
- 8.5 Define and demonstrate understanding of Knowledge-Based articles (KB) and the impact of research-based troubleshooting.
- 8.6 Demonstrate an understanding of Computational Problem Solving as a part of Computational Thinking.

Course Standard 9

IT-IHT-9

Describe, analyze, develop, and follow policies for managing ethical and legal issues in the business world and in a technology-based society.

- 9.1 Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors.
- 9.2 Recognize the ethical and legal issues while accessing, creating, and using digital tools and resources in order to make informed decisions.
- 9.3 Exercise digital citizenship as a lifelong learner.
 - a. Promote and model digital etiquette and responsible social technology interactions, permanence of digital footprints, online image and presence, etc.
- 9.4 Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- 9.5 Demonstrate an understanding of technology-related problems such as Internet addiction, mobile phone addiction, and always-connected devices.
- 9.6 Describe personal and legal consequences of inappropriate use of resources and online content.
 - a. Plagiarism, piracy, illegal downloading, copy-right infringement, licensing infringement, inappropriate use of software, hardware, and mobile devices.
- 9.7 Identify security issues and trends affecting computers and information privacy.
 - a. Virus, open or free networks, user control methods, file sharing, etc.
- 9.8 Describe the use of computer forensics to prevent and solve information technology crimes and security breaches.

- 9.9 Identify criminal activity in relationship to cybercrime, the Internet, and Internet trafficking.
 - a. Common internet crimes, techniques to identify criminal activity and prevention actions related to cybercrime.
- 9.10 Understand newly emerging technologies like AI and Deepfakes and their impact on ethical and legal issues in business.
- 9.11 Understand and apply ethical behavior when working with intellectual property.
- 9.12 Understand fundamental ethical frameworks such as IT Compliance and laws and precedents from industry affect how IT operates. Differentiate between national, state, local, and industry ethical standards and how they affect the role of IT in an organization.

Course Standard 10

IT-IHT-10

Use tools, diagnostic procedures and troubleshooting techniques for personal computer components.

- 10.1 Recognize and apply the basic aspects of troubleshooting theory, such as power and cable connections, compatibility, and other basic issues.
- 10.2 Recognize the names, purposes, characteristics, and appropriate application of tools used in computer repair.
- 10.3 Identify and apply basic diagnostic procedures and troubleshooting techniques.

Course Standard 11

IT-IHT-11

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 11.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 11.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 11.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 11.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 11.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

**Information Technology Career Cluster
Networking Fundamentals
Course Number: 11.46100**

Course Description:

How do computers communicate? How are you connected? Start with a building block of knowledge of networks, local area networks, IP Addresses, subnetting, and data routes from a LAN to a WAN. This course is designed to provide students with the background necessary to understand the local area networking information on workstations and networking. Students will learn the processes involved in designing, implementing, upgrading, managing, and otherwise working with networks and network technologies.

Various forms of technologies will be used to expose students to resources, software, and applications of networking. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Networking Fundamentals is the second course in the Networking pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Hardware Technology.

Course Standard 1

IT-NF-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback

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				Getting Others to Listen
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Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism

International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-NF-2

Review and update personal online career portfolio.

- 2.1 Review and update résumé to reflect new knowledge and skills mastery and additional work experience.
- 2.2 Compose an additional cover letter seeking employment for a position representative of new skills, knowledge, and work experience.
- 2.3 Replace outdated transcripts to reflect current courses successfully completed.
- 2.4 Review and revise existing artifacts to bring them up to date with new skills mastered, as necessary.
- 2.5 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.

Course Standard 3

IT-NF-3

Identify the fundamental principles of networking, local area networks, network topologies and access methods, Ethernet architecture, and the client-server and peer-to-peer networking models.

- 3.1 Define a local area network (LAN), including LAN elements, design, perimeter networks, and IP addressing.
- 3.2 Identify the different types of LANs.
- 3.3 Identify what a perimeter network is and explain its purpose.
- 3.4 Identify the different network topologies, such as star, mesh, and ring.
- 3.5 Identify and explain different protocols, such as TCP, UDP, layers, HTML, FTP, websocket, and others.
- 3.6 Define Ethernet standards.
- 3.7 Identify the differences between client/server and peer-to-peer distributed networks.

Course Standard 4

IT-NF-4

Identify the layers of the OSI (Open Systems Interconnection) Model and define the communications sub-network.

- 4.1 Explain the OSI model by defining each of the layers.
- 4.2 Explain the separate the functions of the lower levels of the OSI, or the communications sub-network, from the upper levels where message creation begins.
- 4.3 Explain the differences between layer 2 and layer 3 switches, and to gain a basic understanding of how they operate.
- 4.4 Differentiate between the OSI model and the TCP model.

Course Standard 5

IT-NF-5

Identify wired networks, media types and wireless networks.

- 5.1 Identify twisted-pair cable, cabling tools, and testers.

- 5.2 Identify what can interfere with twisted-pair cabling and how to avoid it.
- 5.3 Identify some of the basics about fiber optic cabling and some of the standards associated with fiber optic cabling.
- 5.4 Identify wireless devices, wireless settings and configurations, wireless standards, and encryption protocols.

Course Standard 6

IT-NF-6

Explore Internet Protocol IPv4 and IPv6 and emerging protocols in industry.

- 6.1 Demonstrate how to categorize IPv4 addresses using classifications such as Class A, B, and C.
- 6.2 Identify the default gateway and DNS server and how to configure them within a network adapter's TCP/IP properties dialog box.
- 6.3 Demonstrate how to define advanced TCP/IP concepts, such as NAT and sub-netting, and how to create a sub-netted network.
- 6.4 Demonstrate how to define CIDR.
- 6.5 Demonstrate the basics of IPv6 and how to configure IPv6 in the command line.
- 6.6 Define IPv6 dual stack and tunneling technologies.

Course Standard 7

IT-NF-7

Demonstrate how to work with the basic and advanced command prompts.

- 7.1 Work with the command prompt as an administrator and in an efficient manner.
- 7.2 Demonstrate basic TCP/IP commands such as ipconfig and ping to analyze and test a network.
- 7.3 Demonstrate more advanced commands such as netstat, nbtstat, tracert, pathping, route, and netsh to fully examine a computer and configure it in the command line.
- 7.4 Work with the Net command in an effort to find out more information about a system, start and stop services, and work with the network configuration.

Course Standard 8

IT-NF-8

Demonstrate how to set up common networking services and define Name Resolution Techniques.

- 8.1 Install and configure DHCP to hand out IP addresses to client computers.
- 8.2 Explain the four-step DHCP process known as DORA.
- 8.3 Install and configure Terminal Services so that client computers can connect remotely to a server and take control of it in the GUI.
- 8.4 Install and configure Network Policy Service (NPS) as a LAN router.
- 8.5 Define IPsec and the various types, including SA, AH, and ESP.
- 8.6 Explain how DNS and WINS function and how to install them in Windows Server 2008, as well as how to create forward lookup zones.

Course Standard 9

IT-NF-9

Explore the concepts of Wide Area Networks, describe routing, and define common WAN technologies and connections.

- 9.1 Explain the differences between static and dynamic routing.

- 9.2 Describe how to install and configure RRAS to function as a network router and how to install the Routing Information Protocol.
- 9.3 Explain the basics about various wide area networking technologies.
- 9.4 Explain the basics of software-defined networking.
- 9.5 Explain different personal and small business Internet connectivity types.

Course Standard 10

IT-NF-10

Explore network infrastructures and network security.

- 10.1 Differentiate between the Internet, intranets, and extranets.
- 10.2 Demonstrate how to set up a virtual private network.
- 10.3 Explain firewalls and how to initiate port scans on them to see whether they are locked down.
- 10.4 Explain other perimeter devices and zones, such as proxy servers, internet content filters, NIDS, NIPS, and the DMZ.

Course Standard 11

IT-NF-11

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 11.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 11.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 11.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 11.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 11.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

**Information Technology Career Cluster
Networking Systems and Support
Course Number: 11.46200**

Course Description:

Wireless? Wired? How do you communicate? Now that students know the fundamental basics, they can apply their skills to connect to the network. Students will apply a variety of fundamental skills utilized in entry-level computer network systems administration positions. Exposure to various aspects of network hardware and software maintenance and monitoring, configuring and supporting a local area network (LAN) and a wide area network (WAN), Internet systems and segments of network systems will allow students to develop a strong knowledge base for networking systems and support. Students will be involved in designing, implementing, upgrading, managing, and working with networks and network technologies.

