

Regular BoE Meeting
Wednesday, November 3, 2021 7:00 PM

BOE Auditorium and via Zoom Meeting
Platform
129 Church Street
Bristol, CT 06010

Agenda

- I. CALL TO ORDER/PLEDGE OF ALLEGIANCE/MOMENT OF SILENCE
- II. STAFF and STUDENT RECOGNITION
- III. APPROVAL OF MINUTES - October 6 - Regular Meeting
- IV. COMMITTEE REPORTS
- V. STUDENT REPRESENTATIVE REPORTS
- VI. CHAIR REPORT
- VII. SUPERINTENDENT REPORT
- VIII. CONSENT AGENDA
 - A. PERSONNEL
 - 1. Teacher Retirement - Effective December 31, 2021
 - 2. Teacher Resignations
 - 3. New Teacher Hires
 - 4. A-2 Resignations - Effective August 14, 2021
 - 5. A-2 Hires
 - 6. A-3 Resignation
 - 7. A-3 Hires
 - 8. Certified Personnel Who Have Attained Tenure
 - B. GRANTS
 - 1. Adult Education State Grant
 - 2. FRC - BOOST Grant
 - 3. FRC: UCONN PEP Parent Leadership Training Grant
- IX. PUBLIC COMMENT
- X. DELIBERATED ITEMS/DISTRICT LEADERSHIP TEAM REPORTS
 - A. October 1 Enrollment Count for the 2021-2022 School Year
Presenter: Dr. Sam Galloway
 - B. NEMS School Building Committee Appointment
 - C. Request to authorize the BOE Operations Committee to serve as the Edgewood Roof Replacement Building Committee
 - D. Request to Apply for a School Construction Grant for the Edgewood School Roof Replacement
 - E. Request Authorization of Schematic Design for the Edgewood School Roof Replacement
 - F. Request to Approve Ed Specs for the Edgewood School Roof Replacement Project
 - G. Request to authorize the BOE Operations Committee to serve as the Chippens Hill Heating Fuel Underground Storage Tank Replacement Building Committee

- H. Request to Apply for a School Construction Grant for the Chippens Hill Heating Fuel Underground Storage Tank Replacement
- I. Request Authorization of Schematic Design for the Chippens Hill Heating Fuel Underground Storage Tank Replacement
- J. Request to Approve the Ed Specs for Chippens Hill Heating Fuel Underground Storage Tank Replacement
- K. Request to authorize the BOE Operations Committee to serve as the Chippens Hill Diesel Fuel Underground Storage Tank Replacement Building Committee
- L. Request to Apply for a School Construction Grant for the Chippens Hill Diesel Fuel Underground Storage Tank Replacement
- M. Request Authorization of Schematic Design for the Chippens Hill Diesel Fuel Underground Storage Tank Replacement
- N. Request to approve Ed Specs for the Chippens Hill Diesel Fuel Underground Storage Tank Replacement
- O. Office of Teaching and Learning Leadership Team Report
- P. Special Services Leadership Team Report
Presenter: Dr. Kimberly Culkin
- XI. CURRICULUM REVISION
 - A. Middle School CTE Revision - Second Reading
 - B. STEM Curriculum Revisions - Second Reading
 - C. Baking and Patisserie - First Reading
 - D. Digital Music - First Reading
 - E. A Cappella Curriculum - First Reading
 - F. Jazz Band - First Reading
- XII. NEW BUSINESS
- XIII. BUILDING REPORTS
Presenter: Dr. Michael Dietter
- XIV. INFORMATION/LIAISON REPORTS
Presenter: Commissioners
- XV. EXECUTIVE SESSION
- XVI. RECONVENE INTO PUBLIC SESSION
- XVII. ADJOURNMENT

BRISTOL BOARD OF EDUCATION
Bristol, Connecticut
October 6, 2021 – Regular Meeting Minutes

The regular meeting of the Bristol Board of Education was held on Wednesday, October 6, 2021, at 7:00 p.m. at the Board of Education auditorium and via the Zoom Meeting Platform.

PRESENT: Commissioners: Eric Carlson, Jennifer Dube, Kristen Giantonio, Thomas O'Brien, Shelby Pons, John Sklenka (arrived 7:05 p.m), Karen Vibert (virtual), Allison Wadowski and Christopher Wilson; Dr. Catherine Carbone, Superintendent, Dr. Michael Dietter, Deputy Superintendent, Jill Browne, Business Director, and Peter Kelley, Council Liaison

CALL TO ORDER/PLEDGE OF ALLEGIANCE/ MOMENT OF SILENCE

Chair Jennifer Dube called the meeting to order at 7:00 p.m. and asked attendees to stand for the Pledge of Allegiance.

MEETING NORMS

Chair Dube acknowledged the meeting norms.

STAFF & STUDENT RECOGNITION

The Board recognized the following staff and students:

Annette Grabowski - BEHS - Grade 12 – Received a 2022 National Merit Scholarship Program Award Nomination.

Lawson Sewell - BCHS – Grade 9 - ALEKS Summer Challenge – Completed 252 Topics independently and won his own ice cream truck visit.

Dr. Corey Nagle - Science Teacher - BCHS - Selected to the Student Achievement Partners Advisory Board.

Julia Darcy - Grade 5 Teacher - GHS – Wrote a piece titled: *Rebuilding Elementary Education* that was published by the Connecticut Education Association. The link to the monograph is here: <https://cea.org/wp-content/uploads/2021/05/TLFP-Monograph-2021-Final.pdf> .

Doctoral Recognition of the following staff members:

Tanya Bulls, Ed.D. - Dean of Students

Molly Goodine, Ed.D. - Special Education Supervisor

Ana O'Donnell, Ed.D - Special Education Teacher

Kristin Woods, Ed.D. - K-5 Library Media Specialist

APPROVAL OF MINUTES

September 15, 2021 - Regular Meeting Minutes

Following a motion by Eric Carlson and a second by John Sklenka

Approval of the **September 15, 2021 - Regular Meeting Minutes PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

COMMITTEE REPORTS

Communications - Commissioner Pons reported that the committee met earlier this evening and discussed ParentSquare usage and different ways we can communicate with the program. The committee also heard more information regarding the intradistrict magnet school that will be opening in 2022. Information was shared regarding the different communications that will be happening at the middle schools later this month. Dr. Dietter

Communications Committee – cont'd

shared that there may be a possibility of afternoon tours on Wednesdays that people can sign up for and perhaps later in the year the building will be more accessible to visitors. Reimagining 2023 was also discussed. Dr. Carbone gave an overview of the changes that will be occurring in the next five years. The timeline shared with the committee will be shared with all board members.

Personnel – Commissioner O'Brien reported that the Personnel Committee met and following a lengthy meeting we have reached a tentative agreement with the teachers last night and earlier reached a tentative agreement with the custodial workers, maintenance, IT, and the secretaries.

Policy – Commissioner Giantonio reported that the committee met on September 22nd and held a discussion regarding Policy 5132 – Dress Code and Grooming. Dr. Dieter presented to the committee the work that was done with the regulation. Commissioners will hear more about that later this evening. There was also a discussion of Policy 3160 – Transfer of Funds. At the Finance Committee meeting, there were questions regarding clarity, there was not much done to the policy, but commissioners will hear more about that later this evening as well.

STUDENT REPRESENTATIVE REPORTS

Sydney Rodriguez – Student Representative from Bristol Central shared what is happening at Bristol Central. Sydney shared that this year felt the most normal since March 2020. There are more activities taking place. Sports and activities have begun. This year students are taking advantage of office hours, all of the teachers have been very helpful. Most clubs have started up or will begin soon. Hispanic Heritage Month began September 15 and the Office of Teaching and Learning has expanded its resources for teachers around diversity and multiculturalism. This month our Annual Homecoming Dance will take place on October 16th it will be held outdoors, next Wednesday PSATs will be held as will virtual Parent-Teacher conferences and finally School Counseling will be holding a financial aid night.

Trisha Monahan - Student Representative from Bristol Eastern reported that they have hit the midway point of the academic quarter, grades have closed and parents will be receiving students' grades. Students are back roaming the halls and everyone is excited to see one another again. For those students that have been struggling various national honor societies will be offering tutoring help, Lancer Nation mentors are also planning daily activities to help freshmen remain organized and set goals to help better themselves academically. Next week on October 13th is PSAT Day, Parent conferences and they are also offering financial aid night. Sports teams have begun and competitions are taking place, fan sections have come alive again. Clubs have been allowed to meet in person this year. This allowed for many new clubs to start up and existing clubs to return to regular meetings. Elections are taken place for clubs and honor societies, and fundraisers have returned. Student Council is planning an outdoor homecoming dance, pep rally and other student events are still up in the air, but are being worked through behind the scenes. Finally, BE has been rewarding the good behavior of students and faculty by choosing a student in each grade level along with a teacher each month who has been seen being awesome. They are rewarded with a gift card.

CHAIR REPORT – Chair Dube addressed the board regarding the start of the school year and thanked everyone for their hard work and patience as we all work through a close to; but still not normal school year.

SUPERINTENDENT REPORT – Dr. Carbone shared information related to the opening and communication of our Bristol Arts and Innovation School, this year's Alliance Grant allocation and use of funds, which is on the agenda later this evening, and a reminder to the parent community of our upcoming parent-teacher conferences scheduled in October.

BAIMS - During the past few weeks we have finalized the communication plan and parent and student sessions schedule for families and students in grades 5, 6, and 7 who may wish to enroll at our new Arts and Innovation interdistrict Magnet school. Dr. Carbone shared the schedule with the board. During that the sessions, Dr. Dieter,

SUPERINTENDENT REPORT – cont'd

Carly Fortin, Dr. Sarli, and Dr. Carbone will visit each grade 6 and 7 or grade 5, 6, and 7 students' classrooms to share the course and programs available at our new school.

Alliance Grant - Dr. Carbone explained how the Alliance Grant works. Pursuant to CT general statute, each Alliance District's receipt of its designated ECS funding is conditioned upon district submission and the Commissioner of Education's approval of a plan, district progress and performance relative to that plan, and subsequent annual amendments, in the context of the district's overall strategy to improve academic achievement. The CSDE reviews district plans on an annual basis and approves plans aligned to the goals of the program. Goals must be aligned to a tiered system of interventions. Foundational reading programs (Grades K-3). Additional learning time, either extended day or extended year A talent strategy designed to "attract, retain, promote and bolster the performance of staff," Training for school leaders and staff early childhood education, student support and Wraparound Services, Minority teacher/administrator recruiting, and or Enhancement of bilingual education programs. Dr. Carbone shared Bristol's Alliance Grant allocation for the 21-22 school year totaling \$6,484,828.00. Funding will support literacy coaching for teachers (5.75 literacy coaches) and support for students in grades K-3 who are reading below the Bristol reading benchmark (6.8 Instructional Support Teachers). In addition, we fund 13.5 kindergarten teachers, 5 mathematics coaches, 5.0 Library Media Specialists, 3.5 Deans, a dean of Climate and culture, a .5 STEM Supervisor, 3 IT Specialists, a Pre-K teacher and para-educator, 4.8 SSW, a Communication and School Partnerships Director, 2 Family Liaisons, 1 Inclusion Specialist, 1 School Psychologist, 2 School Climate/Security Personnel, 2 CREC Teacher Residents, .5 CTE Teacher, Student Support and Math Interns at NEMS, 25 current staff will receive a TESOL certificate after successful completion of the ARCTEL alternative route to certification program, and portions of salaries in the grants office. Employee benefits for all positions are also funded. Additional items include but are not limited to, ALEX 6-12: 4 Year Subscription to ST Math, ParentSquare, Digital backpack, Pear deck, Thought exchange. Our grant goals must be measurable and aligned with the State Accountability Plan.

Parent Conferences - A reminder to parents our fall conferences begin October 12th. Parents or guardians should have received information from each high school through ParentSquare regarding ways to sign up for a conference with teachers at the high school level. Conferences run through October 14th and will be held via video conferencing. Middle-Level Conferences begin on October 26th and Elementary and K8 conferences begin on October 27. Conferences for these schools run through October 29. Again teachers, principals, and team leaders will send or have sent messages through ParentSquare for conference time slots.

Reimagining BPS 2023 - Dr. Carbone reported on the Reimagining BPS 2023 - Update of Town Council Presentation. Dr. Carbone shared the 5 year Reimagining BPS Timeline with commissioners.

Update on Executive Order 13G – BPS Employee Vaccination - We are compliant with Executive Order 13G with 87.9 percent of the staff having been vaccinated.

CONSENT AGENDA

Chair Dube called for the approval of the Consent Agenda which included Items VIII.A.1. through VIII.B1.

Following a motion by Eric Carlson and a second by Kristen Giantonio

Questions followed regarding the Alliance Grant and exiting the plan.

Approval of the **Consent Agenda PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

PERSONNEL

Teacher Retirement - Effective October 15, 2021

DeFeo, Melissa - EDGE - IST Literacy Coach

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **Teacher Retirement PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

Teacher Resignations

Castles, Anna - MTV - Special Education Teacher effective September 7, 2021

Kelley, Jillian - CHMS - Special Education Teacher effective October 2, 2021

Marsella, Shea - ID - Speech and Language Pathologist effective August 2, 2021

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **Teacher Resignations PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

New Teacher Hires

Baronowski (Shea), Rebecca - BECC - Speech and Language Pathologist effective Sept. 20, 2021

Boswell, Samantha - WB - Grade 1 Teacher effective October 12, 2021

Fedorchick, Jennifer - SSS - Grade 1 Teacher effective October 13, 2021

Holmes, Tyrell - BCHS - Special Education Teacher effective September 27, 2021

Nelson, Kyle - EPH/BPA/SSS - .4 PE/Health Teacher effective September 20, 2021

Voisine, Stephanie - CHMS - Grade 8 Math Teacher effective October 1, 2021

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **New Teacher Hires PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

A-2 Resignation - Effective August 24, 2021

Russo, Dean - WB - Instructional Technology Coordinator K-8

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **A-2 Resignation PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

A-2 Hire - Effective August 24, 2021

Bolton, Sara - WB - Instructional Technology Coordinator K-8

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **A-2 Hire PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

A-3 Resignation - Effective August 24, 2021

Russo, Dean - WB - Webmaster

A-3 Resignation - Effective August 24, 2021 – cont'd

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **A-3 Resignation PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion

A-3 Hire - Effective August 24, 2021

Martino, Rocco - WB – Webmaster

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **A-3 Hire PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion

Teacher Requests for Unpaid Leave of Absences

Hoyt, Sara - MTV/WB - Music Teacher - effective August 24, 2021, through January 2, 2022

Mercier, Elena - STAF - Social Worker - effective December 3, 2021, through May 2, 2022

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **Teacher Requests for Unpaid Leave of Absences PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

GRANTS

VIII.B.1. Alliance and Priority School District Grants

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **Alliance and Priority School District Grants PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

PUBLIC COMMENT

Chair Dube read into the record all public comments that were received prior to this evening's meeting.

Emily Bailey – 21 Tiffany Lane – addressed the board regarding Superintendent executive powers.

Mary Nelson – 186 Burlington Avenue – addressed the board regarding the mask mandate.

Lauren Vernaglia – 79 Beechwood Lane – addressed the board regarding the mask mandate and the pending vaccine mandate.

Kristen Bevins – 41 Leon – addressed the board regarding parental choice.

Jennifer Van Gorder – 272 Candlewood Drive – addressed the board regarding mask choice.

Emily Michaud – 19 Driftwood Road – addressed the board regarding choice.

DELIBERATED ITEMS/DISTRICT LEADERSHIP TEAM REPORTS

Policy 6114.81 - Emergencies and Disaster Preparedness - Pandemic/Epidemic Emergencies - Emergency Suspension of Policy During Pandemic

Upon the extension of the Governors's executive authority, the Board must now vote in accordance with this policy if Dr. Carbone needs an extension of the executive authority granted to her in March 2020.

Policy 6114.81 - Emergencies and Disaster Preparedness - Pandemic/Epidemic Emergencies - Emergency Suspension of Policy During Pandemic – cont'd

Following a motion by Karen Vibert and a second by Christopher Wilson

Approval of an Extension of the Superintendent's Executive Authority **PASSED** following a **Roll Call Vote** of with five (5) Commissioners (O'Brien, Pons, Vibert, Wadowski, and Wilson) in favor of the motion and four (4) Commissioners (Carlson, Dube, Giantonio, and Sklenka) **OPPOSED**.

Special Services Leadership Team Report - Mrs. Culkin presented the Special Services Leadership Report. Mrs. Culkin reported that her report will be brief as the finance subcommittee of the Board had not met since the last Board of Education meeting. The enrollment information will be provided to the committee at next week's meeting and then the subsequent board meeting in November. This evening Mrs. Culkin shared that the CSDE is developing a comprehensive statewide Special Education Data System referred to as (CT-SEDS). CT-SEDS includes an adaptive electronic Individual Education Program (IEP) document designed to improve the format and flow of individualized educational programming (or IEP) information with intuitive, easy-to-use displays. The new system will include a parent portal for families to access their student's IEP and other important information as well as a language translation feature to ensure that parents receive information in their native language. The new and improved document will also assist planning and placement teams (PPTs) in navigating the special education process, leading to the development of high-quality IEPs for students.

The new process will:

- Reduce the current local data reporting burdens, eliminating the need for various local data uploading or collection reports (SEDAC, Evaluation Timelines, ECO, and Restraint/Seclusion);
- Provide a document repository and facilitate timely record transfers;
- Allow for the interoperability with PowerSchool

CT-SEDS will include

The following modules and functions according to a staggered timeline:

- IEP Module
- Statewide Assessment Eligibility and Accommodations Testing Designated Supports/Accommodations Form and Alternate Assessment Eligibility Form
- Service Delivery Tracking
- Documentation for Medicaid billing
- Progress Monitoring and Student Progress Reporting
- Services Plan Module
- Multi-tiered Systems of Support/Scientific Research-Based Interventions (MTSS/SRBI) Management Module
- Section 504 Accommodation Plan Module
- Gifted and Talented Module
- Surrogate Parent Module
- Document Repository Module
- Restraint/Seclusion Module
- Due Process Module
- Special Education Excess Cost Grant Module

A core leadership team will participate in 8-1.5 hour sessions starting in January to prepare for district implementation. The core team will consist of special education administrators and teachers/staff as well as general education teachers and administrators. The training sessions are at no cost to the district and the CT-SEDS IEP platform will be provided to local education agencies (LEAs) at no cost. In partnership with the Greater Bristol SEPTO, we will provide parents and families with information to aid in the transition to the new IEP document and format. Implementation of the new IEP document and platform will begin July 1, 2022.

POLICY REVISIONS

Policy 3160 – Transfer of Funds – Revision – Dr. Dietter presented Policy 3160 – Transfer of Funds. The committee did discuss the policy and at this time the only change being made is that we will need to provide a written explanation of the aforementioned transfer to the town's legislative body.

Following a motion by Eric Carlson and a second by Kristen Giantonio

Approval of the **Policy 3160 – Transfer of Funds – Revision PASSED UNANIMOUSLY** with nine (9) Commissioners (Carlson, Dube, Giantonio, O'Brien, Pons, Sklenka, Vibert, Wadowski, and Wilson) in favor of the motion.

Regulation 5132 – Dress and Grooming – Information - Dr. Dietter presented information regarding Regulation 5132 – Dress and Grooming. The policy has been revised, updated, and passed at a previous meeting. We have done our due diligence and updated the regulation associated with the policy. The revised regulation has been shared with the subcommittee.

NEW BUSINESS - There was no new business to come before the Board.

BUILDING REPORTS

BAIMS Update (aka known as MBIAMS Update)

Dr. Dietter provided the Memorial Boulevard Intradistrict Arts Magnet School Update and shared photos of the building's progress. The project is moving along on budget and on our established timeline. We are anticipating a turnover of the building for June 1, 2022. The addition to the back of the building that will be the gymnasium now has a roof on it. The walls are up and we are anticipating new windows to be delivered shortly. The majority of the windows have been installed on all exterior elevations of the building. Windows that are not in have purposefully held out to get large mechanicals and other items hoisted or craned into the building. Once that is complete we will install the remaining windows and begin interior work. There is a model classroom that is coming together on the 3rd floor. The flooring has been installed, the walls are in, most of the millwork is done and, the ceiling, lighting, etc are going in. The project is progressing nicely. Work continues with FF&E. We are finalizing equipment that will go into classrooms, furniture, technology, etc. We are in regular collaboration with the State regarding reimbursables and non-reimbursables and we continue to have a healthy contingency. Dr. Dietter shared that on October 16, 2021, there will be a celebration on the boulevard, sponsored by Bristol Parks and Community & Youth Services. They have invited the Board of Education and the constructors to participate. We will have a table set up with information regarding the program, enrollment, and FAQ's.

South Side HVAC Project

Tim Callahan provided an update on the South Side HVAC Project. There are a couple of issues, from Phase 1 there is water leakage from the units that have been installed. We are working with the manufacturer. It looks like it is a manufacturer leak and they will be coming out to look at it. We have some negative pressure on the unit as well. Allstate is now repairing where the leaks are and drawing air in. We will be shutting the system down on a Saturday, re-working it, which will be followed up with testing and balancing. We are moving along with Phase 2, the multipurpose room. The unit should be shipped and installed by the 29th.

INFORMATION/LIAISON REPORTS

Commissioner Sklenka shared a liaison report from Stafford School. The report has been shared via email with all commissioners.

VOTE TO CONVENE INTO EXECUTIVE SESSION *for the purpose of discussing:*

1. Superintendent's Evaluation

Following a motion by Eric Carlson and a second by John Sklenka

The Board of Education voted to **CONVENE INTO EXECUTIVE SESSION** for the purpose of discussing the Superintendent's Contract. (8:23 p.m.)

EXECUTIVE SESSION

PRESENT: Commissioners: Eric Carlson, Jennifer Dube, Kristen Giantonio, Thomas O'Brien, Shelby Pons, John Sklenka, Allison Wadowski, and Christopher Wilson

Executive Session was called to order at 8:33 p.m.

Dr. Carbone presented the Evidence of Effort of the goals set last year.

RECONVENE INTO PUBLIC SESSION

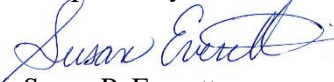
The Board of Education should reconvene into Public Session to take any votes on matters discussed in Executive Session.

ADJOURNMENT

There being no other business to come before the board and

Following a motion by Eric Carlson and a second by John Sklenka, the Board of Education meeting was adjourned. (9:15 p.m.)

Respectfully Submitted,



Susan P. Everett
Executive Secretary to the Board of Education

William Aldredge

EDUCATION

Bachelor of Science in Music Education

May 2021

Western Connecticut State University Danbury, CT

STUDENT TEACHING

Mill Ridge/ Morris Street Elementary Schools

January-March 2021

28 Morris St. Danbury, CT 06810

Supervising Teacher: Danielle Core

- Managed a general music class of 20+ students
- Constructed and executed 6+ lesson plans per week
- Taught instrumental lessons including saxophone, flute, and violin
- Accommodated for various levels of ELL students
- Modified lesson plans for split online learning

Rogers Park Middle School

March-May 2021

21 Memorial Dr. Danbury, CT 06810

Supervising Teacher: Carlton Walden

- Taught the following courses: Music Fundamentals, Modern Music
- Directed the 8th grade Choir of 20+ students
- Conducted office hours
- Accommodated for various levels of ELL students
- Modified lesson plans for split online learning

WORK EXPERIENCE

Lake Compounce Amusement- Seasonal Park Ride Manager

May 2017-Current

185 Enterprise Dr. Bristol, CT 06010

- Managed a team of 50+ ride operators
- Scheduled shifts, breaks, and operation placements
- Responded to maintenance calls
- Trained employees on rides and ensured proper ride procedures were followed
- Communicated with upper management to maintain a safe and efficient work place

Stop and Shop -Cashier

Nov. 2020 -May 2021

100 Main St N, Southbury, CT 06488

- Complete customer transactions at register
- Stocking and inventory duties
- Maintained excellent customer service

St. Pius Catholic Church- Tenor Cantor

March 2018- December 2019

310 Westfield St. Middletown, CT 06457

- Prepared and Performed Solos
- Tenor Section Leader for Choir

Einstein's Bagels - Barista

October 2017- May 2019

181 White St, Danbury, CT 06810

- Prepared drinks and food to customer satisfaction
- Completed customer transactions at register
- Followed safety protocols and kept a clean space

VOLUNTEER POSITIONS

Waterbury Arts Magnet School Summer Program

2016-2019

Waterbury, CT

- Responsible for co-directing summer musical
- Worked with choir in warm-ups and sectionals
- Administrative Duties
- Conducted rehearsals

Treasurer of American Choral Directors Association

March 2020-March 2021

Western Connecticut State University, Student Chapter

- Crafted budget for the group's fiscal year
- Preparing Financial Reports and Filing Legal Forms
- Met weekly with E-board to discuss fundraising and club activities

AFFILIATIONS & AWARDS

- National Association for Music Education
- American Choral Directors Association
- Kathwari Honors Program
- Dean's List 2017-2021
- National Association of Teachers of Singing- 2nd Place in Classical Category

SUSAN DUFFANY

EDUCATION

Bachelor of Science in Education

Wayne State University, Detroit, Mi. August 2008

Major: Special Education

Certified: Special Education (0165 Comprehensive Special Education) and Elementary Education
(k-5 all subjects)

G.P.A. 3.58

Masters of Science-Teaching (Special Education)

Walden University, Minneapolis, Minn., August 2013-December 2016

G.P.A. 4.0

Special Education Teacher-High School

09/15-present

Resource room (English, History and Biology) All grades (9,10,11,12), Co-teach (10th, 11th and 12th)

Crosby High School, Waterbury, Ct.

- Develop relationship with students, staff and families
- Maintain records for all students on PowerSchool
- Accommodate and modify lessons to be implemented in classroom
- Create and develop IEP goals and objectives with the use of Tie net software
- Adhere and keep up to date with all special education state and federal regulations and mandates
- Administer achievement assessments according to individual needs (IEP's)
- Collaborate with All building staff
- Participate in Department and staff meetings, faculty meetings, professional development
- Incorporate technology in all instruction, (e.g. google classroom,quizlet.com)
- Implement behavioral expectations daily by maintaining a PBIS curriculum
- Instruct and support students as a co-teach partner

- Create weekly Universal for design (UDL) and differentiate lessons to accommodate ALL students
- Implement individualized instructional interventions based on student needs
- Develop success plans and guide students to transition after graduation (checklists, interviews and inventories)
- Manage and evaluate staff in classroom annually
- Assess students' knowledge daily through formal and informal assessments and collect data weekly
- Participate in school and community activities

Special Education Teacher-Middle School

08/2014-06/2015

Resource room, Co-teacher- Math, English Language Arts (8th/7th)

Litchfield High School, Litchfield, Ct.

- Develop rapport with staff, students and parents
- Maintain progress monitoring and data collection for student IEP goals
- Introduce learning strategies for all content areas; math, English language arts
- Communicate progress to all stakeholders, parents, students and staff
- Provide support for general education teacher and students in an inclusive settings
- Modify and provide accommodations to be implemented in the inclusive classroom
- Plan and develop lessons with co-teaching partner

Special Education Teacher-Middle School

10/2011-08/2014

Intellectual Disability – functional Life Skills-Language Arts resource room/ Co-taught (Math, Science and Social Studies), Summer School – Essential Skills-SXI, Self -contained- Behavioral Disorder Learning Center (BDLC), Home-bound Instructor

North End Middle School, Waterbury, Ct.

- Develop relationship with students, staff and families
- Maintain records for all students on progress book
- Accommodate and modify lessons to be implemented in classroom
- Create and develop IEP goals and objectives with the use of Tie net software
- Administer achievement assessments according to individual needs (IEP's)
- Collaborate with All building staff
- Participate in Common Planning meetings
- Incorporate technology in instruction
- Implement behavioral expectations daily by maintaining a PBIS curriculum
- Instruct students as a co-teacher in Language arts, Social Studies, Science and Mathematics, reading –all grade levels (6th, 7th and 8th)
- Implement functional life skills curriculum

- Create weekly student – Universal for design and differentiate lesson
- Implement interventions based on student needs
- Manage staff in classroom
- Assess students' knowledge daily through formal and informal assessments and collection of data
- **Special Education Teacher-Summer School (ESY) –Severely Impaired students**
7/2013-8/2013 Develop rapport with families
- Create themes and develop and execute lessons
- Manage support staff-seven
- Maintain safe and nurturing environment
- Record attendance and progress for ESY
- Collect data for student IEP-objectives and goals

Homebound Special Education Teacher

11/2010-10/2011

Waterbury, Ct.

- Implement lessons provided by classroom teacher
- Provide accommodations for student on homebound bases
- Assist students with each lesson.
- Assess students on comprehension of learning

Long- term substitute, special Education teacher

Middle school resource room, High school SXI classroom

City Hill Middle School, Naugatuck High School

- Assume all responsibilities of regular classroom teacher
- Maintain a safe learning environment for all students
- Create lessons
- Supervise staff in classroom
- Provide assistance for students academically
- Assist students with Hygiene needs and supports
- Perform duties left by classroom teacher
- Collaborate with staff

Substitute special education teacher

August 2010-October 2011

Various age levels

Detroit Metropolitan Area, Mi.

- Maintain and create a daily classroom schedule
- Supervise classroom staff

- Create hands on and real life lessons with the use of adaptive technology
- Provide community based instruction and trips for students
- Implement unique individual accommodations according to the Individual Educational Plan
- Assess students daily through observations and collection of data

Professional Development

School governance committee (2018-2019), NEASC Committee 2019-(student learning),SAT training proctor 2019),Read-Works PD 2017Project Based Learning PD (August 2016),Walk for Success Community Initiative (August 2016),Reading Assessment (GORT), WIAT (Evaluation)-Training (Fall 2015), College Board Training (SAT) (trained Proctor for SAT)2015-2016,Goal-Kit-Training (2015),Training on IEP direct (November 2014), Workshop on Google Classroom (2015), PD on formative and summative assessment (2015), UDL workshop (2015), CCSS and Unpacking Smart goals (2014) Common core professional development, Smarter balance training, Bloom board training (Teacher evaluation 2014), Brain Gym workshop(2013), Co-teacher workshop (2013), CPI training (2012) (2015) CEA New teacher Conference (2013,2012), Smart board workshop training (2012),-2012Writing objectives-2012Reading strategies for the content area- 2011,workshop-assistive technology for the Autistic student 2011, Member of the PBIS Committee (2012,2013,2014)Member of the International Honor society, Completion of Team-Beginning preparation program for CT, Staff Member of the week (March 7,2014), Participate on a committee (core beliefs) for NEASC- New England Association for School Accreditation (2014-2015).

PAULA ANN LOVE

CAREER OBJECTIVE: To obtain a position that will allow me to utilize my skills, knowledge and expertise in planning and implementing a curriculum in grades PreK-6.

CERTIFICATION: Connecticut Certified Grades PreK and K (008)
Connecticut Certified Grades K-6 (013)
Provisional Educator Certificate July 2014-June 2022

EDUCATION: **THE UNIVERSITY OF HARTFORD**
Masters in Education, Spring 1999
THE UNIVERSITY OF CONNECTICUT
Bachelor of Science in Early Childhood Education, May 1991

**RELATED
EXPERIENCE:**
2012-Present

UNIVERSITY OF HARTFORD MAGNET SCHOOL
PreK Teacher-Planned and implemented curriculum, conducted assessments and assumed all duties and responsibilities

Sept 2002-
2012

Substitute Teacher for grades Prek-5 with long term assignment in PreK

Associate Instructor for grades K-5-Responsible for scheduling and placement of students, administering tests, planning, implementing intervention programs and inputting data. Worked with many literacy and math intervention programs such as Foundations, LLI

Oct 1999-
June 2001

CHERRY BROOK PRIMARY SCHOOL
Third Grade Teacher-one year position. Second Grade Teacher-one year position. Planned and implemented curriculum as well as assumed all duties and responsibilities of classroom teacher.

**SPECIAL
ACTIVITIES:**

CPR and First Aid certified
March 2021-March 2023

Lauren Santiago

Objective To obtain a teaching position in an elementary, middle, or high school setting, grades Pre-K -12.

Summary Excellent interpersonal and communication skills.
Motivated and able to prioritize.
Strong in MS Office and Google.

Education Bachelor of Science in Music Education,
Date of graduation: May 22, 2021
Central Connecticut State University, New Britain, CT
3.68 GPA
Dean's List – Graduated Cum Laude

Certification Initial Educator Certification
Certification Number: C072021002908
EdTPA: Passed

Teaching

Experience WEBSTER HILL ELEMENTARY SCHOOL, West Hartford, CT
Student Teacher (Grade PreK-5) January 2021- May 2021

- Observed and evaluated behavior management, classroom interaction, and classroom management.
- Prepared and taught multiple lesson plans consisting of rhythmic dictation, songbooks, musical activities and games for grades PreK-5th.

WOLCOTT ELEMENTARY SCHOOL, West Hartford, CT

Teaching Candidate (Grade 4)

September 2019-November 2019

- Observed and evaluated behavior management, classroom interaction, and classroom management
- Created a lesson plan and taught a song by rote
- Created a lesson plan and taught a dancing activity that went along with the rote song I previously taught the class.

SMITH ELEMENTARY SCHOOL, New Britain, CT

Teaching Candidate (Grade 3)

September 2019-November 2019

- Observed and evaluated behavior management, classroom interaction, and classroom management.
- Prepared and instituted a class activity in math.
- Provided one-on-one tutoring experience in math.
- Assisted teacher with small group instruction.

Other Related

Experience VACATION BIBLE SCHOOL, Bristol, CT

Music Director (Ages 13-18)

Summers 2013—18

- Prepared and taught songs to campers
- Prepared and taught motions that went along with the songs.

Work

Experience EVENT MANAGEMENT, Central Connecticut State University, New Britain CT

Usher

- Event setup; tables, tablecloths, chairs, tents, and roping off sections of audience seating.
- Meeting with clients to discuss last minute requests and instruction.
- Event breakdown: restoring event spaces back to default setup.

LOGISTIC SUPPORT, Central Connecticut State University, New Britain, CT

Office

- Open and close office
- Making files

- Making signs
- Taking calls and messages
- Scheduling events
- Training new office employees

ELMWOOD COMMUNITY CENTER, 1106 New Britain Ave, West Hartford, CT

Learning Program Staff

- Helped students in grades K-5 with their online homework during the pandemic.
- Supervised children throughout the day.
- Implemented and engaged in fun activities throughout the day.

Honors

- Johannes Scholarship Fund, November 2019
- Deans List years: 2017-2021
- Graduated with Cum Laude

Activities

- American Choral Directors Association (September 2018-Present)
- National Association of Music Education (September 2018-Present)
- Chromachord Coed A Cappella group Music Director (September 2017-2020)
- Youth/ Adult Choir – St. Joseph’s Church (2010- 2018)
- Handbell Choir – St. Joseph’s Church (2012- 2018)

Skills and Interests

- Proficient with Microsoft Office products
- Proficient with Google programs
- Organization skills
- Problem solving

References

- Available upon request

**BOARD OF EDUCATION
Bristol, Connecticut**

TENURE ELIGIBILITY LIST

Certified professional personnel who became eligible for continuing contract status (tenure) during the period September 1, 2020 through September 1, 2021 are listed below.

Bristol Central High School

	<u>Effective Date</u>
Gardiner, Kenneth - Social Studies Teacher	6/30/21
Nass, Brian - Social Studies Teacher	6/30/21

Bristol Eastern High School

LeClair, Michael - Technology Teacher	2/28/2019*
Mendal, Zoe - Science Teacher	1/31/21

Chippens Hill Middle School

Abucewicz, Danielle - Music Teacher	12/31/20
Maust, Andrew - Music Teacher	6/30/21
McCane, Tara - Social Studies	6/30/21
Santopietro, Jenna - English Teacher	6/30/21
Stabile, Anamarie - Science Teacher	6/30/21

Ivy Drive School

Susat, Kathleen - Physical Education	6/30/21
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Northeast Middle School

Roche, Sheryl - Math Teacher	1/31/21
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South Side School

Webster, Amanda - Physical Education	6/30/21
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Stafford School

Wood, Andrew - Physical Education Teacher	9/30/20
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West Bristol K-8 School

Taylor, Tina - Art Teacher	6/30/21
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Special Education

Autencio, Danielle M. - Special Education Teacher - EPH	6/30/21
Consonni, Claire A. - Pre-K Special Education Teacher - BECC	6/30/21
Costa, John - Special Education Teacher - NEMS	6/30/21
Daboul, Kristin L. - Speech and Language Pathologist - EPH	6/30/21
Ferraro, M. Rebeca. - Pre-K Special Education Teacher - BECC	6/30/21
Lease, Noah - Special Education Teacher - BCHS	5/31/21
Turner, Eric - Special Education Teacher - EPH	1/31/21

Administrators

Culkin, Kimberly

6/30/2021

Ward, Leszek

6/30/2021

Rechenberg, Jaime

11/30/2020

FISCAL YEAR: 2022

ED-114 BUDGET FORM

GRANTEE NAME: Bristol	TOWN CODE: 17			
GRANTEE TITLE: ADULT EDUCATION PROVIDER				
PROJECT TITLE: Bristol Adult Education				
FUND: 11000	SPID: 17030	YEAR: 2022	PROG: 84002	CF1: 170013
GRANT PERIOD: 07/01/2021– 06/30/2022		AUTHORIZED AMOUNT: \$734,633		
AUTHORIZED AMOUNT BY SOURCE:				
LOCAL:	COOP DUE:	STATE:		

CODES	DESCRIPTIONS	STATE/LOCAL	COOP REV	TOTAL
111A	NON-INSTRUCTIONAL	\$252,097	\$22,810	\$274,907
111B	INSTRUCTIONAL	\$234,822	\$26,278	\$261,100
200	PERSONAL SERVICES-EMPLOYEE BENEFITS	\$20,174	\$0	\$20,174
322	IN SERVICE	\$1,625	\$0	\$1,625
330	EMPLOYEE TRAINING AND DEVELOPMENT SERVICES	\$0	\$0	\$0
400	PURCHASED PROPERTY SERVICES	\$125,177	\$5,775	\$130,952
500	OTHER PURCHASED SERVICES	\$30,445	\$0	\$30,445
600	SUPPLIES	\$6,480	\$2,750	\$9,230
700	PROPERTY	\$6,200	\$0	\$6,200
	TOTAL	\$677,020	\$57,613	\$734,633

ORIGINAL REQUEST DATE	STATE DEPARTMENT OF EDUCATION PROGRAM MANAGER AUTHORIZATION	DATE OF APPROVAL
REVISED REQUEST DATE		

STATE OF CONNECTICUT
DEPARTMENT OF EDUCATION

GRANT AWARD NOTIFICATION

1 Grant Recipient

Bristol School District
DUNS Number: 060665783

4 Award Information

Grant Type: STATE
Statute:
CFDA #:
SDE Project Code: SDE000000000002
Grant Number: 017-000 11000-17030-2022-84002-170013

2 Grant Title

State Adult Education - Provider

5 Award Period

7/1/2021 - 6/30/2022

3 Education Staff

Program Manager:
Marcy Reed (860) 807-2130

Payment & Expenditure Inquiries:
Jeff Lindgren (860) 713-6624

6 Authorized Funding

Grant Amount: \$677,020.00

Funding Status: Final

7 Terms and Conditions of Award

This grant is contingent upon the continuing availability of funds from the grant's funding source and the continuing eligibility of the State of Connecticut and your town/agency to receive such funds.