Various forms of technologies will be used to expose students to resources, software, and applications of networking. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Networking Systems & Support is the third course in the Networking pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Hardware Technology and Networking Fundamentals course. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Course Standard 1

IT-NSS-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling		Giving and Receiving	Asking Questions

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	Unsolicited Calls		Feedback	
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship

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				Staying Motivated to Search
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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture

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Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-NSS-2

Identify the fundamental principles of networking demonstrating installation, configuration, optimization, upgrades of networking, and accurate recordkeeping.

- 2.1 Identify tools used in network installation and configuration.
- 2.2 Use diagnostic procedures and troubleshooting techniques in solving network problems perform preventive maintenance on networks.
- 2.3 Describe the different types of common network cables and connectors by defining each as relating to speed and connection technology for the purpose of establishing connectivity.
- 2.4 Install and configure network cards for wired and wireless connection.
- 2.5 Demonstrate and explain the importance of accurate recordkeeping of installations, trouble tickets, upgrades, and other tasks.

Course Standard 3

IT-NSS-3

Explore local-area network (LAN), metropolitan area network (MAN), wide-area network (WAN), and wireless local-area network (WLAN) trends and issues including the basics of telecommunications and use in the interconnection of networks.

- 3.1 Explain the characteristics and differences between LAN, MAN, WAN, and WLAN.
- 3.2 Compare and contrast a peer-to-peer network with a client/server network.
- 3.3 Explain the common networking protocols.
- 3.4 Explain the how data is packaged and transmitted using protocols.
- 3.5 Explain the purpose of general network devices such as a hub, repeater, switch, and router.
- 3.6 Compare and Contrast the similarities and differences between each layer of the OSI Model and the TCP/IP Model when data is transmitted.

Course Standard 4

IT-NSS-4

Demonstrate knowledge of LAN physical media and knowledge of network connectivity basics.

- 4.1 List the characteristics of the IEEE 802.3 (Ethernet), 802.5 (token ring), 802.3 (fiber-optic), and 802.11 (wireless) standards.
- 4.2 Analyze each standard and determine which would be used in certain business network environments.
- 4.3 Explain the difference between different network media – Copper Core, Fiber-Optic, and Wireless.
- 4.4 Describe the major differences between an analog and digital signal.
- 4.5 Explain Broadband, Baseband, and telecommunication services during data transmission.
- 4.6 Define simplex, half-duplex, and full-duplex communication.
- 4.7 Configure a wireless network card and record all configuration properties.

Course Standard 5

IT-NSS-5

Understand through explanation and demonstration of the two standard computer network communication protocols (OSI Layer and TCP/IP) and its importance to standards-based networks.

- 5.1 Compare and contrast the similarities and differences between each layer of the OSI model and the TCP/IP model when data is transmitted.
- 5.2 Explain difference between IPv4 and IPv6 network addresses.
- 5.3 Explain the network address translation process.
- 5.4 Explain public and private addressing.
- 5.5 Describe the characteristics of each protocol and its purpose in OSI Layer and the TCP/IP protocol stack.
- 5.6 Describe how UDP, TCP, and IP relate to the OSI model.
- 5.7 Interpret TCP/IP troubleshooting utilities.
- 5.8 Compare the IPX/SPX protocol suite to the OSI model.
- 5.9 Compare the Apple Talk protocol suite to the OSI model.

Course Standard 6

IT-NSS-6

Demonstrate the concept of sub-netting and the importance to standards-based networks.

- 6.1 Demonstrate how to access TCP/IP properties for all major operating systems.
- 6.2 Understand how to identify the different class of networks of an IPv4 IP address.
- 6.3 Demonstrate conversion methods of binary, decimal, and hexadecimal.
- 6.4 Calculate VLSM (Various Length Subnet Masks) needed for network administration.
- 6.5 Explain the purpose, advantages and disadvantages of sub-netting and super-netting.
- 6.6 Understand the characteristics and purpose of a Virtual LAN (VLAN).

Course Standard 7

IT-NSS-7

Identify the fundamental principles of network security systems for optimal network operation and administration.

- 7.1 Identify common network ports used for security breaches and vulnerabilities.
- 7.2 Compare and contrast symmetrical and asymmetrical encryption.
- 7.3 Explain the importance of user authentication (passwords) and certificate authority.
- 7.4 Demonstrate security processes associated with Challenge Handshake Access Protocol (CHAP).
- 7.5 Describe how firewall and proxy servers are used to secure network access.
- 7.6 Explain various monitoring protocol tools to secure network traffic.
- 7.7 Understand router security issues.

Course Standard 8

IT-NSS-8

Troubleshoot network problems and functions.

- 8.1 Identify ways to research online and locate troubleshooting techniques.
- 8.2 Explain industry certified troubleshooting strategies (CompTia, Cisco, etc.).
- 8.3 Perform Network Address Translation configuration and troubleshooting.
- 8.4 Explain network documentation.
- 8.5 Describe how event logs are used to assist with troubleshooting network issues.

- 8.6 Explain troubleshooting methodologies and tools.
- 8.7 Perform network troubleshooting by layer.

Course Standard 9

IT-NSS-9

Create a network using design standards, analysis, and section for networks.

- 9.1 Describe the factors to be considered when designing or modifying a network.
- 9.2 Describe methods used for naming conventions.
- 9.3 Explain the various stages of network design.
- 9.4 Identify and explain terminology used by standards to identify network cable connection locations.
- 9.5 Describe the various facilities used in a telecommunications infrastructure.

Course Standard 10

IT-NSS-10

Explain computer network operation and management procedures including network maintenance and diagnostic testing.

- 10.1 Explain why and how a baseline is established.
- 10.2 Describe the commonly accepted practices for protecting data.
- 10.3 Describe the use of fault tolerance and different data backup strategies.
- 10.4 Explain proper procedures for installing patches, upgrades, and service packs.
- 10.5 List commonly accepted antivirus procedures and policies.

Course Standard 11

IT-NSS-11

Apply network applications and knowledge of network operating systems by installing basic system architectures using current windows operating system software and perform network administration.

- 11.1 Explain the Windows authentication process.
- 11.2 Explain the Active Directory authentication process.
- 11.3 Explain the ways to obtain interoperability between clients and servers in networks with different network operating systems.
- 11.4 Compare and contrast the different file systems (FAT16, FAT32, and NTFS).
- 11.5 Demonstrate knowledge of network applications and architecture protocols.

Course Standard 12

IT-NSS-12

Organize personal online career portfolio for specific career interests.

- 12.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 12.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 12.3 Update all current items in the portfolio.
- 12.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 12.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.

12.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 13

IT-NSS-13

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 13.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 13.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 13.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 13.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 13.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

**Information Technology Career Cluster
Programming, Games, Apps, and Society
Course Number: 11.47200**

Course Description:

Are you ready to design and develop? The course is designed for high school students to strategize, design, and develop games and mobile and desktop applications that can be produced in the real world. Students will learn about life cycles of project development and use models to develop applications. Attention will be placed on how user interfaces affect the usability and effectiveness of a game or an application. Programming constructs will be employed which will allow students' applications to interact with "real world," stimuli. The course exposes students to privacy, legality, and security considerations with regards to the software industry.

Various forms of technologies will be used to expose students to resources, software, and applications of programming. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Programming, Games, Apps and Society is the third course in the Programming pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Software Technology and Computer Science Principles. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Course Standard 1

IT-PGAS-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening

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	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship

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				Staying Motivated to Search
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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture

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Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-PGAS-2

Describe various software application life cycle models and select a model to develop applications.

- 2.1 Demonstrate understanding of various software development cycle models (Waterfall, Agile, etc.) and the advantages or disadvantages of each.
- 2.2 Select a design model and use it to design an application.
- 2.3 Use selected development model to implement a cell phone or video game application.
- 2.4 Write properly structured programs using proper commenting and naming conventions. Upload to online career portfolio.
- 2.5 Test program for completeness and accuracy.

Course Standard 3

IT-PGAS-3

Design and develop applications using Object-Oriented Programming.