Fiscal and other reports relating to this grant must be submitted as required by the granting agency. Written requests for budget revisions for expenditures made between July 1, 2021 and June 30, 2022 must be received at least 60 days prior to the expiration of the grant period but no later than May 1, 2022. For grants awarded for two-year periods beginning July 1, 2021, final second-year budget revision requests covering the entire two-year period must be received no later than February 1, 2023. The grantee shall provide for an audit acceptable to the granting agency in accordance with the provisions of Sections 7-394a and 7-396a of the Connecticut General Statutes.

The grant may be terminated upon 30 days written notice by either party. In the event of such action, all remaining funds shall be returned in a timely fashion to the granting agency.

Please refer to the Authorized Amount by Source page for the breakdown of the Award by State Source and Local Source.

This grant has been approved.

9/28/2021

John Frassinelli - CSDE Management Approver

BRISTOL PUBLIC SCHOOLS

**ENROLLMENT FIGURES
2021-2022**

Kdg = 22
Grades 1 - 2 = 23
Grades 3 - 5 = 28

As of October 1, 2021 at 3:00 pm

Elem.School	Pre-K	Kgn.	1	2	3	4	5	Total	Total Prev. Yr.	DIFF.
Edgewood		21	17	23	21	23	24			
		21	18	22	20	24	25			
Total	0	42	35	45	41	47	49	259	261	-2
Ellen Hubbell		22	20	24	20	20	23			
		22	23	23	20	20	24			
		22	21	23	20	22				
Total	0	66	64	70	60	62	47	369	383	-14
Greene-Hills	11	21	17	22	20	23	23			
	12	20	19	22	18	20	22			
		21	19	23	18	18	23			
		21	17	23	21	19	23			
		20	17		17		23			
Total	23	103	89	90	94	80	114	593	604	-11
Ivy Drive	16	18	19	19	16	22	22			
	14	19	20	21	15	24	19			
		18	19	21	16	22	19			
Total	30	55	58	61	47	68	60	379	381	-2
Mt. View	14	22	18	20	22	19	17			
	14	22	18	19	19	20	17			
	16			20		19	17			
	16									
Total	60	44	36	59	41	58	51	349	317	32
South Side	8	19	20	21	24	22	23			
	11	17	21	22	26	21	23			
	16	20	22	21	25	21	23			
	15	19		21		22				
Total	50	75	63	85	75	86	69	503	486	17

BRISTOL PUBLIC SCHOOLS

**ENROLLMENT FIGURES
2021-2022**

Kdg = 22
Grades 1 - 2 = 23
Grades 3 - 5 = 28

Elem.School	Pre-K	Kgn.	1	2	3	4	5	Total	Total Prev. Yr.	DIFF.
Stafford		16	22	20	16	20	18			
		17	21	21	15	19	21			
		16	18	21	15	20	20			
Total	0	49	61	62	46	59	59	336	342	-6
West Bristol		21	20	21	20	20	22			
		20	19	21	20	23	22			
		20	21	21	19	21	23			
		20	18	20	19	23	23			
		20	21	19						
Total	0	101	99	102	78	87	90	557	551	6
BECC	6									
	5									
	7									
	8									
	4									
	6									
	7									
	11									
	11									
	9									
	10									
	11									
	12									
Speech	18									
Total	125	0	0	0	0	0	0	125	108	17
TOTALS	288	535	505	574	482	547	539	3470	3433	37
Total K - 5		535	505	574	482	547	539	3182	3202	-20

Elementary Class Size Averages

Pre-K	Kgn.	1	2	3	4	5	K-5
10.8	19.8	19.4	21.3	19.3	21.0	21.6	20.7

excludes
Speech

Range 20-21							
Range 19-20	4-16	16-22	17-23	19-24	15-26	18-24	17-25

excludes
Speech

BRISTOL PUBLIC SCHOOLS

**ENROLLMENT FIGURES
2021-2022**

Kdg = 22
Grades 1 - 2 = 23
Grades 3 - 5 = 28

Mid. School	6	7	8	Total	Total Prev. Yr.	DIFF.
Chippens Hill	238	247	240	725	736	-11
Greene-Hills	94	96	111	301	305	-4
Northeast	135	120	144	399	437	-38
West Bristol	108	97	105	310	307	3
Total	575	560	600	1735	1785	-50

High School	9	10	11	12	Total	Total Prev. Yr.	DIFF.
BCHS	333	313	318	270	1234	1223	11
BEHS	341	295	272	240	1148	1110	38
BPA	3	6	18	20	47	46	1
Total	677	614	608	530	2429	2379	50
Community/Vocational Program					16	22	-6
					2445	2401	44

	Number Attending	Total to Date	Total Prev. Yr.	DIFF.
	Total PreK-5	3470	3433	37
	Total Gr. 6-8	1735	1785	-50
	Total Gr. 9-12	2445	2401	44
	Sub Total	7650	7619	31
Special Education Program: Citywide	ASEP	24	26	-2
	Sub Total	7674	7645	29
Bristol Students Enrolled But Not Attending a Bristol Public School and Counted in the State Report	Spec. Ed. Out Pl. Priv.	103	110	-7
	BTEC	14	25	-11
	Sub Total	117	135	-18
	Gr. Total Enrolled	7791	7780	11
Magnet Students		243	267	-24
	Total	8034	8047	-13

BRISTOL PUBLIC SCHOOLS

**ENROLLMENT FIGURES
2021-2022**

Kdg = 22
Grades 1 - 2 = 23
Grades 3 - 5 = 28

COMPARISON OF BRISTOL NUMBERS PREVIOUS YEAR TO CURRENT YEAR

SCHOOL	C. YR.	PR. YR	DIFF.
Edgewood	259	261	-2
Greene-Hills	593	604	-11
Hubbell	369	383	-14
Ivy Drive	379	381	-2
Mt. View	349	317	32
South Side	503	486	17
Stafford	336	342	-6
West Bristol	557	551	6
BECC	125	108	17
EL. Subtotal	3470	3433	37
CHMS	725	736	-11
GH	301	305	-4
NEMS	399	437	-38
WB	310	307	3
MS. Subtotal	1735	1785	-50
BCHS	1234	1223	11
BEHS	1148	1110	38
BPA	47	46	1
HS. Subtotal	2429	2379	50
Comm/Voc	16	22	-6
ASEP	24	26	-2
Subtotal	40	48	-8
Grand Total	7674	7645	29
Minus PreK	7386	7414	-28

BRISTOL PUBLIC SCHOOLS

**ENROLLMENT FIGURES
2021-2022**

Kdg = 22
Grades 1 - 2 = 23
Grades 3 - 5 = 28

High School Class Load Teachers Over 130 Students

BCHS

Subject	21-22	20-21	Diff.
English	1	2	-1
Math	1	2	-1
Science	1	0	1
Soc. Studies	0	1	-1
World Lang.	1	0	1
Total	4	5	-1

BEHS

Subject	21-22	20-21	Diff.
English	1	0	1
Math	0	1	-1
Science	0	0	0
Soc. Studies	1	0	1
World Lang.	1	0	1
Total	3	1	2

Sections per Grade

	*PreK	Kind.	1	2	3	4	5	Total PreK	Total K - 5
Edgewood	0	2	2	2	2	2	2	0.0	12
Ellen Hubbell	0	3	3	3	3	3	2	0.0	17
Greene-Hills	2	5	5	4	5	4	5	2.0	28
Ivy Drive	2	3	3	3	3	3	3	2.0	18
Mt. View	4	2	2	3	2	3	3	4.0	15
South Side	4	4	3	4	3	4	3	4.0	21
Stafford	0	3	3	3	3	3	3	0.0	18
West Bristol	0	5	5	5	4	4	4	0.0	27
BECC	13							13.0	
Total	25	27	26	27	25	26	25	25.0	156
								Total Sections	181.0
								Total Sec K-5	156.0

* Speech not included in Prek

RACIAL TOTALS

Oct 1 , 2020

Grade	American Indian/ Native Alaskan					Asian American/ Pacific Islander					Black/ Not of Hispanic Origin					White/ Not of Hispanic Origin					Hispanic					Unclassified					Two or More Races					Grade	Total				
	M	F	NB	Tot.	%	M	F	NB	Tot.	%	M	F	NB	Tot.	%	M	F	NB	Tot.	%	M	F	NB	Tot.	%	M	F	NB	Tot.	%	M	F	NB	Tot.	%		M	F	NB	Tot.	%
Pre-K	0	0	0	0	0.0%	8	7	0	15	5.2%	8	5	0	13	4.5%	72	50	0	122	42.2%	64	49	0	113	39.1%	0	0	0	0	0.0%	16	10	0	26	9.0%	Pre-K	168	121	0	289	57.8%
Kind.	1	0	0	1	0.2%	14	3	0	17	3.2%	15	17	0	32	5.9%	130	123	0	253	47.0%	89	101	0	190	35.3%	0	0	0	0	0.0%	25	20	0	45	8.4%	Kind.	274	264	0	538	53.0%
GR. 1	0	1	0	1	0.2%	6	8	0	14	2.8%	24	18	0	42	8.3%	114	100	0	214	42.4%	104	92	0	196	38.8%	0	0	0	0	0.0%	20	18	0	38	7.5%	GR. 1	268	237	0	505	57.6%
GR. 2	1	0	0	1	0.2%	7	8	0	15	2.6%	18	24	0	42	7.3%	160	115	0	275	47.9%	102	105	0	207	36.1%	0	0	0	0	0.0%	17	17	0	34	5.9%	GR. 2	305	269	0	574	52.1%
GR. 3	0	0	0	0	0.0%	7	4	0	11	2.3%	19	17	0	36	7.5%	109	88	0	197	40.9%	98	109	0	207	42.9%	0	0	0	0	0.0%	13	18	0	31	6.4%	GR. 3	246	236	0	482	59.1%
GR. 4	1	0	0	1	0.2%	9	8	0	17	3.1%	22	17		39	7.1%	139	137	0	276	50.2%	91	107	0	198	36.0%	0	0	0	0	0.0%	8	11	0	19	3.5%	GR. 4	270	280	0	550	49.8%
GR. 5	0	1	0	1	0.2%	15	6	0	21	3.9%	19	21	0	40	7.4%	143	135	0	278	51.1%	98	86	0	184	33.8%	0	0	0	0	0.0%	9	11	0	20	3.7%	GR. 5	284	260	0	544	48.9%
GR. 6	0	0	0	0	0.0%	6	14	0	20	3.5%	30	27	0	57	9.9%	123	150	0	273	47.5%	102	93	0	195	33.9%	0	0	0	0	0.0%	18	12	0	30	5.2%	GR. 6	279	296	0	575	52.5%
GR. 7	0	0	0	0	0.0%	5	10	0	15	2.7%	15	33	0	48	8.7%	122	141	2	265	48.1%	98	101	0	199	36.1%	0	0	0	0	0.0%	11	13	0	24	4.4%	GR. 7	251	298	2	551	51.9%
GR. 8	0	0	0	0	0.0%	14	13	0	27	4.5%	17	21	1	39	6.5%	161	130	2	293	48.8%	102	112	0	214	35.7%	0	0	0	0	0.0%	15	12	0	27	4.5%	GR. 8	309	288	3	600	51.2%
GR. 9	0	0	0	0	0.0%	5	12	0	17	2.5%	25	23	0	48	7.1%	165	160	1	326	48.2%	132	118	0	250	36.9%	0	1	0	1	0.2%	13	22	0	35	5.2%	GR. 9	340	336	1	677	51.7%
GR. 10	0	0	0	0	0.0%	9	14	0	23	3.7%	28	27	0	55	9.0%	146	153	0	299	48.7%	98	119	0	217	35.3%	0	0	0	0	0.0%	10	10	0	20	3.3%	GR. 10	291	323	0	614	51.3%
GR. 11	0	2	0	2	0.3%	10	14	0	24	3.9%	12	22	0	34	5.5%	169	177	0	346	56.4%	89	91	0	180	29.3%	0	0	0	0	0.0%	16	12	0	28	4.6%	GR. 11	296	318	0	614	43.6%
GR. 12	1	0	0	1	0.2%	9	4	0	13	2.4%	24	21	0	45	8.4%	162	152	2	316	58.7%	68	77	0	145	27.0%	0	0	0	0	0.0%	10	8	0	18	3.3%	GR. 12	274	262	2	538	41.3%
Total	4	4	0	8	0.1%	124	125	0	249	3.3%	276	293	1	570	7.5%	1915	1811	7	3733	48.8%	1335	1360	0	2695	35.2%	0	1	0	1	0.0%	201	194	0	395	5.2%	Total	3855	3788	8	7651	51.2%

ELL #s

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
263	329	315	355	341	354	377	370	415	397	423

**BRISTOL PUBLIC SCHOOLS
 RACIAL SURVEY BY SCHOOL
 10/1/2020**

School	American Indian	Asian	Black	White	Hispanic	Native Hawaiian	Two or More	Unspecified	Total	Percentage of Diversity in Student Body						
										% 2011	% 2012	% 2013	% 2014	% 2015	% 2016	% 2017
BCHS	0	26	79	621	459	0	55	1	1240	49.9%	45.4%	43.4%	40.9%	39.6%	35.9%	35.6%
BEHS	3	51	100	639	319	0	43	0	1155	44.7%	40.8%	37.2%	34.9%	31.4%	30.2%	30.9%
CHMS	0	34	63	331	269	0	27	0	724	54.3%	53.5%	51.7%	48.2%	45.2%	37.2%	36.5%
NEMS	0	19	29	227	102	0	22	0	399	43.1%	42.8%	39.8%	35.1%	31.4%	26.9%	26.5%
GH	2	37	72	428	320	0	36	0	895	52.2%	49.8%	50.6%	49.9%	45.6%	42.1%	42.2%
WB	0	21	62	377	349	1	59	0	869	56.6%	58.2%	55.3%	51.3%	48.5%	44.6%	43.2%
EDGE	0	8	9	126	98	0	19	0	260	51.5%	49.8%	49.5%	46.4%	43.8%	38.1%	39.0%
EPH	0	16	33	140	157	0	23	0	369	62.1%	58.7%	56.7%	55.3%	52.8%	51.1%	49.0%
ID	0	9	32	207	107	0	25	0	380	45.5%	44.4%	38.1%	37.6%	37.6%	33.7%	31.2%
MTV	0	17	22	182	105	0	24	0	350	48.0%	41.3%	41.2%	41.3%	37.3%	36.3%	38.3%
SSS	2	9	34	246	189	0	24	0	504	51.2%	45.9%	44.2%	44.4%	43.3%	38.2%	37.5%
STAF	0	8	30	135	147	0	20	0	340	60.3%	59.4%	51.7%	51.6%	47.2%	41.1%	43.4%
ASEP	0	0	4	9	11	0	0	0	24	62.5%	50.0%	52.2%	58.8%	50.0%	50.0%	61.9%
COMM VOC	0	0	1	9	4	0	2	0	16	43.8%	31.8%	28.6%	37.5%	23.1%	25.0%	33.3%
BECC	0	2	2	54	57	0	11	0	126	57.1%	51.9%	40.3%	41.2%	44.1%	36.6%	19.0%
BPA	0	0	3	27	14	0	3	0	47	42.6%	43.5%	35.0%	52.8%	46.2%	39.1%	42.9%
TOTAL	7	257	575	3758	2707	1	393		7698	51.2%	48.6%	46.3%	44.3%	41.6%	37.7%	34.2%

ELL #s

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2121
263	329	315	355	341	354	377	370	415	397	423

**BRISTOL PUBLIC SCHOOLS
ENROLLMENT FIGURES
PAROCHIAL SCHOOLS
10/1/2020**

School	Pre-K	Kgn.	1	2	3	4	5	6	7	8	Total	Pr.Yr.	#Bristol
Heritage Ch.	Closed		0	0	0	0	0	0	0	0	0	0	0
Immanuel Lu.	42	15	13	12	9	9	6	5	5	8	124	97	90
St. Anthony	Closed		0	0	0	0	0	0	0	0	0	0	0
St. Joseph	19	8	16	15	18	17	18	17	20	15	163	169	125
St. Matthew	21	13	16	17	19	13	19	18	22	8	166	164	118
Total	82	36	45	44	46	39	43	40	47	31	453	430	333

School	9	10	11	12							Total	Pr.Yr.	#Bristol
St. Paul	82	111	104	123							420	581	105
Heritage	Closed		0	0							0	0	
Total	82	111	104	123							420	581	105

Parochial Totals

Level	20-21	Pr.Yr
Elementary	453	430
Secondary	420	581
Total	873	1011

BRISTOL CENTRAL HIGH SCHOOL

TO: Dr. Catherine Carbone FROM: Peter Winger (Vicky Blais)
 RE: Section Anaysis 21-22 / S1 DATE: October 1, 2021

Based on Master Schedule

Department								October, 2021			October, 2020			October, 2019			October, 2018		
	1-5	6-10	11-15	16-20	21-25	26-30	>30	Total	Total	Section	Total	Total	Section	Total	Total	Section	Total	Total	Section
	Students	Sections	Average	Students	Sections	Average	Students	Sections	Average	Students	Sections	Average	Students	Sections	Average	Students	Sections	Average	
Art	1		1	6	10			358	18	19.89	362	20	18.1	352	18	19.56	371	18	20.61
AVID				4				69	4	17.25	75	4	18.75	77	4	19.25	73	4	18.25
Business			2	15				319	17	18.76	237	13	18.23	223	12	18.58	213	12	17.75
English			6	31	25			1220	62	19.68	1033	51	20.25	970	51	19.02	975	45	21.67
English-Team											268	16	16.75	335	16	20.94	276	16	17.25
English Total											1301	67	19.42	1305	67	19.48	1251	61	20.51
ELL	1	4	1					45	6	7.50	84	11	7.64	75	10	7.5	53	10	5.3
Fam Cons Science			1	11				225	12	18.75	219	12	18.25	202	12	16.83	199	12	16.58
Math		1	11	30	19	1		1128	62	18.19	926	52	17.81	909	47	19.34	899	46	19.54
Math-Team											286	16	17.88	344	16	21.5	294	16	18.38
Math Total											1212	68	17.82	1253	63	19.89	1193	62	19.24
Medical (HO)						2		46	2										
Music	1		8					120	9	13.33	102	8	12.75	92	8	11.5	100	9	11.11
Band						1	1	58	2	29.00	74	2	37	72	2	36	72	2	36
Choir							1	38	1	38.00	71	3	23.67	77	2	38.5	70	1	70
Phys. Ed.				1	7	12	3	656	23	28.52	570	23	24.78	621	22	28.23	570	26	21.92
Health				3	12			281	15	18.73	151	7	21.57	171	8	21.38	150	12	12.5
Science			12	27	22			1133	61	18.57	867	45	19.27	810	44	18.41	767	44	17.43
Science-Team											274	16	17.13	339	16	21.19	276	16	17.25
Science Total											1141	61	18.7	1149	60	19.15	1043	60	17.38
Soc.Stud		5	15	26	21			1181	67	17.63	865	46	18.8	829	45	18.42	902	44	20.5
Soc.Stud-Team											275	16	17.19	315	16	19.69	246	16	15.38
Soc. Stud Total											1140	62	18.39	1144	61	18.75	1148	60	19.13
Special Ed.	16	29	30	2	7		1	971	85	11.42	909	96	9.47	874	101	8.65	850	99	8.59
Technical Ed.		1	4	7				195	12	16.25	201	12	16.75	176	12	14.67	164	12	13.67
World Lang.	2	4	10	8	18	4		830	46	18.04	842	45	18.71	811	49	16.55	785	45	17.44
TOTALS	21	44	101	171	141	20	6	8873	504			514			513			505	

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
Fernandez, Leslie	Art	AP STUDIO ART/PORTFOLIO	61411.1	1-2(A)	21-22	8	4
Fernandez, Leslie	Art	PHOTO AS ART	61402.1	5-6(A)	S1	8	14
Fernandez, Leslie	Art	DRAW and PAINT 3	61032.1	3-4(A)	S1	8	16
Fernandez, Leslie	Art	DESIGN 1	61371.1	1-2(B)	S1	8	20
Fernandez, Leslie	Art	DRAW and PAINT 1	61012.1	3-4(B)	S1	8	24
Fernandez, Leslie	Art	DRAW and PAINT 1	61012.2	7-8(B)	S1	8	24
Kosciukiewicz, Peter L	ART	SCULPTURE 1	61212.7	3-4(B)	S1	6	16
Kosciukiewicz, Peter L	ART	SCULPTURE 1	61212.2	5-6(A)	S1	6	16
Kosciukiewicz, Peter L	ART	DRAW and PAINT 2	61022.1	1-2(A)	S1	6	18
Kosciukiewicz, Peter L	ART	DRAW and PAINT 1	61012.6	7-8(B)	S1	6	23
Kosciukiewicz, Peter L	ART	DRAW and PAINT 1	61012.5	1-2(B)	S1	6	24
Kosciukiewicz, Peter L	ART	DRAW and PAINT 1	61012.4	3-4(A)	S1	6	24
Monaco-Walsh, Kristine C	Art	SCULPTURE 1	61212.1	3-4(A)	S1	2	16
Monaco-Walsh, Kristine C	Art	POTTERY 1	61112.3	1-2(B)	S1	1	23
Monaco-Walsh, Kristine C	Art	POTTERY 1	61112.1	1-2(A)	S1	1	24
Monaco-Walsh, Kristine C	Art	POTTERY 1	61112.4	3-4(B)	S1	1	24
Monaco-Walsh, Kristine C	Art	POTTERY 1	61112.2	7-8(A)	S1	1	24
Monaco-Walsh, Kristine C	Art	POTTERY 2	61122.1	5-6(B)	S1	1	24
Gardiner, Kenneth H	AVID	AVID Tutoring	670000.5	5-6(A)	21-22	228	17
Gardiner, Kenneth H	AVID	AVID Tutoring 3	672000.5	5-6(B)	21-22	228	18
McCabe, Kelly W	AVID	AVID Tutoring 2	671000.1	1-2(A)	21-22	116	18
Nagle, Corey E	AVID	AVID Tutoring 4	673000.1	5-6(A)	21-22	235	16
Cote, Michelle	CATE/BUS	Computer Programming & Video Game D	91321.4	3-4(B)	S1	101	18
Cote, Michelle	CATE/BUS	Information Processing	91422.1	1-2(A)	S1	101	20
Cote, Michelle	CATE/BUS	Information Processing	91422.2	5-6(A)	S1	101	20
Cote, Michelle	CATE/BUS	SMALL BUSINESS OWNERSHIP	91472.11	1-2(B)	S1	101	20
Cote, Michelle	CATE/BUS	SMALL BUSINESS OWNERSHIP	91472.1	5-6(B)	S1	101	20
Ellison, Effrin	CATE/BUS	Introduction to Marketing	91512.6	3-4(A)	S1	102	19
Ellison, Effrin	CATE/BUS	WEB SITE DESIGN	91482.3	3-4(B)	S1	102	19
Ellison, Effrin	CATE/BUS	BUSINESS MANAGEMT	91412.3	7-8(A)	S1	102	20
Ellison, Effrin	CATE/BUS	Introduction to Marketing	91512.7	1-2(B)	S1	102	20
Ellison, Effrin	CATE/BUS	Introduction to Marketing	91512.8	5-6(B)	S1	102	20
Ellison, Effrin	CATE/BUS	PERSONAL FINANCE & INVESTMENT	91462.7	5-6(A)	S1	102	20
Roberge, Laurie B	CATE/Bus	ACCOUNTING 1	91101.2	5-6(A)	21-22	103	12
Roberge, Laurie B	CATE/Bus	ACCOUNTING 1	91101.1	1-2(A)	21-22	103	15
Roberge, Laurie B	CATE/Bus	PERSONAL FINANCE & INVESTMENT	91462.3	7-8(B)	S1	103	17
Roberge, Laurie B	CATE/Bus	PERSONAL FINANCE & INVESTMENT	91462.2	5-6(B)	S1	103	19
Roberge, Laurie B	CATE/Bus	PERSONAL FINANCE & INVESTMENT	91462.1	3-4(A)	S1	103	20
Roberge, Laurie B	CATE/Bus	PERSONAL FINANCE & INVESTMENT	91462.11	3-4(B)	S1	103	20
Smith, Alison R	CATE/FCS	Baking & Patisserie	101072.2	5-6(A)	S1	10	19
Smith, Alison R	CATE/FCS	Intro Foods & Nutrition	101042.8	3-4(B)	S1	10	19
Smith, Alison R	CATE/FCS	Baking & Patisserie	101072.4	5-6(B)	S1	10	20
Smith, Alison R	CATE/FCS	Intro Foods & Nutrition	101042.5	3-4(A)	S1	10	20
Smith, Alison R	CATE/FCS	Intro Foods & Nutrition	101042.6	7-8(A)	S1	10	20

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
Smith, Alison R	CATE/FCS	Intro Foods & Nutrition	101042.7	7-8(B)	S1	10	20
Twiggs, Tina M	CATE/FCS	EARLY CHILDHOOD EDUCATION 1	102211.1	3-4(A)	S1	12	11
Twiggs, Tina M	CATE/FCS	EARLY CHILDHOOD EDUCATION 1	102211.2	7-8(A)	S1	12	16
Twiggs, Tina M	CATE/FCS	Intro Foods & Nutrition	101042.2	3-4(B)	S1	13	20
Twiggs, Tina M	CATE/FCS	Intro Foods & Nutrition	101042.1	5-6(A)	S1	13	20
Twiggs, Tina M	CATE/FCS	Intro Foods & Nutrition	101042.3	5-6(B)	S1	13	20
Twiggs, Tina M	CATE/FCS	Intro Foods & Nutrition	101042.4	7-8(B)	S1	13	20
Holley, Christine M	CATE/HO	Foundations in Health Science	82132.2	3-4(B)	S1	27	20
Holley, Christine M	CATE/HO	Medical Terminology/UCONN	82122.1	1-2(B)	21-22	27	26
Horan, Jonathan D	CATE/Tech	Principles of Engineering	81801.3	7-8(B)	21-22	16	10
Horan, Jonathan D	CATE/Tech	Advanced Digital Media Productions	81952.1	5-6(A)	S1	16	11
Horan, Jonathan D	CATE/Tech	Introduction to Engineering	81551.1	3-4(B)	21-22	16	14
Horan, Jonathan D	CATE/Tech	Intro to Digital Media Productions	81792.1	3-4(A)	S1	16	15
Horan, Jonathan D	CATE/Tech	Introduction to Engineering	81551.4	7-8(A)	21-22	16	17
Horan, Jonathan D	CATE/Tech	Intro to Digital Media Productions	81792.3	1-2(B)	S1	16	19
Piotrowski, Nicholas J	CATE/Tech	AUTOMATION & ROBOTICS	81442.1	3-4(A)	S1	19	14
Piotrowski, Nicholas J	CATE/Tech	Intro to Computer Assisted Design	81321.1	1-2(B)	S1	20	18
Piotrowski, Nicholas J	CATE/Tech	ARCH CONCEPTS	81822.4	7-8(A)	S1	20	19
Piotrowski, Nicholas J	CATE/Tech	CONSTRUCTION TECH	81082.1	3-4(B)	S1	17	19
Piotrowski, Nicholas J	CATE/Tech	TOOLS and MATERIALS	81862.1	1-2(A)	S1	17	19
Piotrowski, Nicholas J	CATE/Tech	CONSTRUCTION TECH	81082.2	7-8(B)	S1	17	20
Abreu, Debbie	ELL	English Support Skills	EL011450.2	1-2(A)	21-22	104	5
Abreu, Debbie	ELL	English Support Skills	EL011450.1	5-6(B)	21-22	104	6
Abreu, Debbie	ELL	English Support Skills	EL011450.3	3-4(B)	21-22	104	7
Abreu, Debbie	ELL	English Support Skills	EL011450.4	7-8(B)	21-22	104	7
Abreu, Debbie	ELL	English Support Skills	EL011450.5	5-6(A)	21-22	104	8
Abreu, Debbie	ELL	Strategic Reading A	11460.2	7-8(A)	21-22	209	12
Boissonneault, Matthew E	Eng	ENGLISH LANGUAGE AP	11055.1	5-6(A)	21-22	211	18
Boissonneault, Matthew E	Eng	CREATIVE WRITING	11152.1	1-2(B)	S1	211	18
Boissonneault, Matthew E	Eng	ENGLISH LANGUAGE AP	11055.2	7-8(B)	21-22	211	21
Boissonneault, Matthew E	Eng	ENGLISH 3/ACAD	11052.5	3-4(A)	21-22	211	23
Boissonneault, Matthew E	Eng	ENGLISH 3/ACAD	11052.4	3-4(B)	21-22	211	23
Boissonneault, Matthew E	Eng	ENGLISH 3/ACAD	11052.3	7-8(A)	21-22	211	23
Ceglarski, Joanne	Eng	ENGLISH 4/ACA	11042.2	5-6(B)	21-22	208	17
Ceglarski, Joanne	Eng	ENGLISH 4/ACC	11041.4	5-6(A)	21-22	208	17
Ceglarski, Joanne	Eng	ENGLISH 2/ACC	11021.2	3-4(A)	21-22	208	18
Ceglarski, Joanne	Eng	ENGLISH 2/ACA	11022.3	7-8(A)	21-22	208	23
Ceglarski, Joanne	Eng	ENGLISH 2/ACA	11022.8	7-8(B)	21-22	208	22
Dinnan, Sarah	ENG	Strategic Reading A	11460.1	7-8(A)	21-22	209	13
Dinnan, Sarah	ENG	ENGLISH 2/ACA	11022.13	1-2(A)	21-22	213	19
Dinnan, Sarah	ENG	ENGLISH 2/ACA	11022.6	3-4(B)	21-22	213	20
Dinnan, Sarah	ENG	ENGLISH 2/ACA	11022.5	5-6(A)	21-22	218	20
Dinnan, Sarah	ENG	ENGLISH 2/ACA	11022.7	5-6(B)	21-22	213	20
Dinnan, Sarah	ENG	ENGLISH 2/ACA	11022.4	1-2(B)	21-22	215	21

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
DiPietro, Lindsey	Eng	DRAMA 1	11182.1	3-4(B)	S1	AUD	10
DiPietro, Lindsey	Eng	ENGLISH 3/ACC	11051.2	3-4(A)	21-22	218	20
DiPietro, Lindsey	Eng	ENGLISH 4/ACA	11042.1	1-2(A)	21-22	218	22
DiPietro, Lindsey	Eng	DRAMA 1	11182.2	5-6(B)	S1	AUD	22
DiPietro, Lindsey	Eng	ENGLISH 3/ACC	11051.1	1-2(B)	21-22	218	23
DiPietro, Lindsey	Eng	ENGLISH 3/ACAD	11052.22	7-8(A)	21-22	218	23
Hayes, Monica E	Eng	ENGLISH 1/ACA	11012.6	5-6(B)	21-22	216	17
Hayes, Monica E	Eng	ENGLISH 1/ACA	11012.4	1-2(B)	21-22	216	20
Hayes, Monica E	Eng	ENGLISH 1/ACA	11012.3	7-8(A)	21-22	216	20
Hayes, Monica E	Eng	ENGLISH 1/ACC	11011.2	3-4(A)	21-22	216	22
Lattimer, David	Eng	SEMINAR AP	110005.1	7-8(A)	21-22	212	15
Lattimer, David	Eng	ENGLISH 4/ACA	11042.5	3-4(B)	21-22	212	17
Lattimer, David	Eng	ENGLISH 4/ACC	11041.3	5-6(B)	21-22	212	17
Lattimer, David	Eng	ENGLISH 4/ACC	11041.2	1-2(B)	21-22	212	20
Lattimer, David	Eng	MYTHOLOGY	11252.1	1-2(A)	S1	212	24
Lattimer, David	Eng	MYTHOLOGY	11252.2	5-6(A)	S1	212	24
Lipscomb, Amy	ENG	ENGLISH 1/ACA	11012.2	3-4(A)	21-22	209	13
Lipscomb, Amy	ENG	ENGLISH 1/ACA	11012.11	1-2(A)	21-22	209	16
Lipscomb, Amy	ENG	ENGLISH 4/ACA	11042.4	3-4(B)	21-22	209	18
Lipscomb, Amy	ENG	ENGLISH 4/ACA	11042.3	5-6(A)	21-22	209	20
Lipscomb, Amy	ENG	ENGLISH 1/ACC	11011.4	1-2(B)	21-22	209	24
Lipscomb, Amy	ENG	ENGLISH 1/ACA	11012.5	7-8(B)	21-22	209	18
Lundquist, Jessica	ENG	ENGLISH 4/ACC	11041.13	5-6(A)	21-22	213	15
Lundquist, Jessica	ENG	ENGLISH 1/ACA	11012.9	3-4(B)	21-22	208	17
Lundquist, Jessica	ENG	ENGLISH 4/ACA	11042.2	5-6(B)	21-22	206	20
Lundquist, Jessica	ENG	ENGLISH 4/ACC	11041.1	7-8(A)	21-22	213	20
Lundquist, Jessica	ENG	ENGLISH 1/ACC	11011.1	3-4(A)	21-22	213	24
Lundquist, Jessica	ENG	ENGLISH 1/ACA	11012.8	1-2(B)	21-22	213	19
Platt, Adam J	Eng	ENGLISH 1/ACA	11012.7	5-6(A)	21-22	206	14
Platt, Adam J	Eng	ENGLISH 1/ACA	11012.1	3-4(B)	21-22	206	16
Platt, Adam J	Eng	ENGLISH 2/ACA	11022.2	3-4(A)	21-22	206	17
Platt, Adam J	Eng	ENGLISH 1/ACC	11011.3	7-8(B)	21-22	206	20
Platt, Adam J	Eng	ENGLISH 2/ACC	11021.1	1-2(B)	21-22	206	21
Platt, Adam J	Eng	ENGLISH 1/ACA	11012.2	7-8(A)	21-22	206	21
Plourde, Jennifer H	Eng	ENGLISH 2/ACC	11021.3	3-4(B)	21-22	215	19
Plourde, Jennifer H	Eng	ENGLISH 2/ACC	11021.4	5-6(B)	21-22	215	21
Plourde, Jennifer H	Eng	English 4/AP	111454.1	3-4(A)	21-22	215	23
Plourde, Jennifer H	Eng	English 4/AP	111454.2	7-8(B)	21-22	215	24
Plourde, Jennifer H	Eng	ENGLISH 2/ACA	11022.1	5-6(A)	21-22	215	18
Talmdage, David	Eng	ENGLISH 3/ACC	11051.4	5-6(A)	21-22	210	18
Talmdage, David	Eng	ENGLISH 3/ACC	11051.3	3-4(A)	21-22	210	20
Talmdage, David	Eng	ENGLISH 3/ACC	11051.5	5-6(B)	21-22	210	22
Talmdage, David	Eng	ENGLISH 3/ACAD	11052.6	1-2(B)	21-22	210	24
Talmdage, David	Eng	ENGLISH 3/ACAD	11052.1	1-2(A)	21-22	210	23