- 3.1 Demonstrate knowledge of primitive (built-in) data types.
- 3.2 Demonstrate knowledge of custom data types (objects) and how they are structured and instantiated.
- 3.3 Design applications with multiple objects interacting with one another or containing other objects.
- 3.4 Develop event-driven programs using objects to solve problems.

Course Standard 4

IT-PGA-4

Design, develop, and implement accessible and usable interfaces, and analyze applications for engaging the user.

- 4.1 Identify the components of a user interface.
- 4.2 List the criteria used to determine the effectiveness of an interface.
- 4.3 Design and produce a user interface.
- 4.4 Apply user interface design criteria to critique common user interfaces (mobile phones, tablets, remote controls, and microwave ovens).
- 4.5 Discuss how the design of applications can influence and motivate or demotivate the user.
- 4.6 Apply software development practices to a programming project.
- 4.7 Test the program for usability.

Course Standard 5

IT-PGA-5

Use and implement different digital representations of media.

- 5.1 Explain the relative strengths and weaknesses of different images file formats.
- 5.2 Explain the relative strengths and weaknesses of different representations of music and sound.
- 5.3 Write a program that implements multiple images with sound.
- 5.4 Develop a program that incorporates both audio and image files. Upload to online career portfolio.
- 5.5 Research tools and techniques to create triggers and events that serve to modify the attributes of audio and image files.

Course Standard 6

IT-PGA-6

Evaluate an application design in terms of meeting privacy needs, legal and intellectual property requirements, and security considerations.

- 6.1 Understand privacy needs in the development of application software.
- 6.2 Explain how security considerations play a part in software development.
- 6.3 Evaluate how intellectual property plays into to the development of applications.
- 6.4 Research examples of how security and privacy leaks in applications have affected users and society.

Course Standard 7

IT-PGA-7

Develop applications that read real-world data from sensors, interpret the data, and respond to the real-world stimuli.

- 7.1 Plan how real-world data collection can influence design decisions.
- 7.2 Develop a program that interprets and reacts to sensor or human input.
- 7.3 Write a program that reads external data and manipulates it to solve a problem. Upload to online career portfolio.

Course Standard 8

IT-PGA-8

Describe the unique needs for information and communication technologies for diverse audiences.

- 8.1 Understand the need for designing software that is intuitive and user-friendly.
- 8.2 Conduct research and apply modifications to make programs inclusive and enhance the user experience.
- 8.3 Research the W3C Accessibility standards.
- 8.4 Demonstrate use of W3C Accessibility standards in a program for those with special needs.
- 8.5 Develop an example set of criteria or requirements for application development for a specific special need.
- 8.6 Explain and demonstrate how software developers remove all text literals from programs and store them in resource files so that international translations for software can be easily incorporated into programs (resource file use for translations).

Course Standard 9

IT-PGA-9

Organize personal online career portfolio for specific career interests.

- 9.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 9.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 9.3 Update all current items in the portfolio.
- 9.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 9.5 Edit all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 9.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 10

IT-PGA-10

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 10.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 10.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 10.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 10.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 10.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Georgia Department of Education

Information Technology Career Cluster
Web Design
Course Number: 11.45200

Course Description:

Can you think of any company that does not have a web presence? Taking this course will equip students with the ability to plan, design, and create a web site. Students will move past learning how to write code and progress to designing a professional looking web site using graphical authoring tools that contains multimedia elements. Working individually and in teams, students will learn to work with web page layout and graphical elements to create a professional looking web site.

Various forms of technologies will be used to expose students to resources, software, and applications of web design. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Web Design is the third course in the Web & Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Software Technology and Digital Design. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Course Standard 1

IT-WD-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening

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	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship

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				Staying Motivated to Search
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1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture

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Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-WD-2

Plan, develop, implement, and resolve ethical issues involved in creating and publishing a web site.

- 2.1 Define key terms in site development: cloud computing, versions of HTML, CSS, design consistency, deprecated tags, wire framing/layout design, hyperlinks.
- 2.2 Develop a logical argument for using cloud computing and the various web hosting platforms for business and personal use.
- 2.3 Demonstrate proper use of basic HTML tags.
- 2.4 Demonstrate proper use of basic CSS Selectors.
- 2.5 Demonstrate understanding of inline style, header section styling, and separated CSS style pages.
- 2.6 Describe the phases of web development (life cycle) and provide specific tasks for each phase.
- 2.7 Use flowcharts/storyboards/pseudocode language to design a web site.
- 2.8 Identify essential web site navigation issues that help ensure site usability (consistency, intuitive text/icons, and breadcrumbs).
- 2.9 Describe ethical, government, and accessibility standards & W3C standards (readability, usability, browser compatibility, and copyright issues related to use of digital media).
- 2.10 Identify technologies available to enhance the user's experience, including programming languages and multimedia technologies.

Course Standard 3

IT-WD-3

Create documents using a variety of tags and coding practices commonly used to create web pages.

- 3.1 Identify basic HTML document (web page) layout & tags used to create web pages according to industry standards (e.g., header, footer, side bar, main content, navigation/menu bar, tabs/drop downs).
- 3.2 Demonstrate familiarity with W3C standards for web development and tag usage.
- 3.3 Demonstrate an understanding of common programming structures, such as loops, conditionals, and arrays, using a front-end Object-Oriented programming language, such as JavaScript.
- 3.4 Create a web site using HTML and Separate CSS Styling pages to W3C standards. Upload to online career portfolio.
- 3.5 Demonstrate understanding of the importance of validating web sites and tools available for the process.

- 3.6 Explain the difference between client-side and server-side programming languages and validation.

Course Standard 4

IT-WD-4

Create and use graphics to enhance web pages using a variety of tools.

- 4.1 Identify and use design and color principles appropriate for graphics and web pages. Explain RGB, HSL, CMYK color formatting.
- 4.2 Describe the image formats used within a web page (gif, jpg, png, image maps) and describe appropriate use of which format. Demonstrate knowledge of lossy and lossless image formats.
- 4.3 Create a web site using multiple image formats. Upload to online career portfolio.
- 4.4 Explore online tools and downloadable software available to create and edit still and animated graphics.

Course Standard 5

IT-WD-5

Define and apply essential aspects of the Cascading Style Sheets to format elements within a web site.

- 5.1 Demonstrate use of inline, header-located and external style sheets.
- 5.2 Create a web site using multiple style selectors and sub-selectors using external Cascading Style Sheets.
- 5.3 Design web pages utilizing CSS to manage text flow using regions, columns, and graphical interfaces. Demonstrate understanding of exact and relative text size formatting. Upload to online career portfolio.

Course Standard 6

IT-WD-6

Use (Graphic User-Interface) GUI-based HTML editing software to create web sites.

- 6.1 Explain the differences between the types of editing software and when to editing software: text, object, and WYSIWYG (What You See Is What You Get).
- 6.2 Design web sites using a GUI-based editor following the design principles to enable navigation, usability, and accessibility.
- 6.3 Explore advanced layouts & scripting tools available through GUI-based editors such as widgets, image sliders, etc.
- 6.4 Create a website which implements tables.
- 6.5 Create and use interactive forms on a web site.
- 6.6 Design and implement layers, image maps, and navigation bars.
- 6.7 Enhance a website with media objects and images. Upload to online career portfolio.

Course Standard 7

IT-WD-7

Develop an understanding of e-commerce practices and related technologies necessary to create a secure, useful interface to conduct business online.

- 7.1 Develop a working e-commerce vocabulary including e-business, mobile commerce, branding, market space, business model (B2B, B2C), security, payment options.

- 7.2 Explain the importance of branding and establishing a color palette for an e-business to create an online presence.
- 7.3 Explain the importance of using web design principles to meet customer expectations.
- 7.4 Explain the benefits of configuring a site to mobile standards currently used further the accessibility of an e-business.
- 7.5 Demonstrate an understanding of security issues associated with the internet including but not limited to backing up files & cloud storage, e-commerce and collecting customer information, vendor tracking devices, hacking, and data security on a web site.

Course Standard 8

IT-WD-8

Test, analyze, and identify performance issues related to publishing and maintaining web sites.

- 8.1 Identify essential issues in developing and maintaining a web site, including project management, testing, legal issues.
- 8.2 Identify strategies commonly used for managing a user's experience and improving site creativity and aesthetic qualities.
- 8.3 Explore options for publishing a web site and web hosting.
- 8.4 Identify the benefits and drawbacks of running your own web server versus using a service provider.
- 8.5 Plan and deliver oral presentations of a web site explaining the developmental process before, during, and after site completion to a potential customer.

Course Standard 9

IT-WD-9

Organize personal online career portfolio for specific career interests.

- 9.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 9.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 9.3 Update all current items in the portfolio.
- 9.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 9.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 9.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 10

IT-WD-10

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 10.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.

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- 10.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 10.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 10.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 10.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Draft

Georgia Department of Education

Information Technology Career Cluster

Web Development

Course Number: 11.42500

Course Description:

This course, with Hypertext Markup Language (HTML) and Cascading Style Sheet (CSS) as its foundation, will teach students to develop and design responsive web sites through coding, testing, debugging and implementation of web-based services. This course will also allow students to learn about content management systems, client-side languages, server-side languages, and database concepts. The course is designed to give students foundational knowledge of front-end and back-end development to address the presentation and data access layers of web site development.

Various forms of technologies will be used to expose students to resources and application of computer science. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organizations are integral components of both the employability skills standards and content standards for this course.

Web Development is the third course in the Web Development pathway. Students enrolled in this course should have successfully completed Introduction to Software Technology and Computer Science Principles. After mastery of the standards in this course, students should be prepared to earn an industry-recognized credential in this career area.

Course Standard 1

IT-WDEV-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude

Georgia Department of Education

	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and Mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads

Georgia Department of Education

	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior, and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success

Georgia Department of Education

Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Course Standard 2

IT-WDEV-2

Develop a web page using Hypertext Markup Language (HTML) and Cascading Style Sheet (CSS).

- 2.1 Explore the historical significance and progression of web design/development languages (e.g., HTML, CSS, HTML5, and JavaScript).
- 2.2 Distinguish between CSS and HTML.
- 2.3 Demonstrate knowledge of HTML5 elements.
- 2.4 Build a website using <div> tags rather than tables.
- 2.5 Evaluate various HTML and CSS frameworks (e.g., HTML5 boilerplate, Bootstrap, Foundation or others).
- 2.6 Analyze pros and cons of using a HTML and CSS frameworks.
- 2.7 Demonstrate the difference between a class versus ID.
- 2.8 Apply selector, property, and value using HTML5.
- 2.9 Investigate the pros and cons of using inline styles.
- 2.10 Compare the pros and cons of pixels versus em.
- 2.11 Differentiate between margin and padding.
- 2.12 Apply appropriate positioning to items on a web page.
- 2.13 Evaluate compatibility issues for browsers/browser versions and demonstrate ways to overcome those issues.

Course Standard 3

IT-WDEV-3

Apply concepts of JavaScript to web page development.

- 3.1 Understand scripting in JavaScript and how it applies to web page development.
- 3.2 Demonstrate how JavaScript can enhance a project.
- 3.3 Compare the pros and cons of using various JavaScript libraries (e.g., jQuery, Prototype, MooTools).
- 3.4 Distinguish between variables and functions in writing JavaScript.
- 3.5 Explore different causes of JavaScript security, including Cross site scripting (XSS) and the problems with using eval().
- 3.6 Create code from design mockup.

Course Standard 4

IT-WDEV-4

Create a single functional webpage based on a design mockup and user requirements, perhaps a résumé (Client-Side Languages).

- 4.1 Generate HTML that incorporates major formatting tags as well as mixed media assets.
- 4.2 Utilize CSS to achieve different visual looks for a webpage without modifying the underlying html.
- 4.3 Build a styled HTML page implementing a form that incorporates JavaScript checking and interacts with the data provided.
- 4.4 Implement a third-party JavaScript tool and explain how it works and what it does.
- 4.5 Write code that is compatible across a given set of web browsers and versions (most notably Internet Explorer (IE), Chrome, Firefox, and Safari).
- 4.6 Demonstrate ability to apply security principles to HTML and JavaScript.
- 4.7 Evaluate the selection and use of software libraries in building client facing portions of the webpage (e.g., HTML5 Boilerplate, Bootstrap, Foundation, jQuery, Angular).

Course Standard 5

IT-WDEV-5

Explain the components needed to develop a dynamic website (Web Development Stack).

- 5.1 Explain the role of the web server in the development stack.
- 5.2 Explain the role of the database in the development stack.
- 5.3 Explain the role of the server-side language in the development stack.
- 5.4 Debate the appropriate web stack for a given problem set.
- 5.5 Demonstrate security mitigation techniques that can be addressed at each level of the development stack.

Course Standard 6

IT-WDEV-6

Use a server-side language to build a multi-page website incorporating a web form, at least two templates with shared portions, and data-driven home page (Server Side Languages).

- 6.1 Explore the history of common server-side languages (e.g., Ruby On Rails, PHP or others).
- 6.2 Explain the differences in server-side languages in terms of syntax and function.
- 6.3 Debate the merits and use of software design patterns as it relates to a dynamic web site.
- 6.4 Build a server script demonstrating language control structures and mathematical computations.
- 6.5 Build a script demonstrating data storage using cookies, sessions, a database, and file storage.
- 6.6 Write code to perform a file upload and validate the uploaded file against given business rules. Upload to online career portfolio.
- 6.7 Incorporate a third-party library into a script and explain what it does and how it works.
- 6.8 Explain how a third-party library was chosen if multiple libraries with the same purpose are available.

- 6.9 Install and configure a Content Management Systems (CMS).
- 6.10 Demonstrate ability to apply security principles to server-side code as it relates to data storage and display.
- 6.11 Explain at least one website attack vector and how to mitigate the risk of that attack.

Course Standard 7

IT-WDEV-7

Utilize on-page Search Engine Optimization (SEO) throughout a website.

- 7.1 Apply responsive design and development.
- 7.2 Understand search engine crawlers, such as Google, Bing, Yahoo!, and Baidu, in regard to crawling, indexing and ranking of webpages.
- 7.3 Master and apply effective use of meta-tags in HTML head of each webpage of a site (title tag, description tag, and keywords tag) and the URL file name. Upload to online career portfolio.
- 7.4 Understand image optimization of .jpeg, .gif and .png (compressing, html tag).
- 7.5 Plan and employ an internal link strategy of a site.
- 7.6 Research search engine algorithms, how frequently they are updated, and how they impact a site's ranking.
- 7.7 Comprehend and apply best practice techniques for keywords and keywords research.
- 7.8 Apply semantic markup to every page of a site (effectively using H1, H2, H3, paragraph, and list tags).
- 7.9 Demonstrate how semantic markup impacts a site's architecture, web coding, usability, and display flexibility.
- 7.10 Examine basic SEO tools such as Google Search Console (formerly Google Webmaster Tools) Bing Webmaster Tools, and Google Analytics.

Course Standard 8

IT-WDEV-8

Apply concepts involved in the software development life cycle (SDLC) as it pertains to web development.

- 8.1 Explain the different steps of SDLC (Plan, Analyze, Design, Develop, and Implement Maintain).
- 8.2 Research and describe the different types of collaboration platforms used in web development (e.g., GitHub, Apache Subversion (SVN) or others).

Course Standard 9

IT-WDEV-9

Ensure websites meet all special considerations and are in compliance with industry and government regulations.

- 9.1 Explain what encryption (https) is and under what circumstances it would be appropriate to implement on a website.
- 9.2 Research and explain a specialized web compliance practice based on a governmental or industry guideline - Payment Card Industry (PCI), Section 508, American Disability Act (ADA), etc.
- 9.3 Explain how security could differ between an application on the internet vs. an intranet.

- 9.4 Determine the fault involved in a data breach and research types of protections pertinent for a particular website.
- 9.5 Explore principles of e-commerce as they apply to web development, mobile devices, banking, and government regulations.

Course Standard 10

IT-WDEV-10

Organize personal online career portfolio for specific career interests.

- 10.1 Review and update résumé to reflect new knowledge and skills master and additional work experience.
- 10.2 Organize folders within the portfolio to reflect specific careers of interest, including résumé, targeted cover letter, and artifacts relevant to the specific career.
- 10.3 Update all current items in the portfolio.
- 10.4 Identify and upload additional industry-appropriate artifacts reflective of mastered skills throughout this course. Write and include a reflective entry for each artifact discussing steps taken, problems encountered and how they were overcome, and other pertinent information about the learning.
- 10.5 Polish all entries in the online career portfolio to ensure accuracy and professionalism as expected from employers.
- 10.6 Conduct a job search and share the appropriate folder with the potential employer.