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
Talmadge, David	Eng	ENGLISH 3/ACAD	11052.2	3-4(B)	21-22	210	23
Bonilla-Jusino, Kiara	HE	Health II	151402.5	3-4(B)	S1	108	17
Bonilla-Jusino, Kiara	HE	Health and Wellness	151302.2	1-2(B)	S1	106	24
Carriere, Christopher	HE	Health and Wellness	151302.3	1-2(A)	S1	106	23
Carriere, Christopher	HE	Health and Wellness	151302.8	7-8(B)	S1	106	23
Carriere, Christopher	HE	Health and Wellness	151302.4	3-4(A)	S1	106	24
Carriere, Christopher	HE	Health and Wellness	151302.6	3-4(B)	S1	106	24
Carriere, Christopher	HE	Health and Wellness	151302.7	5-6(B)	S1	106	25
Carriere, Christopher	HE	Health and Wellness	151302.5	7-8(A)	S1	106	25
Pepper, Lance D.	HE	Health II	151402.3	3-4(A)	S1	108	18
Pepper, Lance D.	HE	Health II	151402.6	7-8(B)	S1	108	23
Pepper, Lance D.	HE	Health II	151402.1	1-2(A)	S1	108	24
Pepper, Lance D.	HE	Health II	151402.2	1-2(B)	S1	108	24
Pepper, Lance D.	HE	Health II	151402.5	5-6(A)	S1	108	24
Pepper, Lance D.	HE	Health II	151402.4	5-6(B)	S1	108	24
Becce, Cassie	Math	STATISTICS/ACA	21272.3	7-8(B)	21-22	118	14
Becce, Cassie	Math	MATH FOUNDATIONS 2	21018.1	1(B)	21-22	118	18
Becce, Cassie	Math	GEOMETRY/ACA	21022.14	1-2(A)	21-22	118	21
Becce, Cassie	Math	GEOMETRY/ACA	21022.6	5-6(B)	21-22	118	21
Becce, Cassie	Math	GEOMETRY/ACA	21022.5	7-8(A)	21-22	118	21
Becce, Cassie	Math	GEOMETRY/ACC	21021.2	5-6(A)	21-22	118	21
Brunetti, Colin	Math	PRE-CAL/ACA	21042.3	7-8(B)	21-22	115	13
Brunetti, Colin	Math	PRE-CAL/ACA	21042.1	5-6(A)	21-22	115	15
Brunetti, Colin	Math	ALGEBRA 2/ACA	21032.19	1-2(A)	21-22	115	19
Brunetti, Colin	Math	ALGEBRA 2/ACC	21031.3	3-4(A)	21-22	115	22
Brunetti, Colin	Math	ALGEBRA 2/ACC	21031.2	3-4(B)	21-22	115	22
Brunetti, Colin	Math	ALGEBRA 2/ACA	21032.3	1-2(B)	21-22	115	21
Crouch, Tara	Math	GEOMETRY/ACA	21022.3	3-4(A)	21-22	120	18
Crouch, Tara	Math	GEOMETRY/ACA	21022.2	3-4(B)	21-22	120	19
Crouch, Tara	Math	GEOMETRY/ACA	21022.2	1-2(A)	21-22	120	21
Crouch, Tara	Math	ALGEBRA 2/ACC	21031.5	5-6(B)	21-22	120	24
Crouch, Tara	Math	GEOMETRY/ACA	21022.4	5-6(A)	21-22	120	23
Fisher, Ryan F	Math	English Support - Mathematics	EL021013.1	7(B)	21-22	111	8
Fisher, Ryan F	Math	MATH FOUNDATIONS 1	21017.2	5(A)	21-22	111	12
Fisher, Ryan F	Math	ALGEBRA 1/ACC	21011.1	7-8(A)	21-22	111	15
Fisher, Ryan F	Math	ALGEBRA 1/ACA	21012.1	3-4(A)	21-22	111	17
Fisher, Ryan F	Math	ALGEBRA 1/ACA	21012.8	1-2(B)	21-22	111	19
Fisher, Ryan F	Math	ALGEBRA 1/ACA	21012.2	5-6(B)	21-22	111	19
Frant, Monika	Math	PRE-CAL/ACC	21041.4	7-8(A)	21-22	114	18
Frant, Monika	Math	ALGEBRA 2/ACA	21032.5	5-6(B)	21-22	114	19
Frant, Monika	Math	MATH FOUNDATIONS 3	21043.1	7(B)	21-22	114	19
Frant, Monika	Math	PRE-CAL/ACC	21041.3	3-4(B)	21-22	114	19
Frant, Monika	Math	PRE-CAL/ACC	21041.2	1-2(A)	21-22	114	21
Frant, Monika	Math	ALGEBRA 2/ACA	21032.4	3-4(A)	21-22	114	19

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Gaudet, Steve M	Math	ALGEBRA 1/ACA	21012.1	3-4(A)	21-22	122	17
Gaudet, Steve M	Math	ALGEBRA 1/ACA	21012.4	3-4(B)	21-22	122	18
Gaudet, Steve M	Math	ALGEBRA 2/ACC	21031.1	7-8(A)	21-22	122	25
Gaudet, Steve M	Math	GEOMETRY (9)/ACC	21121.1	5-6(A)	21-22	122	25
Gaudet, Steve M	Math	ALGEBRA 1/ACA	21012.12	5-6(B)	21-22	122	20
Gaudet, Steve M	Math	ALGEBRA 2/ACA	21032.2	7-8(B)	21-22	122	22
Greenleaf, David	Math	PRE-CAL/ACC	21041.1	5-6(A)	21-22	124	16
Greenleaf, David	Math	ALGEBRA 1/ACA	21012.7	7-8(A)	21-22	124	17
Greenleaf, David	Math	ALGEBRA 1/ACA	21012.6	1-2(B)	21-22	124	19
Greenleaf, David	Math	GEOMETRY (9)/ACC	21121.3	7-8(B)	21-22	124	27
Greenleaf, David	Math	GEOMETRY/ACA	21022.1	3-4(B)	21-22	124	18
Greenleaf, David	Math	ALGEBRA 1/ACA	21012.29	1-2(A)	21-22	124	22
McCabe, Kelly W	Math	STATISTICS/ACA	21272.4	3-4(B)	21-22	116	14
McCabe, Kelly W	Math	STATISTICS/ACA	21272.2	7-8(A)	21-22	116	16
McCabe, Kelly W	Math	STATISTICS/ACA	21272.1	1-2(B)	21-22	116	17
McCabe, Kelly W	Math	STATISTICS/AP	21075.1	5-6(B)	21-22	116	18
McCabe, Kelly W	Math	CALCULUS/ACC	21051.1	5-6(A)	21-22	116	23
Oksanen, Benjamin J	Math	PRE-CAL/ACA	21042.8	5-6(B)	21-22	112	16
Oksanen, Benjamin J	Math	GEOMETRY/ACA	21022.9	7-8(B)	21-22	112	19
Oksanen, Benjamin J	Math	GEOMETRY/ACA	21022.8	7-8(A)	21-22	112	21
Oksanen, Benjamin J	Math	Calculus AB/AP S1	211651.1	1-2(A-B)	S1	112	21
Oksanen, Benjamin J	Math	GEOMETRY/ACA	21022.7	3-4(A)	21-22	112	19
Redline, Alicia A	Math	ALGEBRA 2 FOUNDATIONS	021112E.1	3-4(B)	21-22	113	11
Redline, Alicia A	Math	ALGEBRA 2/ACA	21032.6	3-4(A)	21-22	113	11
Redline, Alicia A	Math	ALGEBRA 2/ACA	21032.8	5-6(B)	21-22	113	19
Redline, Alicia A	Math	ALGEBRA 2/ACA	21032.7	7-8(A)	21-22	113	21
Walker, Reinhard L	Math	ALGEBRA 1/ACC	21011.5	7-8(A)	21-22	117	14
Walker, Reinhard L	Math	ALGEBRA 1/ACA	21012.3	7-8(B)	21-22	117	16
Walker, Reinhard L	Math	ALGEBRA 1/ACC	21011.2	1-2(A)	21-22	117	18
Walker, Reinhard L	Math	ALGEBRA 2/ACA	21032.18	3-4(B)	21-22	117	18
Walker, Reinhard L	Math	ALGEBRA 1/ACA	21012.9	5-6(A)	21-22	117	14
Abucewicz, John	MU	MUSIC THEORY/AP	71031.3	7-8(A)	21-22	125	4
Abucewicz, John	MU	MUSIC THEORY 1	71012.1	3-4(B)	S1	125	11
Abucewicz, John	MU	MUSIC TECHNOLOGY	71442.3	1-2(B)	S1	125	15
Abucewicz, John	MU	MUSIC TECHNOLOGY	71442.1	5-6(B)	S1	125	15
Abucewicz, John	MU	BAND	71302.1	1-2(A)	21-22	AUD	28
Abucewicz, John	MU	BAND	71302.2	3-4(A)	21-22	AUD	30
Nelson, David E	MU	GUITAR(ACOUSTIC)	71422.2	1-2(B)	S1	126	15
Nelson, David E	MU	GUITAR(ACOUSTIC)	71422.1	7-8(A)	S1	126	15
Nelson, David E	MU	PIANO/KEYBOARD	71412.1	1-2(A)	S1	126	15
Nelson, David E	MU	PIANO/KEYBOARD	71412.2	3-4(B)	S1	126	15
Nelson, David E	MU	PIANO/KEYBOARD	71412.12	7-8(B)	S1	126	15
Nelson, David E	MU	CONCERT CHOIR	71202.1	5-6(A)	21-22	AUD	38
Bonilla-Jusino, Kiara	PE/HE	PHYS ED 9	151002.22	1-2(A)	S1	Gym	26

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Bonilla-Jusino, Kiara	PE/HE	PHYS ED 10/11/12	151032.51	7-8(B)	S1	Gym	27
Bonilla-Jusino, Kiara	PE/HE	PHYS ED 10/11/12	151032.49	7-8(A)	S1	Gym	28
Bonilla-Jusino, Kiara	PE/HE	PHYS ED 10/11/12	151032.5	5-6(A)	S1	106	29
DeFillippi, Joseph	PE/HE	PHYS ED 10/11/12	151032.19	1-2(A)	S1	Gym	20
DeFillippi, Joseph	PE/HE	PHYS ED 9	151002.23	5-6(A)	S1	Gym	23
DeFillippi, Joseph	PE/HE	PHYS ED 10/11/12	151032.21	5-6(B)	S1	Gym	25
DeFillippi, Joseph	PE/HE	PHYS ED 10/11/12	151032.2	1-2(B)	S1	Gym	28
DeFillippi, Joseph	PE/HE	PHYS ED 10/11/12	151032.48	3-4(A)	S1	Gym	28
DeFillippi, Joseph	PE/HE	PHYS ED 9	151002.1	7-8(B)	S1	Gym	32
Kalat, Kevin R	PE/HE	PHYS ED 9	151002.9	5-6(B)	S1	Gym	19
Kalat, Kevin R	PE/HE	PHYS ED 10/11/12	151032.24	3-4(B)	S1	Gym	22
Kalat, Kevin R	PE/HE	PHYS ED 10/11/12	151032.23	1-2(A)	S1	Gym	23
Kalat, Kevin R	PE/HE	EARLY BIRD PE	151212.1	IND(A-B)	S1	Gym	24
Kalat, Kevin R	PE/HE	PHYS ED 10/11/12	151032.16	3-4(A)	S1	Gym	29
Kalat, Kevin R	PE/HE	PHYS ED 10/11/12	151032.25	7-8(B)	S1	Gym	30
Kalat, Kevin R	PE/HE	PHYS ED 9	151002.8	7-8(A)	S1	Gym	34
Stafford-Kirk, Tamara	PE/HE	PHYS ED 10/11/12	151032.33	3-4(B)	S1	Gym	24
Stafford-Kirk, Tamara	PE/HE	PHYS ED 10/11/12	151032.14	5-6(B)	S1	Gym	27
Stafford-Kirk, Tamara	PE/HE	PHYS ED 9	151002.4	3-4(A)	S1	Gym	27
Stafford-Kirk, Tamara	PE/HE	PHYS ED 10/11/12	151032.31	5-6(A)	S1	Gym	29
Stafford-Kirk, Tamara	PE/HE	PHYS ED 10/11/12	151032.41	1-2(B)	S1	Gym	30
Stafford-Kirk, Tamara	PE/HE	PHYS ED 10/11/12	151032.32	7-8(A)	S1	Gym	31
Barrette, Timothy	Sci	PHYSICAL SCI/ACA	31212.5	5-6(B)	21-22	233	14
Barrette, Timothy	Sci	Environmental Sustainability and Issues	31172.2	3-4(A)	21-22	233	15
Barrette, Timothy	Sci	PHYSICAL SCI/ACA	31212.1	1-2(A)	21-22	233	18
Barrette, Timothy	Sci	ENVIRONMENTAL SCIENCE AP	31195.2	3-4(B)	21-22	233	23
Barrette, Timothy	Sci	PHYSICAL SCI/ACC	31211.3	1-2(B)	21-22	233	23
Barrette, Timothy	Sci	PHYSICAL SCI/ACA	31212.22	5-6(A)	21-22	233	17
Brewer, David	Sci	PHYSICS/ACA	31102.1	7-8(B)	21-22	202	11
Brewer, David	Sci	PHYS 1401: Physics w/Calculus I/UCONN	31375.2	5-6(A-B)	S1	202	13
Brewer, David	Sci	PHYS 1201: Physics I/UCONN	31395.1	3-4(A-B)	S1	202	15
Brewer, David	Sci	PHYSICS/ACC	31101.1	1-2(A)	21-22	202	18
Hasler, Kristen	SCI	Principles of Chemistry	31082.7	5-6(B)	21-22	203	21
Hasler, Kristen	SCI	Principles of Chemistry	31082.13	1-2(B)	21-22	203	22
Hasler, Kristen	SCI	CHEMISTRY/ACC	31071.5	7-8(B)	21-22	203	23
Hasler, Kristen	SCI	CHEMISTRY/ACC	31071.1	1-2(A)	21-22	203	24
Hasler, Kristen	SCI	Principles of Chemistry	31082.5	3-4(A)	21-22	203	22
Hasler, Kristen	SCI	Principles of Chemistry	31082.6	5-6(A)	21-22	203	22
Imfeld, Isabel T	Sci	BIOLOGY/ACA	31042.15	3-4(A)	21-22	239	14
Imfeld, Isabel T	Sci	Biotechnology and Forensics	39902.2	7-8(B)	21-22	239	18
Imfeld, Isabel T	Sci	BIOLOGY/ACA	31042.1	5-6(B)	21-22	239	20
Imfeld, Isabel T	Sci	Biotechnology and Forensics	39902.1	1-2(B)	21-22	239	20
Imfeld, Isabel T	Sci	BIOLOGY/ACA	31042.2	5-6(A)	21-22	239	21
Imfeld, Isabel T	Sci	BIOLOGY/ACA	31042.3	1-2(A)	21-22	239	13

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Italia, Romina M	Sci	BIOLOGY/ACA	31042.4	1-2(B)	21-22	240	16
Italia, Romina M	Sci	BIOLOGY/ACA	31042.6	3-4(B)	21-22	240	17
Italia, Romina M	Sci	Botany	31142.1	5-6(B)	S1	240	17
Italia, Romina M	Sci	BIOLOGY/ACC	31041.4	5-6(A)	21-22	240	19
Italia, Romina M	Sci	BIOLOGY/ACC	31041.1	3-4(A)	21-22	240	20
Italia, Romina M	Sci	BIOLOGY/ACC	31041.2	7-8(A)	21-22	240	22
Landro, Laura D	Sci	Chemistry/UCONN	31076.1	1-2(A-B)	21-22	242	16
Landro, Laura D	Sci	CHEMISTRY/ACC	31071.2	3-4(B)	21-22	242	18
Landro, Laura D	Sci	CHEMISTRY/ACC	31071.3	5-6(A)	21-22	242	22
Landro, Laura D	Sci	CHEMISTRY/ACC	31071.8	7-8(B)	21-22	242	22
Landro, Laura D	Sci	Principles of Chemistry	31082.3	7-8(A)	21-22	242	22
Lennon, Nancy M	Sci	ANAT and PHYS/ACA	31132.2	3-4(A)	21-22	237	16
Lennon, Nancy M	Sci	ANAT and PHYS/ACA	31132.1	7-8(A)	21-22	237	16
Lennon, Nancy M	Sci	BIOLOGY/ACC	31041.17	3-4(B)	21-22	237	17
Lennon, Nancy M	Sci	BIOLOGY/ACC	31041.13	1-2(A)	21-22	237	18
Lennon, Nancy M	Sci	ANAT and PHYS/ACA	31132.3	1-2(B)	21-22	237	21
Lennon, Nancy M	Sci	BIOLOGY/ACA	31042.1	7-8(B)	21-22	237	21
Nagle, Corey E	Sci	PHYSICAL SCI/ACA	31212.7	1-2(B)	21-22	235	18
Nagle, Corey E	Sci	PHYSICAL SCI/ACA	31212.3	7-8(A)	21-22	235	18
Nagle, Corey E	Sci	PHYSICAL SCI/ACC	31211.18	3-4(A)	21-22	235	19
Nagle, Corey E	Sci	PHYSICAL SCI/ACC	31211.5	5-6(B)	21-22	235	21
Nettleton, Kimberly M	Sci	PHYSICAL SCI/ACA	31212.27	3-4(A)	21-22	241	13
Nettleton, Kimberly M	Sci	PHYSICAL SCI/ACA	31212.28	3-4(B)	21-22	241	15
Nettleton, Kimberly M	Sci	PHYSICAL SCI/ACA	31212.8	5-6(A)	21-22	241	16
Nettleton, Kimberly M	Sci	Meteorology	31242.3	7-8(A)	S1	241	19
Nettleton, Kimberly M	Sci	PHYSICAL SCI/ACC	31211.2	5-6(B)	21-22	241	22
Nettleton, Kimberly M	Sci	Oceanography	31152.7	7-8(B)	S1	241	24
Porter, Elizabeth	SCI	BIOLOGY/ACA	31042.9	7-8(B)	21-22	236	21
Porter, Elizabeth	SCI	Principles of Chemistry	31082.1	1-2(A)	21-22	236	22
Porter, Elizabeth	SCI	Principles of Chemistry	31082.2	5-6(A)	21-22	236	22
Porter, Elizabeth	SCI	Principles of Chemistry	31082.22	3-4(B)	21-22	236	19
Porter, Elizabeth	SCI	BIOLOGY/ACA	31042.5	1-2(B)	21-22	236	20
Porter, Elizabeth	SCI	BIOLOGY/ACA	31042.17	7-8(A)	21-22	236	21
Reichler, Jason E	Sci	PHYSICAL SCI/ACA	31212.2	1-2(A)	21-22	234	15
Reichler, Jason E	Sci	PHYSICAL SCI/ACA	31212.23	5-6(B)	21-22	234	15
Reichler, Jason E	Sci	PHYSICAL SCI/ACA	31212.11	7-8(B)	21-22	234	15
Reichler, Jason E	Sci	PHYSICAL SCI/ACC	31211.4	5-6(A)	21-22	234	18
Reichler, Jason E	Sci	PHYSICAL SCI/ACA	31212.1	3-4(B)	21-22	234	17
Collins, Michelle	Soc	WORLD HISTORY/ACA	41012.1	5-6(A)	21-22	222	13
Collins, Michelle	Soc	WORLD HISTORY/ACA	41012.11	1-2(A)	21-22	222	19
Collins, Michelle	Soc	WORLD HISTORY/ACC	41011.2	3-4(B)	21-22	222	19
Collins, Michelle	Soc	SOCIOLOGY/ACA	41242.2	5-6(B)	S1	222	22
Collins, Michelle	Soc	SOCIOLOGY/ACA	41242.1	7-8(A)	S1	222	22
Collins, Michelle	Soc	WORLD HISTORY/ACA	41012.9	7-8(B)	21-22	222	22