Course Standard 11

IT-WDEV-11

Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 11.1 Explain the goals, mission, and objectives of Future Business Leaders of America (FBLA) and/or Technology Student Association (TSA) and/or SkillsUSA.
- 11.2 Explore the impact and opportunities a student organization (FBLA, TSA, SkillsUSA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 11.3 Explore the local, state, and national opportunities available to students through participation in related student organizations (FBLA, TSA, SkillsUSA) including but not limited to conferences, competitions, community service, philanthropy, and other student organization activities.
- 11.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 11.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.

Information Technology Career Cluster Course Revisions

Course Revisions Committee

July 2021

Name	Organization	Job Title
Dave Brown	eDemand, Inc.	President
Kemble Hildreth	Big Southern Software	CEO
Paul Engleberth	PTC	Master Application Architect
Mike Lowry	TechCitySouth	
Joan Watson	Live Oak CS	Director of Pedagogy
Greg Frick	DT Global Staffing	
Chuck Lopez	AT&T Georgia	Principal - Business Analyst
Sujatha Bayyapureddy	McKesson	Director of Systems
Joe Moore	World 50	Director, Software Architect
Dane Hildreth	Live Oak CS	Director of Education
James McWilliam	Big Southern Software	CTO
Tiffany Alexander	North Oconee High School	Information Technology Teacher
Rebekah Burnside	Thompson High School	Information Technology Teacher
Janine Walton	North Clayton High School	Information Technology Teacher
Shirron Jeffries	Cedar Grove High School	Information Technology Teacher
Darryl Johnson	Global Impact Academy	Information Technology Teacher
Dustin Herrington	Langston-Hughes High School	Information Technology Teacher
Raymond Schenk	Johns Creek High School	Information Technology Teacher

Jodie R. Snow
Chief Operating Officer, ABAC Foundation

Jodie Snow currently serves as the Chief Operating Officer of the Abraham Baldwin Agricultural College Foundation, Inc. (ABAC Foundation). Snow is responsible for the oversight of the ABAC Foundation and its subsidiaries including investments, endowments and real estate. She also provides support and guidance for planned gifts to the foundation. Snow has a faculty appointment in the Stafford School of Business where she has taught Legal and Regulatory Environment of Business. Additionally, Snow has served as the Title IX Investigator Abraham Baldwin Agricultural College.

Prior to joining the ABAC Foundation, Mrs. Snow served as Assistant State Attorney for the Second Judicial Circuit of Florida in Tallahassee. Snow practiced in the areas of civil litigation, real estate and wills, trust and estates in South Florida before becoming a prosecutor.

A Fitzgerald native, Snow received her Associate of Science degree from ABAC where she was named as an Outstanding Young Alumnus. Snow received her Bachelor of Business Administration degree from the University of Georgia and her Juris Doctorate and a Master of Business Administration from Stetson College of Law and Stetson University, respectively. Snow has been spotlighted in the Stetson College of Law Employer's Guide for her work in the non-profit sector.

Mrs. Snow is an active member of the Tifton Judicial Circuit Bar Association, Georgia Agribusiness Council, Georgia Education Advancement Council, and Tifton-Tift County Chamber of Commerce where she serves as the Vice Chair of Financial Services. Snow recently served as Treasurer of both the Tifton Judicial Circuit Shelter and the Innovation Fund Foundation. Mrs. Snow has served as the Vice-President and President of the Tifton Judicial Circuit Bar Association. She is a graduate of the Georgia Academy for Economic Development and Leadership Georgia class of 2015.

Mrs. Snow is married to Matt Snow and they have two beautiful children, Matthew (7) and Raylie Grace (3).

**CALHOUN CITY SCHOOLS BOARD OF EDUCATION
RESOLUTION**

WHEREAS, the Calhoun City Schools Board of Education is the governing body of the Calhoun City Schools School District;

WHEREAS, the Calhoun City Schools Board of Education entered into a contract with the State Board of Education on or about June 23, 2016 for the operation of the Calhoun City Schools School District as a Charter System;

WHEREAS, the Calhoun City Schools Board of Education recognizes the positive impact charter system status has had on increasing community engagement, student achievement, and flexibility throughout Calhoun City Schools School District; and

WHEREAS, the Calhoun City Schools Board of Education seeks to amend its Charter System contract by waiving State Board of Education Rule 160-3-1-.07(2)(a) related to the Kindergarten Assessment.

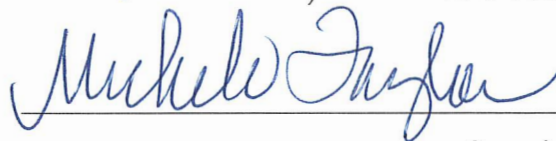
NOW, THEREFORE, BE IT RESOLVED that the Calhoun City Schools Board of Education authorizes the amendment of its contract with the State Board of Education and hereby submits Amendment #2 and this Resolution to the State Board of Education for final approval.

Adopted this the 23rd day of August 2021.

Calhoun City Schools Board of Education



Board Chairperson



Superintendent

**CALHOUN CITY SCHOOLS CHARTER SYSTEM CONTRACT AMENDMENT
NUMBER 2**

The State Board of Education (“State Board”) and Calhoun City Schools Board of Education (“Local Board”) agree to amend the Charter System Contract for Calhoun City Schools (“Contract”). This amendment, which shall become effective upon the last signature, shall be referred to as “Amendment #2.”

WHEREAS, the State Board and the Local Board entered into the Contract for the operation of a charter system beginning on or about July 1, 2016 to maximize academic and financial accountability;

WHEREAS, the Local Board seeks to waive the requirement to administer the Georgia Kindergarten Inventory of Developing Skills assessment; and,

WHEREAS, the Local Board passed a resolution seeking to amend the Contract for the purpose of waiving the Georgia Kindergarten Inventory of Developing Skills assessment.

NOW THEREFORE, in consideration for the promises made herein, the State Board and the Local Board mutually agree to amend the Contract as follows:

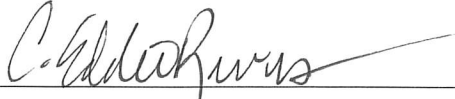
1. The Contract is hereby amended by inserting the following as new Section 11, to read as follows:

11. Assessment and Accountability. Notwithstanding Sections 7 and 9 above, each Charter System School is subject to all accountability and assessment requirements set forth within Title 20 of the Official Code of Georgia Annotated and any corresponding State Board Rules, including, but not limited to, the accountability provisions of O.C.G.A. § 20-14-30 through § 20-14-41, and the use of Teacher and Leader Effectiveness Systems, including Student Learning Objectives. However, for the 2021-2022 school year, the Charter System shall waive State Board of Education Rule 160-3-1-.07(2)(a) related to the Kindergarten Assessment. The Charter System Schools are also subject to all federal accountability requirements under the Elementary and Secondary Education Act, subject to any amendment, waiver, or reauthorization thereof.

Except as amended herein, the Contract and all previous amendments are unaffected and shall continue in full force and effect in accordance with its terms. If there is a conflict between this amendment and the Contract or any earlier amendment, the terms of this amendment will prevail.

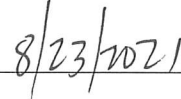
IN WITNESS WHEREOF, the parties state and affirm that they are duly authorized to bind the respected entities designated below as of the day and year indicated.

Chairperson, STATE BOARD OF EDUCATION



Chairperson, CALHOUN CITY SCHOOLS
BOARD OF EDUCATION

(Date)



(Date)

**COLQUITT COUNTY SCHOOL SYSTEM
BOARD OF EDUCATION
RESOLUTION**

WHEREAS, the Colquitt County School System Board of Education is the governing body of the Colquitt County School District;

WHEREAS, the Colquitt County School System Board of Education entered into a contract with the State Board of Education on or about June 18, 2020 for the operation of Colquitt County School District as a Charter System;

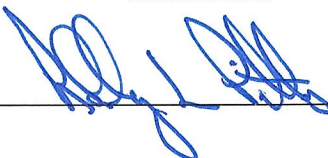
WHEREAS, the Colquitt County School System Board of Education recognizes the positive impact charter system status has had on increasing community engagement, student achievement, and flexibility throughout the Colquitt County School District; and

WHEREAS, the Colquitt County School System Board of Education seeks to amend its Charter System contract by waiving State Board of Education Rule 160-3-1-.07(2)(a) related to the Kindergarten Assessment.


NOW, THEREFORE, BE IT RESOLVED that the Colquitt County Board of Education authorizes the amendment of its contract with the State Board of Education and hereby submits Amendment #1 and this Resolution to the State Board of Education for final approval.

Adopted this the 23 day of AUGUST 2021.

COLQUITT County Board of Education



Board Chairperson



Superintendent

COLQUITT COUNTY SCHOOL SYSTEM BOARD OF EDUCATION
CHARTER SYSTEM CONTRACT AMENDMENT
NUMBER 1

The State Board of Education (“State Board”) and the Colquitt County School System Board of Education (“Local Board”) agree to amend the Charter System Contract for Colquitt County School System (“Contract”). This amendment, which shall become effective upon the last signature, shall be referred to as “Amendment #1.”

WHEREAS, the State Board and the Local Board entered into the Contract for the operation of a charter system beginning on or about June 18, 2020 to maximize academic and financial accountability;

WHEREAS, the Local Board seeks to waive the requirement to administer the Georgia Kindergarten Inventory of Developing Skills assessment; and,

WHEREAS, the Local Board passed a resolution seeking to amend the Contract for the purpose of waiving the Georgia Kindergarten Inventory of Developing Skills assessment.

NOW THEREFORE, in consideration for the promises made herein, the State Board and the Local Board mutually agree to amend the Contract as follows:

1. The Contract is hereby amended by inserting the following as new Section 11, to read as follows:

11. Assessment and Accountability. Notwithstanding Sections 7 and 9 above, each Charter System School is subject to all accountability and assessment requirements set forth within Title 20 of the Official Code of Georgia Annotated and any corresponding State Board Rules, including, but not limited to, the accountability provisions of O.C.G.A. § 20-14-30 through § 20-14-41, and the use of Teacher and Leader Effectiveness Systems, including Student Learning Objectives. However, for the 2021-2022 school year, the Charter System shall waive State Board of Education Rule 160-3-1-.07(2)(a) related to the Kindergarten Assessment. The Charter System Schools are also subject to all federal accountability requirements under the Elementary and Secondary Education Act, subject to any amendment, waiver, or reauthorization thereof.

Except as amended herein, the Contract and all previous amendments are unaffected and shall continue in full force and effect in accordance with its terms. If there is a conflict between this amendment and the Contract or any earlier amendment, the terms of this amendment will prevail.

IN WITNESS WHEREOF, the parties state and affirm that they are duly authorized to bind the respected entities designated below as of the day and year indicated.

Chairperson, STATE BOARD OF EDUCATION

(Date)

Chairperson, 
BOARD OF EDUCATION

8/23/2021

(Date)

**CHATTAHOOCHEE COUNTY SCHOOL DISTRICT
CHARTER SCHOOL SYSTEM CONTRACT AMENDMENT
NUMBER 1**

The State Board of Education (“State Board”) and the Chattahoochee County Board of Education (“Local Board”) agree to amend the Strategic Waiver School System Contract/ Charter Contract for Chattahoochee County School District (“Contract”). This amendment, which shall become effective upon the last signature, shall be referred to as “Amendment # 1.”

WHEREAS, the State Board and the Local Board entered into the Contract for the operation of a Strategic Waivers School System/ Charter System beginning on or about July 1, 2020 to maximize academic and financial accountability;

WHEREAS, the Local Board seeks to waive the requirement to administer the Georgia Kindergarten Inventory of Developing Skills assessment; and,

WHEREAS, the Local Board passed a resolution seeking to amend the Contract by augmenting the flexibility components of the Contract.

NOW THEREFORE, the State Board and the Local Board mutually agree to amend the Contract as follows:


- 1. Exhibit B of the Contract is hereby amended to add the following waiver:
 - a. Testing Programs – Student Assessment (SBOE Rule 160-3-1-.07(2)(a))

Except as amended herein, the Contract and all previous amendments are unaffected and shall continue in full force and effect in accordance with its terms. If there is a conflict between this amendment and the Contract or any earlier amendment, the terms of this amendment will prevail.

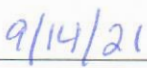
IN WITNESS WHEREOF, the parties state and affirm that they are duly authorized to bind the respected entities designated below as of the day and year indicated.

Chairperson, STATE BOARD OF EDUCATION

(Date)



Chairperson, Chattahoochee County
BOARD OF EDUCATION



(Date)

CHATTAHOOCHEE COUNTY BOARD OF EDUCATION

RESOLUTION

WHEREAS, the Chattahoochee County Board of Education is the governing body of the Chattahoochee County School District;

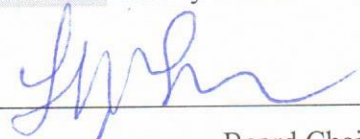
WHEREAS, the Chattahoochee Board of Education entered into a contract with the State Board of Education on or about [February 2020] for the operation of Chattahoochee County School District as a Charter System; and

WHEREAS, the Chattahoochee Board of Education seeks to amend Exhibit B to its Charter contract by waiving State Board of Education Rule 160-3-1-.07(2)(a) related to the Kindergarten Assessment.

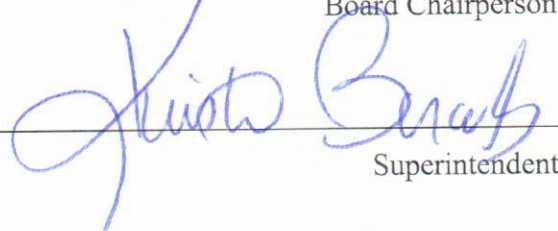
NOW, THEREFORE, BE IT RESOLVED that the Chattahoochee County Board of Education authorizes the amendment to Exhibit B of its Charter System contract and hereby submits Amendment # 1 and this Resolution to the State Board of Education for final approval.

Adopted this 14 day of Sept 2021.

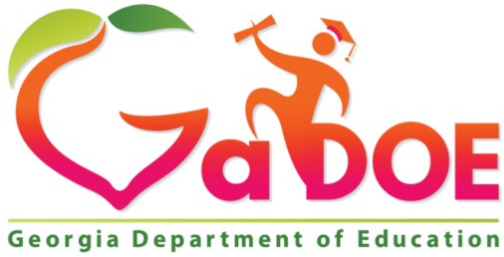
Chattahoochee County Board of Education



Board Chairperson



Superintendent



"Educating Georgia's Future"

Richard Woods, Georgia's School Superintendent

Summary of Appointment Recommendations

State Superintendent of Schools Richard Woods recommends the following Georgia Department of Education at-will appointments:

<u>Name</u>	<u>Job Title</u>	<u>Organizational Unit</u>	<u>Funding</u>
Shekina Beckham	Prof. Learning Specialist	School Improvement	Federal-funded
Holly Deal	School Effectiveness Specialist	School Improvement	State-funded
Linda Priester	School Effectiveness Specialist	School Improvement	State-funded
Danielle Battle	District Effectiveness Specialist	School Improvement	State-funded
Michael Sanders	Education Program Specialist	Facilities & Pupil Transportation	State-funded
Metsehet Ketsela	Accounting Manager 2, Reporting	Finance & Business Operations	State-Funded
Heather Vess	Accounting Manager	Finance & Business Operations	State-funded
Kathleen Everett	Education Program Specialist Dispute Resolution	Federal Program	Federal-funded
Adam Churney	Data Analysis & Reporting Manager	Information Technology	State-funded
Stanley Montgomery	Financial Examiner	School Nutrition	State-funded



"Educating Georgia's Future"

**Recommended Personnel Actions – Appointments
State Board of Education Meeting
September 29 - 30, 2021**

Richard Woods, Georgia's School Superintendent

The following positions are all federally-funded CARES/ARP funding.