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Gardiner, Kenneth H	SOC	WORLD HISTORY/ACA	41012.22	1-2(B)	21-22	228	15
Gardiner, Kenneth H	SOC	WORLD HISTORY/ACA	41012.23	3-4(A)	21-22	228	16
Gardiner, Kenneth H	SOC	PSYCHOLOGY/AP	41205.3	3-4(B)	21-22	228	20
Gardiner, Kenneth H	SOC	PSYCHOLOGY/AP	41205.2	7-8(A)	21-22	228	25
Godbout, Ginny	Soc	MOD AMER HIST/ACA	41062.2	3-4(A)	21-22	220	15
Godbout, Ginny	Soc	MOD AMER HIST/ACA	41062.19	1-2(A)	21-22	220	19
Godbout, Ginny	Soc	LAW and JUSTICE/ACA	41172.1	3-4(B)	S1	220	21
Godbout, Ginny	Soc	LAW and JUSTICE/ACA	41172.14	5-6(A)	S1	220	23
Godbout, Ginny	Soc	US HISTORY/AP	41115.1	7-8(B)	21-22	220	24
Godbout, Ginny	Soc	MOD AMER HIST/ACA	41062.21	5-6(B)	21-22	220	22
Hertzler, Sarah F	Soc	Civics	41042.8	5-6(B)	S1	217	11
Hertzler, Sarah F	Soc	MOD AMER HIST/ACC	41061.3	5-6(A)	21-22	217	13
Hertzler, Sarah F	Soc	MOD AMER HIST/ACC	41061.15	1-2(A)	21-22	217	17
Hertzler, Sarah F	Soc	MOD AMER HIST/ACC	41061.14	3-4(B)	21-22	217	17
Hertzler, Sarah F	Soc	GLOBAL ISSUES	41152.1	3-4(A)	S1	217	22
Hertzler, Sarah F	Soc	Civics	41042.9	1-2(B)	S1	217	23
Jandreau, Nathan D	Soc	WORLD HISTORY/ACA	41012.2	3-4(B)	21-22	224	13
Jandreau, Nathan D	Soc	WORLD HISTORY/ACC	41011.1	5-6(B)	21-22	224	16
Jandreau, Nathan D	Soc	WORLD HISTORY/ACC	41011.13	7-8(B)	21-22	224	16
Jandreau, Nathan D	Soc	WORLD HISTORY/ACA	41012.12	1-2(A)	21-22	224	18
Jandreau, Nathan D	Soc	WORLD HISTORY/ACA	41012.3	3-4(A)	21-22	224	19
Nass, Brian M	SOC	WORLD HISTORY/ACA	41012.14	5-6(A)	21-22	214	12
Nass, Brian M	SOC	MOD AMER HIST/ACA	41062.24	3-4(A)	21-22	214	15
Nass, Brian M	SOC	MOD AMER HIST/ACA	41062.25	3-4(B)	21-22	214	15
Nass, Brian M	SOC	Civics	41042.1	7-8(B)	S1	214	16
Nass, Brian M	SOC	WORLD HISTORY/ACC	41011.6	1-2(B)	21-22	214	17
Nass, Brian M	SOC	WORLD HISTORY/ACA	41012.8	7-8(A)	21-22	214	21
O'Meara-Cartwright, Jamie M	SOC	English 3/ACA	011052G.1	7-8(A)	21-22	218	7
O'Meara-Cartwright, Jamie M	SOC	World History/ACA	041012G.11	7-8(B)	21-22	222	9
O'Meara-Cartwright, Jamie M	SOC	World History Essentials	ESN042053.10	1-2(A)	21-22	228	10
O'Meara-Cartwright, Jamie M	SOC	World History Essentials	ESN042053.3	5-6(B)	21-22	227	10
O'Meara-Cartwright, Jamie M	SOC	World History/ACA	041012G.3	3-4(A)	21-22	224	11
O'Meara-Cartwright, Jamie M	SOC	CASE MANAGER	999999.38	TCM(A)	21-22	230	20
Plourde, Gerard A	Soc	MOD AMER HIST/ACA	41062.7	3-4(B)	21-22	226	14
Plourde, Gerard A	Soc	MOD AMER HIST/ACA	41062.4	5-6(A)	21-22	226	19
Plourde, Gerard A	Soc	DEVELOP PSYCHOLOGY	41262.2	1-2(A)	S1	226	20
Plourde, Gerard A	Soc	ECONOMICS/ACA	41122.1	3-4(A)	S1	226	21
Plourde, Gerard A	Soc	MICROECONOMICS/AP	41165.1	5-6(B)	21-22	226	22
Quintero, Juan D	SOC	Early US History	EL041563.2	1-2(B)	S1	227	15
Quintero, Juan D	SOC	Human Geography AP	41155.1	1-2(A)	21-22	227	19
Quintero, Juan D	SOC	Human Geography AP	41155.2	3-4(B)	21-22	227	19
Quintero, Juan D	SOC	MOD AMER HIST/ACA	41062.18	5-6(A)	21-22	227	20
Quintero, Juan D	SOC	MOD AMER HIST/ACA	41062.9	7-8(B)	21-22	227	21
Quintero, Juan D	SOC	MOD AMER HIST/ACA	41062.3	7-8(A)	21-22	227	21

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Ray, Sumeet	Soc	Civics	41042.33	5-6(A)	S1	229	12
Ray, Sumeet	Soc	Civics	41042.31	3-4(B)	S1	229	19
Ray, Sumeet	Soc	Civics	41042.2	1-2(A)	S1	229	22
Ray, Sumeet	Soc	Contemporary Psychology	41252.2	5-6(B)	S1	229	23
Ray, Sumeet	Soc	Contemporary Psychology	41252.1	7-8(A)	S1	229	23
Ray, Sumeet	Soc	LAW and JUSTICE/ACA	41172.5	7-8(B)	S1	229	23
Sonstrom, Connor	SOC	Civics	41042.36	5-6(B)	S1	218	10
Sonstrom, Connor	SOC	WORLD HISTORY/ACA	41012.7	1-2(B)	21-22	222	13
Sonstrom, Connor	SOC	WORLD HISTORY/ACA	41012.6	3-4(B)	21-22	218	15
Torreso, Ginny M	Soc	US GOVT and POL/AP	41125.2	5-6(A)	21-22	219	17
Torreso, Ginny M	Soc	US GOVT and POL/AP	41125.3	1-2(B)	21-22	219	19
Torreso, Ginny M	Soc	MOD AMER HIST/ACA	41062.5	1-2(A)	21-22	219	20
Torreso, Ginny M	Soc	US GOVT and POL/AP	41125.1	3-4(A)	21-22	219	20
Torreso, Ginny M	Soc	MOD AMER HIST/ACC	41061.6	7-8(B)	21-22	219	22
Torreso, Ginny M	Soc	US GOVT and POL/AP	41125.4	5-6(B)	21-22	219	22
Archibald, Brian	SPED	Geometry ACA	021022G.1	3-4(A)	21-22	112	7
Archibald, Brian	SPED	Geometry ACA	021022G.2	3-4(B)	21-22	124	7
Archibald, Brian	SPED	Geometry ACA	021022G.3	5-6(A)	21-22	120	7
Archibald, Brian	SPED	Geometry Essentials	ESN022063.1	1-2(A)	21-22	110	13
Archibald, Brian	SPED	Geometry Essentials	ESN022063.3	1-2(B)	21-22	110	17
Archibald, Brian	SPED	CASE MANAGER	999999.21	TCM(A)	21-22	110	21
Brown, Jessica	SPED	Civics/ACA	041042G.2	1-2(B)	S1	217	11
Brown, Jessica	SPED	Modern American History Essentials	ESN042063.3	1-2(A)	21-22	207	12
Brown, Jessica	SPED	Vocational Education	ESN082006.1	3(A)	21-22	207	12
Brown, Jessica	SPED	Vocational Education	ESN082006.2	4(A)	21-22	207	14
Brown, Jessica	SPED	Modern American History Essentials	ESN042063.4	3-4(B)	21-22	207	15
Brown, Jessica	SPED	CASE MANAGER	999999.25	TCM(A)	21-22	207	21
Brown, Jessica	SPED	Career & Life Skills	ESN083006.1	7-8(B)	S1	210	22
DelGobbo, Kelly	SPED	Algebra 2/ACA	021032G.1	3-4(A)	21-22	114	3
DelGobbo, Kelly	SPED	Algebra 2/ACA	021032G.2	7-8(B)	21-22	122	4
DelGobbo, Kelly	SPED	CASE MANAGER	999999.33	TCM(A)	21-22	107	9
DelGobbo, Kelly	SPED	Algebra 2 Essentials	ESN022073.3	5-6(A)	21-22	107	11
DelGobbo, Kelly	SPED	Algebra 2 Essentials	ESN022073.4	5-6(B)	21-22	107	11
Dunn, Kate E	SPED	English 1/ACA	011012G.3	7-8(B)	21-22	209	8
Dunn, Kate E	SPED	English 1/ACA	011012G.14	1-2(B)	21-22	213	9
Dunn, Kate E	SPED	English 1/ACA	011012G.2	7-8(A)	21-22	206	9
Dunn, Kate E	SPED	English 9 Essentials	ESN012153.2	3-4(B)	21-22	107	9
Dunn, Kate E	SPED	English 9 Essentials	ESN012153.1	3-4(A)	21-22	107	10
Dunn, Kate E	SPED	CASE MANAGER	999999.35	TCM(A)	21-22	107	19
Elliott, Tyler	SPED	Modern Am History/ACA	041062G.1	7-8(A)	21-22	227	8
Elliott, Tyler	SPED	Environmental Science	LC032273.1	5-6(B)	21-22	11	11
Elliott, Tyler	SPED	U.S. History	LC041044.1	3-4(A)	21-22	11	11
Elliott, Tyler	SPED	Algebra 2	LC021032.1	3-4(B)	21-22	11	12
Elliott, Tyler	SPED	English 10	LC011022.3	1-2(A)	21-22	11	12

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
Elliott, Tyler	SPED	CASE MANAGER	999999.2	TCM(A)	21-22	11	13
Elliott, Tyler	SPED	Vocational Skills 1	LC092113.1	1-2(B)	21-22	11	13
GUMPERT, JESSE	SPED	Principles of Chemistry	031082G.7	3-4(B)	21-22	236	4
GUMPERT, JESSE	SPED	Algebra 2/ACA	021032G.12	1-2(B)	21-22	115	5
GUMPERT, JESSE	SPED	Modern Am History/ACA	041062G.10	5-6(B)	21-22	220	8
Holmes, Tyrell	SPED	Modern Am History/ACA	041062G.12	5-6(A)	21-22	226	5
Holmes, Tyrell	SPED	Environmental Science	GL032183.2	3-4(A)	21-22	3	12
Holmes, Tyrell	SPED	Geometry Essentials	GL021022.2	1-2(B)	21-22	3	12
Holmes, Tyrell	SPED	Life Skills II	GL102036.3	5-6(B)	21-22	3	12
Holmes, Tyrell	SPED	U.S. History	GL042173.2	3-4(B)	21-22	3	12
Holmes, Tyrell	SPED	English 10 Essentials	GL011022.2	1-2(A)	21-22	3	13
Holmes, Tyrell	SPED	CASE MANAGER	999999.19	TCM(A)	21-22	3	14
Hylan, Paul F	SPED	Physical Sci/ACA	031212G.1	3-4(B)	21-22	234	10
Hylan, Paul F	SPED	Physical Sci/ACA	031212G.2	5-6(A)	21-22	233	10
Hylan, Paul F	SPED	Physical Science Essentials	ESN032073.2	7-8(B)	21-22	230	10
Hylan, Paul F	SPED	Physical Science Essentials	ESN032073.1	7-8(A)	21-22	230	13
Hylan, Paul F	SPED	English 12 Essentials	ESN012183.1	1-2(A)	21-22	230	15
Hylan, Paul F	SPED	CASE MANAGER	999999.22	TCM(A)	21-22	230	21
Lease, Noah P	SPED	Biology ACA	031042G.1	1-2(A)	21-22	239	5
Lease, Noah P	SPED	Biology ACA	031042G.9	7-8(A)	21-22	236	9
Lease, Noah P	SPED	Biology Essentials	ESN032083.2	5-6(B)	21-22	232	9
Lease, Noah P	SPED	Biology ACA	031042G.2	1-2(B)	21-22	236	10
Lease, Noah P	SPED	Biology Essentials	ESN032083.1	3-4(A)	21-22	232	17
Lease, Noah P	SPED	CASE MANAGER	999999.23	TCM(A)	21-22	232	22
Magnan, Andrew J	SPED	Algebra 1/ACA	021012G.12	5-6(A)	21-22	117	7
Magnan, Andrew J	SPED	Algebra 1 Essentials	ESN022053.2	3-4(A)	21-22	110	11
Magnan, Andrew J	SPED	Algebra 1 Essentials	ESN022053.1	3-4(B)	21-22	110	11
Magnan, Andrew J	SPED	Algebra 1/ACA	021012G.4	1-2(A)	21-22	124	11
Magnan, Andrew J	SPED	Algebra 1/ACA	021012G.13	5-6(B)	21-22	122	11
Magnan, Andrew J	SPED	CASE MANAGER	999999.32	TCM(A)	21-22	110	21
Papazian, Jeffrey A	SPED	Func Aca/Life Skills 11/12	900307.2	5-6(A)	S1	5	1
Papazian, Jeffrey A	SPED	Func Aca/Science 11/12	903337.3	3-4(B)	S1	5	1
Papazian, Jeffrey A	SPED	Func Aca/Math 11/12	9000337.3	3-4(B)	S1	5	2
Papazian, Jeffrey A	SPED	Func Aca/History 9/10	911117.1	3-4(B)	S1	5	4
Papazian, Jeffrey A	SPED	Func Aca/English 11/12	900037.1	1-2(A)	S1	5	5
Papazian, Jeffrey A	SPED	Func Aca/English 9/10	900017.1	1-2(A)	S1	5	5
Papazian, Jeffrey A	SPED	Func Aca/History 11/12	933337.1	3-4(B)	S1	5	5
Papazian, Jeffrey A	SPED	Func Aca/Life Skills 11/12	900307.1	5-6(B)	S1	5	5
Papazian, Jeffrey A	SPED	Func Aca/Science 11/12	903337.1	3-4(A)	S1	5	5
Papazian, Jeffrey A	SPED	Func Aca/Vocational Skills 11/12	903007.1	5-6(A)	S1	5	5
Papazian, Jeffrey A	SPED	Func Aca/Life Skills 9/10	900107.1	5-6(B)	S1	5	6
Papazian, Jeffrey A	SPED	Func Aca/Science 9/10	901117.1	3-4(A)	S1	5	6
Papazian, Jeffrey A	SPED	Func Aca/Vocational Skills 9/10	901007.2	5-6(A)	S1	5	6
Papazian, Jeffrey A	SPED	Func Aca/Math 11/12	9000337.1	1-2(B)	S1	5	7

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
Papazian, Jeffrey A	SPED	Func Aca/Math 9/10	9000117.1	1-2(B)	S1	5	7
Papazian, Jeffrey A	SPED	CASE MANAGER	999999.12	TCM(A)	21-22	5	87
Rubbo, Nicola	SPED	English 3/ACA	011052G.13	1-2(A)	21-22	210	8
Rubbo, Nicola	SPED	English 10 Essentials	ESN012163.1	5-6(B)	21-22	207	10
Rubbo, Nicola	SPED	English 2/ACA	011022G.2	5-6(A)	21-22	215	11
Rubbo, Nicola	SPED	English 2/ACA	011022G.3	7-8(B)	21-22	208	11
Rubbo, Nicola	SPED	English 10 Essentials	ESN012163.2	7-8(A)	21-22	207	15
Rubbo, Nicola	SPED	CASE MANAGER	999999.37	TCM(A)	21-22	207	21
Wayton, Matthew	SPED	English 3/ACA	011052G.2	3-4(B)	21-22	210	6
Wayton, Matthew	SPED	Principles of Chemistry	031082G.6	3-4(A)	21-22	203	6
Wayton, Matthew	SPED	Principles of Chemistry	031082G.2	5-6(A)	21-22	203	6
Wayton, Matthew	SPED	English 11 Essentials	ESN012173.1	1-2(A)	21-22	216	9
Wayton, Matthew	SPED	Principles of Chemistry Essentials	ESN032063.5	7-8(B)	21-22	232	11
Wayton, Matthew	SPED	CASE MANAGER	999999.34	TCM(A)	21-22	236	19
Archibald, Kathleen	WL	SPANISH 2/ACC	51221.8	1-2(A)	21-22	23	22
Archibald, Kathleen	WL	SPANISH 1/ACA	51212.2	5-6(A)	21-22	23	24
Archibald, Kathleen	WL	SPANISH 1/ACA	51212.4	7-8(B)	21-22	23	24
Archibald, Kathleen	WL	SPANISH 3/ACC	51231.1	3-4(A)	21-22	23	24
Archibald, Kathleen	WL	SPANISH 1/ACA	51212.3	3-4(B)	21-22	23	25
Gallo Reinhard, Gina M	WL	ITALIAN 3/ACA	51132.1	3-4(B)	21-22	35	12
Gallo Reinhard, Gina M	WL	Italian ECE/UCONN	51145.1	1-2(B)	21-22	35	12
Gallo Reinhard, Gina M	WL	ITALIAN 2/ACA & ACC	51122.1	3-4(A)	21-22	Sr. Cafe	37
Gallo Reinhard, Gina M	WL	ITALIAN 3/ACC	51131.1	1-2(A)	21-22	35	16
Gallo Reinhard, Gina M	WL	ITALIAN 1/ACA	51112.1	5-6(B)	21-22	35	22
Gallo Reinhard, Gina M	WL	ITALIAN 1/ACC	51111.1	5-6(A)	21-22	35	22
Guarino, Valerie L	WL	SPANISH 4/ACA	51242.1	5-6(A)	21-22	31	18
Guarino, Valerie L	WL	SPANISH 4/ACC	51241.6	3-4(B)	21-22	31	18
Guarino, Valerie L	WL	SPANISH 3/ACC	51231.3	7-8(B)	21-22	31	20
Guarino, Valerie L	WL	SPANISH 3/ACC	51231.2	1-2(B)	21-22	31	21
Guarino, Valerie L	WL	SPANISH 3/ACA	51232.9	1-2(A)	21-22	31	26
Guarino, Valerie L	WL	SPANISH 3/ACA	51232.2	3-4(A)	21-22	31	28
Lindstrom, Sarah L	WL	Spanish UCONN ECE/AP	51275.1	3-4(B)	21-22	25	12
Lindstrom, Sarah L	WL	SPANISH 4/ACC	51241.1	5-6(B)	21-22	25	17
Lindstrom, Sarah L	WL	SPANISH 4/ACC	51241.2	7-8(A)	21-22	25	19
Lindstrom, Sarah L	WL	SPANISH 2/ACA	51222.12	1-2(B)	21-22	25	24
Lindstrom, Sarah L	WL	SPANISH 2/ACA	51222.2	1-2(A)	21-22	25	25
Lindstrom, Sarah L	WL	SPANISH 2/ACA	51222.1	3-4(A)	21-22	25	25
Monahan-DiNoia, Kelly A	WL	LATIN 4/ACC	51561.1	7-8(A)	21-22	29	9
Monahan-DiNoia, Kelly A	WL	LATIN 1/ACC	51511.3	5-6(A)	21-22	29	10
Monahan-DiNoia, Kelly A	WL	LATIN 3/ACC	51551.1	3-4(A)	21-22	29	14
Monahan-DiNoia, Kelly A	WL	LATIN 2/ACC	51521.1	3-4(B)	21-22	29	16
Monahan-DiNoia, Kelly A	WL	Language and Culture A	52032.4	5-6(B)	S1	29	22
Monahan-DiNoia, Kelly A	WL	Language and Culture A	52032.2	7-8(B)	S1	29	23
Rochester, Anya	WL	FRENCH 4/ACA & ACC	51042.1	5-6(B)	21-22	21	14