Finance and Business Operations

Kori Russell	Budget Analyst	Finance & Business Operations	CARES/ARP
Natalie Heath	Budget Specialist	Finance & Business Operations	CARES/ARP
Andrea Torres	Accountant	Finance & Business Operations	State-funded
Ann Gillio	Contracts Administrator	Finance & Business Operations	CARES/ARP
Taniya Wilder	Academic Recovery Specialist	School Improvement	CARES/ARP
Josephine Pate	Academic Recovery Specialist	School Improvement	CARES/ARP
Taijuan Clayton-Brookes	Academic Recovery Specialist	School Improvement	CARES/ARP

Rural Education and Innovation

Kermit Gilliard	Senior Program Manager	Rural Education & Innovation	CARES/ARP
Alissa Sasser	Education Program Specialist (Partnerships)	Rural Education & Innovation	CARES/ARP
Kimberly Hatcher	Education Program Specialist (Teacher Recruitment & Retention)	Rural Education & Innovation	CARES/ARP
April Aldridge	Education Program Specialist (Instruction)	Rural Education & Innovation	CARES/ARP



"Educating Georgia's Future"

**Recommended Personnel Actions – Appointments
State Board of Education Meeting
September 29 - 30, 2021**

Richard Woods, Georgia's School Superintendent

Russell Paine	Technology Specialist	Rural Education & Innovation	CARES/ARP
Whole Child			
Lindsey Oliver	Program Specialist - Social Work	Whole Child	CARES/ARP
Ruth Ellis	Program Specialist - School Health Ctr.	Whole Child	CARES/ARP
Molly Sims	Program Specialist - Prof. Development	Whole Child	CARES/ARP
Bryan Smith	Program Specialist, Wraparound	Whole Child	CARES/ARP

**STATE BOARD OF EDUCATION
STATE OF GEORGIA**

DR. JAMES BARRETT	:	
	:	
Appellant,	:	
	:	CASE NO.: 2022-02
v.	:	
	:	DECISION
WALKER COUNTY	:	
BOARD OF EDUCATION,	:	
	:	
Appellee.	:	

This is an appeal by Dr. James Barrett (“Appellant”) from a decision by the Walker County Board of Education (“Local Board”) to non-renew his teaching contract for the 2021-2022 school year. For the following reasons, the Local Board’s decision is **AFFIRMED**.

I. FACTUAL AND PROCEDURAL HISTORY

On or about late 2018, the Appellant was a tenured¹ 6th through 8th grade teacher at Saddle Ridge Elementary and Middle School (“School”) in the Walker County School System (“District”) when the Catoosa County Sheriff’s Department issued criminal search warrants against him. After the warrants were served on the Appellant, the Local Board immediately removed the Appellant from the classroom and reassigned him to the District’s central office. On or about April 5, 2019, the Appellant was arrested on one count of sexual exploitation of children and was released from jail under the bond condition that he have no contact with minor children.

On April 10, 2019, the Local Board offered the Appellant a teaching contract for the 2019-2020 school year. The Appellant accepted the contract but because of the bond condition, the Local Board assigned him to the District’s central office where he was given special projects. The cover letter attached to the contract indicated that the teaching contract was offered “subject to the pending outcome of the matter for which you were recently arrested.” The Appellant remained at the central office for the remainder of the 2019-2020 school year.

The following year on April 15, 2020, the Local Board offered, and the Appellant accepted, another contract as a 6th through 8th grade teacher for the 2020-2021 school year. Attached to the contract again was the cover letter indicating that the contract was issued subject to the outcome of the Appellant’s pending criminal matter. The 2020-2021

¹ In accordance with O.C.G.A. § 20-2-942, a tenured teacher is one who accepts a school year contract for the fourth consecutive school year from the same local board of education. A tenured teacher may only be demoted or have her contract non-renewed for those reasons indicated in the Georgia Fair Dismissal Act, set forth in O.C.G.A. § 20-2-940(a).

contract assigned the Appellant, once again, to the School. However, because the bond provision was still in effect and prevented the Appellant from teaching students, the District placed the Appellant in the maintenance facility and assigned him to non-teaching projects.

On April 5, 2021, the Local Board informed the Appellant that it would not renew the Appellant's teaching contract for the 2021-2022 school year. On April 27, 2021, the Local Board sent the Appellant a charge letter notifying him that the basis for the non-renewal was his inability to perform the duties of his job due to the special bond provisions to which he agreed, and which constituted "other good and sufficient cause" under the Georgia Fair Dismissal Act.

A tribunal conducted a hearing on June 2, 2021, to determine whether there was good and sufficient cause not to renew the Appellant's contract. The tribunal found that due to the continued bond provision prohibiting the Appellant from having contact with minors, the Appellant was unable to fulfill the duties of his job as a middle school teacher for the foreseeable future. The tribunal recommended the Local Board not renew the Appellant's teaching contract. The Appellant appealed the tribunal's recommendation to the Local Board which adopted the tribunal findings and determination on June 22, 2021.

On July 6, 2021, the Appellant appealed the non-renewal of his teaching contract to the Georgia State Board of Education (State Board) alleging that the Local Board was prohibited from relying on events occurring prior to the 2020-2021 school year in determining whether to renew his contract, that "other good and sufficient cause" did not exist to support the non-renewal of his contract, and that the decision of the Local Board to not renew his contract was arbitrary and capricious.

II. STANDARD OF REVIEW

"The standard for review by the State Board of Education is that if there is any evidence to support the decision of the local board of education, then the local board's decision will stand unless there has been an abuse of discretion, or the decision is so arbitrary and capricious as to be illegal." See *Ransum v. Chattooga Cnty. Bd. of Educ.*, 144 Ga. App. 783, 242 S.E.2d 374 (1978); *Antone v. Greene Cnty. Bd. of Educ.*, Case No. 1976-11 (Ga. SBE, Sept. 1976); and *Roderick J. v. Hart Cnty. Bd. of Educ.*, Case No. 1991-14 (Ga. SBE, Aug. 1991).

III. ISSUES ON APPEAL

A. Is the Local Board Prohibited from Relying on Events Occurring in Prior Contract Years as the Basis for Contract Non-Renewal in Subsequent Years?

The Appellant argues that the Local Board is prohibited from using the Appellant's actions in a prior contract year as cause for non-renewal in a subsequent contract year. The Appellant further argues that the Local Board waived its right to assert the

Appellant's inability to teach minors as a justification for non-renewal, under the doctrine of equitable estoppel.

1. **Can the Appellant's action during a prior contract year be used to support non-renewal in subsequent years?**

In *Moulder v. Bartow Cnty. Bd. of Educ.*, Case No. 2003-07 (Ga. SBE, Nov. 2002), the local board sought to terminate a teacher that had inappropriately grabbed a student on or about February 12, 2002. On February 14, 2002, the teacher was formally warned by school district administrators that any future incidents of inappropriate touching would result in her termination. On February 20, 2002, the local board offered the teacher a new contract for the 2002-2003 school year, which she signed on March 7, 2002. In July 2002, the local board terminated the teacher's contract for the 2002-2003 school year based on her actions prior to the offer of the new contract.

In *Moulder*, the State Board indicated that "[e]vidence of incidents that occurred before a contract renewal can be presented for the purpose of establishing a course of conduct, but such incidents cannot be used to recommend against renewal in a subsequent year." *Id.* (citing *Peterson v. Brooks Cnty. Bd. of Educ.*, Case No. 1990-29 (Ga. SBE, Dec. 1990) (reversed on other grounds, *Brooks Cnty. Bd. of Educ. v. Peterson*, Civil Action 91-CV-43, Brooks Cnty. Superior Ct. (Aug. 1991)). The Georgia Court of Appeals adopted the State Board's position in *Moulder v. Bartow Cnty. Bd. of Educ.*, 267 Ga. App. 339, 345-347, 599 S.E.2d 495, 500-01 (2004). Since *Moulder*, the State Board has consistently affirmed the principle that incidents occurring in a prior contract year cannot be used as evidence to recommend removal in a subsequent contract year.

The State Board has recognized certain exceptions to the principle articulated in *Moulder*. The first exception arises when a local board renews a contract having no knowledge of the incident occurring in the prior contract year. See *Carolyn Akins v. Bulloch Cnty. Bd. of Educ.*, Case No. 1985-35 (Ga. SBE, Jan. 1985).² The second exception occurs when through no fault of the local board, by operation of law³, a contract is renewed before the completion of an adverse action initiated by the local board against a teacher. *Shell v. Atlanta Bd. of Educ.*, Case No. 1998-46 (Ga. SBE, Nov. 1998).⁴ As with *Akins* and *Shell*, the facts of this case warrant an exception to *Moulder*.

² In *Akins*, the local board was not aware that the teacher had taken a plea deal before the renewal of her contract.

³ See O.C.G.A. § 20-2-942(b)(3).

⁴ In *Shell*, on or about February 1998, the teacher's principal recommended to the superintendent that the teacher's contract not be renewed. A new contract was not issued to the teacher; but rather by operation of law, the teacher's contract was automatically renewed on April 15, 1998, since no adverse action had yet been completed. On May 1, 1998, the superintendent informed the teacher that he intended to seek termination of the new contract. The local board held a hearing in June 1998 and terminated the teacher's 1998-1999 contract based on incompetence and other good and sufficient cause arising from incidents occurring in the prior school year, 1997-1998.

As an initial matter, the facts of this case can be distinguished from *Moulder*. The instant case involves the non-renewal of a contract rather than the termination of an existing contract. The Local Board did not offer the Appellant a new contract for 2021-2022 school year. Also, unlike *Moulder*, the incident which resulted in the Appellant being unable to teach students is ongoing. In *Moulder*, the teacher inappropriately grabbed a child. The incident began and ended within the same contract year. The school district formally reprimanded the teacher for her action, and then the local board offered her a new contract. When the local board attempted to terminate the new contract, there were no allegations of new actions nor any allegations of ongoing actions from prior years against the teacher. In this instance, the Appellant's previous contracts were not terminated. The Local Board would have had no reason to terminate the Appellant's previous contracts because it offered the Appellant those contracts knowing that he was unable to teach at the time those contracts were offered. However, unlike in *Moulder*, the Appellant's action, or more appropriately, his inaction is ongoing. Since March 2019, he has been unable to fulfill the duties of his job as a teacher. The Appellant's ongoing incident, his inability to teach due to the acceptance of the bond provision, has continued for over two years with no end in sight.⁵ It is perfectly reasonable that the Local Board consider the ongoing action or inaction of a teacher when determining whether to renew his contract.

2. **Did the Local Board waive the right to assert the Appellant's inability to teach under the doctrine of equitable estoppel?**

The Appellant contends that under the doctrine of equitable estoppel, the Local Board has waived its right to not renew the Appellant's teaching contract since it renewed his teaching contract twice following his acceptance of the bond provisions which prohibited contact with minors. In *Carolyn Akins v. Bulloch Cnty. Bd. of Educ.*, Case No. 1985-35 (Ga. SBE, Jan. 1985), the State Board identified the elements of equitable estoppel as derived from *Moore v. Bibb Cnty. Bd. of Educ.*, Case No. 1981-43 (Ga. SBE, Mar. 1982).

Akins indicates that: 1) the local board must have knowledge of the incident; 2) the teacher must have already been notified of an adverse action as determined by the local board; 3) the local board must have made or had knowledge of a promise or commitment made to the teacher that no further punishment is forthcoming for the incident; and 4) the teacher must have acted in reliance upon those promises.

In this case, the Local Board had knowledge of the incident. However, the record does not reveal that the Appellant was punished or that any adverse action occurred prior to the non-renewal. Moreover, at no time did the Local Board promise to continue renewing the Appellant's teaching contract until his criminal matter was concluded. Instead, the Local Board attached a cover letter to each of the two contracts granted after the issuance of the bond provision warning the Appellant that even though the Local Board was granting him a contract, his employment was dependent upon the outcome of

⁵ The record is devoid of any timeframe regarding when the Appellant might expect to be released from the bond provision or resolve his criminal matter.

the criminal matter. The Local Board's willingness to allow the Appellant more than two years⁶ to resolve the conditions of his bond did not obligate it to wait in perpetuity for the resolution of the Appellant's criminal case. The cover letters did not guarantee that the Local Board would continue to renew the Appellant's contract year after year regardless of his ability to fulfill the duties of the contract. For the reasons set forth, above, the conditions of the Appellant's non-renewal do not satisfy the elements of equitable estoppel.

B. Did "Other Good and Sufficient Cause" Exist to Not Renew Appellant's Teaching Contract?

Under the Georgia Fair Dismissal Act, there are eight grounds for which a local board may terminate or not renew a tenured teacher's contract. O.C.G.A. § 20-2-940(a); *Dukes-Walton v. Atlanta Indep. Sch. Sys.*, 336 Ga. App. 175, 176 n.1 (2016). In this instance, the Local Board based its grounds for non-renewal on "any other good and sufficient cause". O.C.G.A. § 20-2-940(a)(8).

The charge letter delivered to the Appellant reads in relevant part, "[t]he cause for non-renewal of your employment contract for the 2021-2022 school year is your inability to perform your job duties as a Classroom Teacher because of the special conditions of your bond to which you agreed, same constituting good and sufficient cause for the non-renewal of your employment contract for the 2021-2022 school year."

The Local Board asserts that *Leontovich v. Cobb Cnty. Bd. of Educ.*, Case No. 2006-40 (Ga. SBE, Apr. 2006) and *Craft v. Chickamauga Cty. Bd. of Educ.*, Case No. 2009-12 (Ga. SBE, Jan. 2009), are controlling in this instance. In both cases the local boards determined that the teachers' inability to perform the duties of their jobs, because of bond provisions preventing contact with minors, amounted to "other good and sufficient cause" sufficient to justify the termination of the teachers' contracts.

The Appellant argues that *Leontovich* and *Craft* are distinguishable because the local boards terminated those teachers' contracts immediately after the issuance of the bond provisions, whereas in this instance the Local Board renewed the Appellant's contract twice after the issuance of his bond provision. The Appellant is correct that under *Leontovich* and *Craft* the Local Board would have been within its right to immediately terminate his contract once he accepted the bond provision. However, the Appellant is wrong to conclude that after the Local Board graciously continued to employ him for over two years, provided him with non-teaching work and allowed him the opportunity to resolve the circumstances which led to the bond provision that it should now be penalized for granting him that leniency.

⁶ Due to the COVID-19 Pandemic, the Georgia courts were closed for several weeks. It is widely understood that there were significant delays in processing and resolving criminal cases. However, the courts are open again, and there is no indication in the record that the Appellant has taken any action to alter the conditions of his bond provision.

The Appellant insists that since the Local Board did not terminate or non-renew his contract immediately after the issuance of the special bond provision, and since he has committed no new acts or omissions during the 2020-2021 contract term, then the Local Board is not justified in non-renewing his contract for any other good and sufficient cause. The Appellant cites *Starks v. Atlanta Cty. Bd. of Educ.*, Case No. 2006-59 (Ga. SBE, June 2006) and *King v. Worth Cnty. Bd. of Educ.*, Case No. 2012-07 (Ga. SBE, Jan. 2012), to support his argument that when a violation of the Fair Dismissal Act is used as grounds for terminating or non-renewing a teacher's contract, the Local Board cannot use violations from a prior contract year as the basis for termination or nonrenewal of a subsequent year's contract. However, *Starks* and *King* are distinguished from the present case by the ongoing nature of the violation, as previously discussed. In *Starks* and *King*, both teachers committed actions or omissions that clearly began and ended under prior specified contract terms. The special condition of the Appellant's bond has continued over multiple school years, providing evidence that other good and sufficient cause exists to justify the Local Board's decision not to renew the Appellant's teaching contract for the 2021-2022 school year.

C. Was the Decision of the Local Board to Not Renew the Appellant's Contract Arbitrary and Capricious?

The State Board is required to affirm the decision of the Local Board if there is any evidence to support the decision. After a review of the record, the State Board finds that there is evidence to support the Local Board's decision to not renew the Appellant's teaching contract for the 2021-2022 school year. See *Ransum v. Chattooga Cnty. Bd. of Educ.*, 144 Ga. App. 783 (1978); *Antone v. Greene Cnty. Bd. of Educ.*, Case No. 1976-11 (Ga. SBE, Sept. 1976). "[T]he State Board of Education will not disturb the finding [of the Local Board] unless there is a complete absence of evidence." *F.W. v. DeKalb Cnty. Bd. of Educ.*, Case No. 1998-25 (Ga. SBE, Aug. 1998).

IV. DECISION

Based on the reasons set forth above, it is the option of the State Board that the evidence supports the decision of the Local Board, and it is, therefore, **AFFIRMED**.

This the 4th day of November, 2021.

LISA KINNEMORE
VICE CHAIR FOR APPEALS