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
Rochester, Anya	WL	FRENCH 2/ACA & ACC	51022.1	3-4(B)	21-22	21	14
Rochester, Anya	WL	FRENCH 3/ACA & ACC	51032.1	3-4(A)	21-22	21	21
Rochester, Anya	WL	FRENCH 2/ACA	51022.4	1-2(B)	21-22		11
Rochester, Anya	WL	FRENCH 1/ACA	51012.1	5-6(A)	21-22	21	14
Rochester, Anya	WL	FRENCH 1/ACA & ACC	51012.5	1-2(A)	21-22	21	29
Troche, Steve G	WL	SPANISH 1/ACC	51211.1	5-6(A)	21-22	33	21
Troche, Steve G	WL	SPANISH 2/ACC	51221.2	1-2(B)	21-22	33	21
Troche, Steve G	WL	SPANISH 2/ACC	51221.3	7-8(A)	21-22	33	21
Troche, Steve G	WL	SPANISH 1/ACA	51212.6	5-6(B)	21-22	33	24
Troche, Steve G	WL	SPANISH 1/ACA	51212.5	1-2(A)	21-22	33	26
Troche, Steve G	WL	SPANISH 2/ACA	51222.4	7-8(B)	21-22	33	27
Total							

Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
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Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
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Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
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Teacher Name	Dept	Course Name	Sec #	Exp	Term	Room	Enr
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BRISTOL EASTERN HIGH SCHOOL

TO: Dr. Catherine Carbone	FROM: Michael Higgins (Vanessa Janick)				
RE: Section Analysis 21-22 / S1	DATE: October 1, 2021				
Based on Master Schedule					

DEPARTMENT								(S1)			(S1)			(S1)		
								2021			2020			2019		
	1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31+	Total Students	Total Sections	Section Average	Total Students	Total Sections	Section Average	Total Students	Total Sections	Section Average
Art	1	2	3	15				341	21	16.24	340	21.00	16.19	312	21	14.86
AVID		1	3					44	4	11.00	58	4.00	14.50	60	4	15.00
CATE/Business			2	15				320	17	18.82	253	14.00	18.07	181	11	16.45
CATE/FCS			2	3				89	5	17.80	86	5.00	17.20	88	5	17.60
CATE/Medical				1	1			41	2	20.50	21	1.00	21.00			
CATE/Tech			5	7				200	12	16.67	213	12.00	17.75	182	12	15.17
ELL		4	1	1				63	6	10.50	80	6.00	13.33	62	6	10.33
English		3	7	19	26	2		1103	57	19.35	789	41.00	19.24	807	39	20.69
English Team											296	16.00	18.50	291	19	15.32
English Total											1085	57.00	19.04	1098	58	18.93
Math		4	14	18	22	1		1069	59	18.12	879	51.00	17.24	764	40	19.10
Math Team											217	14.00	15.50	290	18	16.11
Math Total											1096	65.00	16.86	1054	58	18.17
Music		4	4					86	8	10.75	86	8.00	10.75	97	8	12.13
Music-Band						1	1	66	2	33.00	90	2.00	45.00	83	2	41.50
Music-Chorus						1	1	55	2	27.50	71	2.00	35.50	97	2	48.50
Health			1	1	4	6		287	12	23.92	138	8.00	17.25	158	8	19.75
Phys. Ed	1	0	0	7	3	10	3	579	24	24.13	547	22.00	24.86			
Health & PE Total											685	30.00	22.83	523	22	23.77
Science		3	6	28	28			1246	65	19.17	920	50.00	18.40	774	43	18.00
Science Team											260	15.00	17.33	255	15	17.00
Science Total											1180	65.00	18.15	1029	58	17.74
Social Studies		2	11	10	26	4		1042	53	19.66	794	42.00	18.90	749	42	17.83
Soc Stu Team											257	14.00	18.36	262	16	16.38
Soc Stu Total											1051	56.00	18.77	1011	58	17.43
Special Education	1	48	29	7	1			903	86	10.50	1036	89.00	11.64	1199	100	11.99
World Language		3	11	11	16			731	41	17.83	725	41.00	17.68	622	42	14.81

BRISTOL EASTERN HIGH SCHOOL

TEACHER CASE LOAD 21-22

TEACHER NAME	DEPT	COURSE NAME	EXP	TERM	ENR
LESSARD, BARBARA	ART	FIBER	1-2(B)	S1	18
LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
LESSARD, BARBARA	ART	PRINTMAKING 1	5-6(B)	S1	16
LESSARD, BARBARA	ART	SCULPTURE 1	1-2(A)	S1	16
LESSARD, BARBARA	ART	SCULPTURE 1	5-6(A)	S1	16
LESSARD, BARBARA	ART	SCULPTURE 1	7-8(A)	S1	16
MORFIS, JOHN	ART	DRAW and PAINT 1	1-2(A)	S1	19
MORFIS, JOHN	ART	DRAW and PAINT 1	5-6(B)	S1	20
MORFIS, JOHN	ART	DRAW and PAINT 1	7-8(B)	S1	20
MORFIS, JOHN	ART	DRAW and PAINT 2	7-8(A)	S1	8
MORFIS, JOHN	ART	DRAW and PAINT 3	3-4(A)	S1	9
MORFIS, JOHN	ART	POTTERY 1	1-2(B)	S1	20
WILLIAMS, SHARON	ART	AP STUDIO ART, PORTFOLIO/ART IND ST	5-6(A)	21-22	3
WILLIAMS, SHARON	ART	DESIGN 1	7-8(A)	S1	13
WILLIAMS, SHARON	ART	DESIGN 1	1-2(B)	S1	14
WILLIAMS, SHARON	ART	POTTERY 1	5-6(B)	S1	20
WILLIAMS, SHARON	ART	POTTERY 1	7-8(B)	S1	20
WILLIAMS, SHARON	ART	POTTERY 2	1-2(A)	S1	14
Woodfield, Robertson	ART	POTTERY 1	3-4(A)	S1	19
Woodfield, Robertson	ART	POTTERY 1	5-6(A)	S1	20
Woodfield, Robertson	ART	POTTERY 1	7-8(A)	S1	20
BURDELSKI, ELIZABETH	AVID	AVID Tutoring	5-6(A)	21-22	11
NUGENT, ALYSSA	AVID	AVID Tutoring 2	5-6(B)	21-22	10
JANDREAU, KARA	AVID	AVID Tutoring 3	7-8(A)	21-22	12
ADAMS, WENDY	AVID	AVID Tutoring 4	7-8(B)	21-22	11
Bisson, Brett	CATE/BUS	Intro to Cooperative Work Experience	7-8(B)	S1	14
Bisson, Brett	CATE/BUS	Introduction to Marketing	1-2(B)	S1	20
Bisson, Brett	CATE/BUS	Introduction to Marketing	3-4(A)	S1	20
Bisson, Brett	CATE/BUS	PERSONAL FINANCE & INVESTMENT	1-2(A)	S1	20
Bisson, Brett	CATE/BUS	PERSONAL FINANCE & INVESTMENT	5-6(A)	S1	20
Bisson, Brett	CATE/BUS	WEB SITE DESIGN	5-6(B)	S1	19
JACQUES, SHARON	CATE/BUS	ACCOUNTING 1	3-4(A)	21-22	17
JACQUES, SHARON	CATE/BUS	ACCOUNTING 1	1-2(A)	21-22	20

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
JACQUES, SHARON	CATE/BUS	ACCOUNTING 2	3-4(B)	21-22	11
JACQUES, SHARON	CATE/BUS	PERSONAL FINANCE & INVESTMENT	1-2(B)	S1	20
JACQUES, SHARON	CATE/BUS	PERSONAL FINANCE & INVESTMENT	7-8(B)	S1	20
Micari, Brittany	CATE/BUS	Computer Programming & Video Game Design	3-4(A)	S1	20
Micari, Brittany	CATE/BUS	Information Processing	7-8(B)	S1	20
Micari, Brittany	CATE/BUS	Introduction to Marketing	1-2(A)	S1	19
Micari, Brittany	CATE/BUS	Introduction to Marketing	5-6(A)	S1	20
Micari, Brittany	CATE/BUS	SMALL BUSINESS OWNERSHIP	3-4(B)	S1	20
Micari, Brittany	CATE/BUS	SMALL BUSINESS OWNERSHIP	5-6(B)	S1	20
PAQUETTE-CLAMAN, CREIGHTON	CATE/FCS	CHILD, FAMILY, & COMMUNITY	5-6(B)	S1	20
PAQUETTE-CLAMAN, CREIGHTON	CATE/FCS	CHILD, FAMILY, & COMMUNITY	7-8(B)	S1	20
PAQUETTE-CLAMAN, CREIGHTON	CATE/FCS	EARLY CHILDHOOD EDUCATION 1	5-6(A)	S1	14
PAQUETTE-CLAMAN, CREIGHTON	CATE/FCS	EARLY CHILDHOOD EDUCATION 1	3-4(A)	S1	20
PAQUETTE-CLAMAN, CREIGHTON	CATE/FCS	IND and FAM DEV/UCONN	7-8(A)	21-22	15
Holley, Christine M	CATE/HO	Intro to Allied Health ProfessionsUCONN	3-4(A)	S1	16
Holley, Christine M	CATE/HO	Medical Terminology/UCONN	1-2(A)	21-22	25
DIAZ, GREGORY	CATE/TECH	ARCH CONCEPTS	7-8(B)	S1	17
DIAZ, GREGORY	CATE/TECH	CONSTRUCTION TECH	5-6(A)	S1	15
DIAZ, GREGORY	CATE/TECH	CONSTRUCTION TECH	3-4(A)	S1	18
DIAZ, GREGORY	CATE/TECH	ENERGY and POWER TECH	7-8(A)	S1	13
DIAZ, GREGORY	CATE/TECH	TOOLS and MATERIALS	3-4(B)	S1	14
DIAZ, GREGORY	CATE/TECH	TOOLS and MATERIALS	5-6(B)	S1	15
LECLAIR, MICHAEL	CATE/TECH	Intro to Computer Assisted Design	1-2(A)	S1	18
LECLAIR, MICHAEL	CATE/TECH	Intro to Computer Assisted Design	3-4(A)	S1	20
LECLAIR, MICHAEL	CATE/TECH	Intro to Digital Media Productions	7-8(B)	S1	18
LECLAIR, MICHAEL	CATE/TECH	Intro to Digital Media Productions	7-8(A)	S1	20
LECLAIR, MICHAEL	CATE/TECH	Introduction to Engineering	1-2(B)	21-22	12
LECLAIR, MICHAEL	CATE/TECH	Introduction to Engineering	3-4(B)	21-22	20
Bannon, Kathleen	ELL	English Support Skills	5-6(B)	21-22	6
Bannon, Kathleen	ELL	English Support Skills	3-4(B)	21-22	7
Bannon, Kathleen	ELL	English Support Skills	7-8(B)	21-22	7
Bannon, Kathleen	ELL	English Support Skills	5-6(A)	21-22	10
Bannon, Kathleen	ELL	Early US History	1-2(A)	S1	13
Bannon, Kathleen	ELL	Strategic Reading A	7-8(A)	21-22	20
Brady, Jennie	ENG	CREATIVE WRITING	7-8(B)	S1	10

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
Brady, Jennie	ENG	ENGLISH 2/ACA	1-2(A)	21-22	11
Brady, Jennie	ENG	ENGLISH 2/ACA	5-6(A)	21-22	23
Brady, Jennie	ENG	ENGLISH 2/ACA	5-6(B)	21-22	13
Brady, Jennie	ENG	ENGLISH 2/ACA	3-4(A)	21-22	17
Brady, Jennie	ENG	ENGLISH 2/ACA	3-4(B)	21-22	22
BURDELSKI, ELIZABETH	ENG	ENGLISH 1/ACA	1-2(B)	21-22	19
BURDELSKI, ELIZABETH	ENG	ENGLISH 1/ACA	5-6(B)	21-22	20
BURDELSKI, ELIZABETH	ENG	ENGLISH 1/ACA	3-4(B)	21-22	21
BURDELSKI, ELIZABETH	ENG	ENGLISH 1/ACC	3-4(A)	21-22	22
BURDELSKI, ELIZABETH	ENG	MYTHOLOGY	1-2(A)	S1	8
GRIFFIN, DENNIS	ENG	ENGLISH 1/ACA	5-6(A)	21-22	16
GRIFFIN, DENNIS	ENG	ENGLISH 1/ACA	3-4(A)	21-22	19
GRIFFIN, DENNIS	ENG	ENGLISH 1/ACC	3-4(B)	21-22	21
GRIFFIN, DENNIS	ENG	ENGLISH 2/ACA	7-8(B)	21-22	23
GRIFFIN, DENNIS	ENG	ENGLISH 1/ACA	1-2(B)	21-22	17
JANDREAU, KARA	ENG	DRAMA 1	3-4(B)	S1	23
JANDREAU, KARA	ENG	ENGLISH 4/ACA	5-6(A)	21-22	24
JANDREAU, KARA	ENG	ENGLISH 4/ACA	1-2(B)	21-22	25
JANDREAU, KARA	ENG	ENGLISH 4/ACA	7-8(B)	21-22	17
JANDREAU, KARA	ENG	ENGLISH 4/ACA	1-2(A)	21-22	21
Levesque, Alanna	ENG	ENGLISH 2/ACA	1-2(A)	21-22	12
Levesque, Alanna	ENG	ENGLISH 2/ACA	1-2(B)	21-22	16
Levesque, Alanna	ENG	ENGLISH 2/ACA	7-8(A)	21-22	22
Levesque, Alanna	ENG	MEDIA LITERACY	5-6(A)	S1	26
Levesque, Alanna	ENG	ENGLISH 3/ACAD	3-4(B)	21-22	19
Levesque, Alanna	ENG	ENGLISH 3/ACAD	5-6(B)	21-22	19
MCELWEE, REBECCA	ENG	ENGLISH 3/ACC	7-8(B)	21-22	19
MCELWEE, REBECCA	ENG	ENGLISH 3/ACC	1-2(B)	21-22	25
MCELWEE, REBECCA	ENG	ENGLISH 3/ACC	5-6(B)	21-22	26
MCELWEE, REBECCA	ENG	ENGLISH LANGUAGE AP	1-2(A)	21-22	21
MCELWEE, REBECCA	ENG	ENGLISH LANGUAGE AP	7-8(A)	21-22	21
MCELWEE, REBECCA	ENG	ENGLISH LANGUAGE AP	3-4(A)	21-22	24
NOCERA, SHELLY	ENG	ENGLISH 1/ACC	1-2(B)	21-22	20
NOCERA, SHELLY	ENG	ENGLISH 3/ACAD	7-8(B)	21-22	20
NOCERA, SHELLY	ENG	ENGLISH 3/ACAD	1-2(A)	21-22	22

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
NOCERA, SHELLY	ENG	ENGLISH 3/ACAD	3-4(A)	21-22	22
NOCERA, SHELLY	ENG	ENGLISH 1/ACA	3-4(B)	21-22	20
NOCERA, SHELLY	ENG	ENGLISH 1/ACA	7-8(A)	21-22	24
PELUSO, JOANNE	ENG	CREATIVE WRITING	1-2(B)	S1	11
PELUSO, JOANNE	ENG	ENGLISH 2/ACC	3-4(A)	21-22	19
PELUSO, JOANNE	ENG	ENGLISH 2/ACC	5-6(B)	21-22	19
PELUSO, JOANNE	ENG	ENGLISH 2/ACC	5-6(A)	21-22	21
PELUSO, JOANNE	ENG	English 4/UCONN	7-8(A)	21-22	23
PELUSO, JOANNE	ENG	SEMINAR AP	3-4(B)	21-22	23
ROBERTS, KATHRYN	ENG	ENGLISH 3/ACAD	1-2(B)	21-22	22
ROBERTS, KATHRYN	ENG	ENGLISH 3/ACAD	5-6(A)	21-22	23
ROBERTS, KATHRYN	ENG	ENGLISH 4/ACA	3-4(B)	21-22	15
ROBERTS, KATHRYN	ENG	ENGLISH 4/ACA	3-4(A)	21-22	19
ROBERTS, KATHRYN	ENG	ENGLISH 4/ACA	5-6(B)	21-22	25
ROBERTS, KATHRYN	ENG	JOURNALISM	7-8(A)	S1	13
RYSKOWSKI, PAUL	ENG	ENGLISH 1/ACA	5-6(A)	21-22	13
RYSKOWSKI, PAUL	ENG	ENGLISH 1/ACA	3-4(A)	21-22	19
RYSKOWSKI, PAUL	ENG	ENGLISH 1/ACA	3-4(B)	21-22	21
RYSKOWSKI, PAUL	ENG	ENGLISH 1/ACC	5-6(B)	21-22	21
RYSKOWSKI, PAUL	ENG	SAT LITERACY PREP	7(B) 8(B)	S1	8
RYSKOWSKI, PAUL	ENG	Strategic Reading A	7-8(A)	21-22	18
HEALTH, NEW	HE	Health and Wellness	3-4(B)	S1	27
HEALTH, NEW	HE	Health and Wellness	5-6(B)	S1	27
HEALTH, NEW	HE	Health and Wellness	7-8(B)	S1	28
HEALTH, NEW	HE	Health II	1-2(A)	S1	21
HEALTH, NEW	HE	Health II	3-4(A)	S1	22
HEALTH, NEW	HE	Health II	7-8(A)	S1	28
Julius, Anthony	HE	Health and Wellness	5-6(A)	S1	14
Julius, Anthony	HE	Health and Wellness	1-2(A)	S1	24
Julius, Anthony	HE	Health and Wellness	7-8(A)	S1	26
Julius, Anthony	HE	Health II	1-2(B)	S1	20
Julius, Anthony	HE	Health II	7-8(B)	S1	23
Julius, Anthony	HE	Health II	3-4(B)	S1	27
BOURKE, LOGAN	MATH	PRE-CAL/ACA	1-2(B)	21-22	13
BOURKE, LOGAN	MATH	PRE-CAL/ACA	3-4(B)	21-22	17

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
BOURKE, LOGAN	MATH	STATISTICS/ACA	5-6(A)	21-22	19
BOURKE, LOGAN	MATH	STATISTICS/ACA	7-8(B)	21-22	21
BOURKE, LOGAN	MATH	ALGEBRA 2/ACA	3-4(A)	21-22	18
BOURKE, LOGAN	MATH	ALGEBRA 2/ACA	1-2(A)	21-22	20
BURNS, MICHELLE	MATH	ALGEBRA 2/ACA	5-6(A)	21-22	19
BURNS, MICHELLE	MATH	ALGEBRA 2/ACA	3-4(B)	21-22	23
BURNS, MICHELLE	MATH	English Support - Mathematics	1(B) 2(B)	21-22	16
BURNS, MICHELLE	MATH	GEOMETRY/ACA	5-6(B)	21-22	11
BURNS, MICHELLE	MATH	GEOMETRY/ACA	1-2(A)	21-22	13
BURNS, MICHELLE	MATH	GEOMETRY/ACA	7-8(A)	21-22	14
Germain, Bridget	MATH	ALGEBRA 1 FOUNDATIONS	3-4(B)	21-22	21
Germain, Bridget	MATH	ALGEBRA 1/ACA	1-2(B)	21-22	13
Germain, Bridget	MATH	ALGEBRA 1/ACA	7-8(A)	21-22	14
Germain, Bridget	MATH	ALGEBRA 1/ACA	7-8(B)	21-22	19
Germain, Bridget	MATH	ALGEBRA 1/ACA	1-2(A)	21-22	20
Germain, Bridget	MATH	ALGEBRA 1/ACA	3-4(A)	21-22	21
Hahn, James	MATH	ALGEBRA 1/ACC	1-2(A)	21-22	19
Hahn, James	MATH	ALGEBRA 2 FOUNDATIONS	3-4(B)	21-22	18
Hahn, James	MATH	ALGEBRA 2/ACA	3-4(A)	21-22	18
Hahn, James	MATH	ALGEBRA 1/ACA	5-6(A)	21-22	17
Hahn, James	MATH	ALGEBRA 1/ACA	1-2(B)	21-22	23
Hahn, James	MATH	ALGEBRA 1/ACA	7-8(B)	21-22	23
JONES, KARA	MATH	ALGEBRA 1/ACA	1-2(A)	21-22	22
JONES, KARA	MATH	ALGEBRA 1/ACC	1-2(B)	21-22	12
JONES, KARA	MATH	ALGEBRA 1/ACC	5-6(A)	21-22	14
JONES, KARA	MATH	GEOMETRY/ACC	3-4(B)	21-22	24
JONES, KARA	MATH	STATISTICS/AP	5-6(B)	21-22	27
KELLY, WILLIAM	MATH	Calculus AB/AP	1-2(A)	21-22	7
KELLY, WILLIAM	MATH	GEOMETRY/ACA	1-2(B)	21-22	12
KELLY, WILLIAM	MATH	GEOMETRY/ACA	7-8(A)	21-22	22
KELLY, WILLIAM	MATH	PRE-CAL/ACC	3-4(B)	21-22	21
KELLY, WILLIAM	MATH	PRE-CAL/ACC	5-6(A)	21-22	23
KELLY, WILLIAM	MATH	SAT Math	7(B) 8(B)	S1	8
MAESTRE, SARAH	MATH	Advanced Mathematical Decision Making	1-2(A)	21-22	13
MAESTRE, SARAH	MATH	Advanced Mathematical Decision Making	3-4(B)	21-22	13

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
MAESTRE, SARAH	MATH	GEOMETRY/ACC	7-8(B)	21-22	24
MAESTRE, SARAH	MATH	GEOMETRY/ACC	7-8(A)	21-22	25
MAESTRE, SARAH	MATH	GEOMETRY/ACA	5-6(B)	21-22	20
MAESTRE, SARAH	MATH	GEOMETRY/ACA	3-4(A)	21-22	22
Roberts, Tyler	MATH	ALGEBRA 2 FOUNDATIONS	1-2(B)	21-22	15
Roberts, Tyler	MATH	ALGEBRA 2/ACA	1-2(A)	21-22	15
Roberts, Tyler	MATH	ALGEBRA 2/ACA	5-6(B)	21-22	23
Roberts, Tyler	MATH	CALCULUS/ACC	7-8(B)	21-22	11
Roberts, Tyler	MATH	PRE-CAL/ACA	3-4(A)	21-22	17
Roberts, Tyler	MATH	PRE-CAL/ACA	5-6(A)	21-22	17
SALESKI, MARTHA	MATH	ALGEBRA 1 FOUNDATIONS	3-4(B)	21-22	9
SALESKI, MARTHA	MATH	ALGEBRA 1/ACA	3-4(A)	21-22	10
SALESKI, MARTHA	MATH	ALGEBRA 1/ACA	1-2(A)	21-22	22
SALESKI, MARTHA	MATH	GEOMETRY/ACA	5-6(A)	21-22	21
SALESKI, MARTHA	MATH	GEOMETRY/ACA	7-8(B)	21-22	23
SALESKI, MARTHA	MATH	GEOMETRY/ACC	1-2(B)	21-22	21
STEINFELD, ERIC	MATH	ALGEBRA 2/ACA	1-2(B)	21-22	21
STEINFELD, ERIC	MATH	ALGEBRA 2/ACA	7-8(A)	21-22	23
STEINFELD, ERIC	MATH	ALGEBRA 2/ACC	5-6(A)	21-22	17
STEINFELD, ERIC	MATH	ALGEBRA 2/ACC	1-2(A)	21-22	20
STEINFELD, ERIC	MATH	ALGEBRA 2/ACC	7-8(B)	21-22	25
STEINFELD, ERIC	MATH	STATISTICS/ACA	3-4(B)	21-22	20
BAGLEY, KEN	MU	BAND	5-6(B)	21-22	30
BAGLEY, KEN	MU	BAND	1-2(B)	21-22	36
BAGLEY, KEN	MU	MUSIC THEORY 1	3-4(A)	S1	8
BAGLEY, KEN	MU	PIANO/KEYBOARD	7-8(B)	S1	9
BAGLEY, KEN	MU	PIANO/KEYBOARD	5-6(A)	S1	12
BAGLEY, KEN	MU	PIANO/KEYBOARD	1-2(A)	S1	13
CODERRE, MICHAEL	MU	CONCERT CHOIR	5-6(A)	21-22	26
CODERRE, MICHAEL	MU	CONCERT CHOIR	3-4(B)	21-22	29
CODERRE, MICHAEL	MU	GUITAR(ACOUSTIC)	1-2(B)	S1	7
CODERRE, MICHAEL	MU	GUITAR(ACOUSTIC)	5-6(B)	S1	15
CODERRE, MICHAEL	MU	GUITAR(ACOUSTIC)	7-8(A)	S1	15
CODERRE, MICHAEL	MU	MUSIC TECHNOLOGY	1-2(A)	S1	7
ARCHANGELO, STACIA	PE/HE	PHYS ED 10/11/12	1-2(A)	S1	17

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
ARCHANGELO, STACIA	PE/HE	PHYS ED 10/11/12	7-8(B)	S1	18
ARCHANGELO, STACIA	PE/HE	PHYS ED 10/11/12	3-4(B)	S1	31
ARCHANGELO, STACIA	PE/HE	PHYS ED 9	5-6(A)	S1	4
ARCHANGELO, STACIA	PE/HE	PHYS ED 9	5-6(B)	S1	28
ARCHANGELO, STACIA	PE/HE	PHYS ED 9	7-8(A)	S1	29
D'AMATO, CHRISTOPHER	PE/HE	PHYS ED 10/11/12	7-8(B)	S1	18
D'AMATO, CHRISTOPHER	PE/HE	PHYS ED 10/11/12	1-2(A)	S1	19
D'AMATO, CHRISTOPHER	PE/HE	PHYS ED 10/11/12	1-2(B)	S1	24
D'AMATO, CHRISTOPHER	PE/HE	PHYS ED 9	5-6(A)	S1	17
D'AMATO, CHRISTOPHER	PE/HE	PHYS ED 9	3-4(A)	S1	28
D'AMATO, CHRISTOPHER	PE/HE	PHYS ED 9	3-4(B)	S1	30
FLOYD, ANTHONY	PE/HE	PHYS ED 10/11/12	7-8(B)	S1	18
FLOYD, ANTHONY	PE/HE	PHYS ED 10/11/12	1-2(B)	S1	23
FLOYD, ANTHONY	PE/HE	PHYS ED 10/11/12	7-8(A)	S1	27
FLOYD, ANTHONY	PE/HE	PHYS ED 10/11/12	3-4(A)	S1	28
FLOYD, ANTHONY	PE/HE	PHYS ED 10/11/12	5-6(B)	S1	30
FLOYD, ANTHONY	PE/HE	PHYS ED 10/11/12	5-6(A)	S1	31
REDMAN, SCOTT	HE	Health and Wellness	1-2(B)	S1	21
REDMAN, SCOTT	PE/HE	PHYS ED 10/11/12	1-2(A)	S1	19
REDMAN, SCOTT	PE/HE	PHYS ED 10/11/12	3-4(A)	S1	28
REDMAN, SCOTT	PE/HE	PHYS ED 10/11/12	5-6(B)	S1	30
REDMAN, SCOTT	PE/HE	PHYS ED 10/11/12	7-8(A)	S1	30
REDMAN, SCOTT	PE/HE	PHYS ED 10/11/12	3-4(B)	S1	31
BITTEL, DAVID	SCI	Computer Science Principles/ AP	1-2(B)	21-22	13
BITTEL, DAVID	SCI	COMPUTER SCIENCE/AP	5-6(B)	21-22	8
BITTEL, DAVID	SCI	PHYS 1201: Physics I/UCONN	3-4(A-B)	S1	18
BITTEL, DAVID	SCI	PHYS 1201: Physics I/UCONN	3-4(A-B)	S1	18
BITTEL, DAVID	SCI	PHYS 1201: Physics I/UCONN	1-2(A)	21-22	24
BITTEL, DAVID	SCI	PHYSICS/ACA	7-8(A)	21-22	13
CODERRE, SARAH	SCI	BIOLOGY/ACA	5-6(B)	21-22	16
CODERRE, SARAH	SCI	BIOLOGY/ACA	3-4(B)	21-22	21
CODERRE, SARAH	SCI	BIOLOGY/ACC	5-6(A)	21-22	20
CODERRE, SARAH	SCI	BIOLOGY/ACC	3-4(A)	21-22	21
CODERRE, SARAH	SCI	BIOLOGY/ACA	1-2(A)	21-22	16
CODERRE, SARAH	SCI	BIOLOGY/ACA	7-8(B)	21-22	21

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
DILERNIA, ELIZABETH	SCI	Botany	3-4(A)	S1	16
DILERNIA, ELIZABETH	SCI	ENVIRONMENTAL SCIENCE AP	7-8(B)	21-22	23
DILERNIA, ELIZABETH	SCI	Environmental Sustainability and Issues	1-2(A)	21-22	10
DILERNIA, ELIZABETH	SCI	Oceanography	1-2(B)	S1	19
DILERNIA, ELIZABETH	SCI	Oceanography	5-6(B)	S1	22
DILERNIA, ELIZABETH	SCI	Oceanography	5-6(A)	S1	23
Elliott, Lauri	SCI	CHEMISTRY/ACC	3-4(A)	21-22	19
Elliott, Lauri	SCI	CHEMISTRY/ACC	7-8(A)	21-22	20
Elliott, Lauri	SCI	CHEMISTRY/AP	1-2(A-B)	21-22	21
Elliott, Lauri	SCI	CHEMISTRY/AP	1-2(A-B)	21-22	21
Elliott, Lauri	SCI	Principles of Chemistry	5-6(B)	21-22	24
Elliott, Lauri	SCI	Principles of Chemistry	7-8(B)	21-22	24
KIELMA, CAROLYN	SCI	BIOLOGY/ACA	1-2(B)	21-22	18
KIELMA, CAROLYN	SCI	BIOLOGY/ACA	3-4(A)	21-22	19
KIELMA, CAROLYN	SCI	BIOLOGY/ACC	5-6(B)	21-22	21
KIELMA, CAROLYN	SCI	BIOLOGY/ACC	1-2(A)	21-22	22
KIELMA, CAROLYN	SCI	Biotechnology and Forensics	3-4(B)	21-22	23
KIELMA, CAROLYN	SCI	Biotechnology and Forensics	5-6(A)	21-22	23
MENDAL, ZOE	SCI	BIOLOGY/ACA	7-8(A)	21-22	18
MENDAL, ZOE	SCI	BIOLOGY/ACC	1-2(B)	21-22	21
MENDAL, ZOE	SCI	PHYSICAL SCI/ACA	7-8(B)	21-22	22
MENDAL, ZOE	SCI	PHYSICAL SCI/ACC	5-6(B)	21-22	22
MENDAL, ZOE	SCI	PHYSICAL SCI/ACC	1-2(A)	21-22	23
MENDAL, ZOE	SCI	PHYSICAL SCI/ACA	3-4(A)	21-22	20
Mercieri, Katie	SCI	CHEMISTRY/ACC	5-6(A)	21-22	17
Mercieri, Katie	SCI	CHEMISTRY/ACC	7-8(B)	21-22	18
Mercieri, Katie	SCI	CHEMISTRY/ACC	1-2(A)	21-22	23
Mercieri, Katie	SCI	PHYSICS/ACA	3-4(A)	21-22	22
Mercieri, Katie	SCI	Principles of Chemistry	1-2(B)	21-22	19
Mercieri, Katie	SCI	Principles of Chemistry	3-4(B)	21-22	24
MEYER, ERIN	SCI	ANAT and PHYS/ACA	5-6(B)	21-22	13
MEYER, ERIN	SCI	ANAT and PHYS/ACA	1-2(B)	21-22	18
MEYER, ERIN	SCI	ANAT and PHYS/ACA	3-4(A)	21-22	19
MEYER, ERIN	SCI	BIOLOGY/ACA	1-2(A)	21-22	16
MEYER, ERIN	SCI	BIOLOGY/AP	7-8(B)	21-22	20

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
PETERSEN, TIINA	SCI	Astronomy	1-2(B)	S1	24
PETERSEN, TIINA	SCI	Meteorology	7-8(B)	S1	19
PETERSEN, TIINA	SCI	PHYSICAL SCI/ACA	5-6(A)	21-22	15
PETERSEN, TIINA	SCI	PHYSICAL SCI/ACA	7-8(A)	21-22	17
PETERSEN, TIINA	SCI	PHYSICAL SCI/ACA	1-2(A)	21-22	18
PETERSEN, TIINA	SCI	PHYSICAL SCI/ACA	3-4(B)	21-22	21
SCHWER, ROBERT	SCI	ANAT and PHYS/ACA	5-6(B)	21-22	13
SCHWER, ROBERT	SCI	PHYSICAL SCI/ACA	5-6(A)	21-22	13
SCHWER, ROBERT	SCI	PHYSICAL SCI/ACA	1-2(A)	21-22	19
SCHWER, ROBERT	SCI	PHYSICAL SCI/ACA	3-4(A)	21-22	20
SCHWER, ROBERT	SCI	PHYSICAL SCI/ACC	1-2(B)	21-22	20
SCHWER, ROBERT	SCI	PHYSICAL SCI/ACC	7-8(B)	21-22	22
VALLE, ORLANDO	SCI	English Support - Science	1(B) 2(B)	21-22	8
VALLE, ORLANDO	SCI	PHYSICAL SCI/ACA	3-4(B)	21-22	19
VALLE, ORLANDO	SCI	PHYSICAL SCI/ACC	3-4(A)	21-22	18
VALLE, ORLANDO	SCI	Principles of Chemistry	1-2(A)	21-22	21
VALLE, ORLANDO	SCI	Principles of Chemistry	5-6(A)	21-22	24
VALLE, ORLANDO	SCI	PHYSICAL SCI/ACA	5-6(B)	21-22	23
ADAMS, WENDY	SOC	Civics	5-6(B)	S1	22
ADAMS, WENDY	SOC	Civics	3-4(A)	S1	24
ADAMS, WENDY	SOC	MOD AMER HIST/ACA	1-2(B)	21-22	23
ADAMS, WENDY	SOC	MOD AMER HIST/ACA	7-8(A)	21-22	25
ADAMS, WENDY	SOC	US GOVT and POL/AP	1-2(A)	21-22	15
BROWER, GINA	SOC	PSYCHOLOGY/AP	5-6(A)	21-22	15
BROWER, GINA	SOC	PSYCHOLOGY/AP	3-4(B)	21-22	18
BROWER, GINA	SOC	WORLD HISTORY/ACA	3-4(A)	21-22	21
BROWER, GINA	SOC	WORLD HISTORY/ACA	1-2(B)	21-22	23
BROWER, GINA	SOC	WORLD HISTORY/ACC	1-2(A)	21-22	19
BROWER, GINA	SOC	WORLD HISTORY/ACA	7-8(B)	21-22	19
CIRILLO, JASON	SOC	Civics	1-2(B)	S1	22
CIRILLO, JASON	SOC	MOD AMER HIST/ACA	5-6(B)	21-22	23
CIRILLO, JASON	SOC	MOD AMER HIST/ACA	3-4(B)	21-22	26
CIRILLO, JASON	SOC	MOD AMER HIST/ACC	1-2(A)	21-22	18
CIRILLO, JASON	SOC	MOD AMER HIST/ACC	5-6(A)	21-22	21
CIRILLO, JASON	SOC	RESEARCH AP	7-8(A)	21-22	21

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
FLEISCHMAN, JEFFREY	SOC	Civics	7-8(B)	S1	23
FLEISCHMAN, JEFFREY	SOC	US GOVT and POL/AP	3-4(B)	21-22	15
FLEISCHMAN, JEFFREY	SOC	Civics	5-6(A)	S1	24
FLEISCHMAN, JEFFREY	SOC	Early US History	1-2(A)	S1	13
FLEISCHMAN, JEFFREY	SOC	Civics	1-2(B)	S1	14
LAVOIE, THOMAS	SOC	GLOBAL ISSUES	1-2(A)	S1	11
LAVOIE, THOMAS	SOC	GLOBAL ISSUES	7-8(B)	S1	12
LAVOIE, THOMAS	SOC	GLOBAL ISSUES	5-6(B)	S1	17
LAVOIE, THOMAS	SOC	SOCIOLOGY/ACA	5-6(A)	S1	21
LAVOIE, THOMAS	SOC	SOCIOLOGY/ACA	3-4(B)	S1	23
LAVOIE, THOMAS	SOC	US HISTORY/AP	3-4(A)	21-22	27
MCDANIEL, KATHLEEN	SOC	ECONOMICS/ACA	1-2(B)	S1	10
MCDANIEL, KATHLEEN	SOC	ECONOMICS/ACA	3-4(B)	S1	13
MCDANIEL, KATHLEEN	SOC	WORLD HISTORY/ACA	5-6(A)	21-22	19
MCDANIEL, KATHLEEN	SOC	WORLD HISTORY/ACA	7-8(B)	21-22	22
MCDANIEL, KATHLEEN	SOC	WORLD HISTORY/ACA	7-8(A)	21-22	23
MCDANIEL, KATHLEEN	SOC	WORLD HISTORY/ACC	3-4(A)	21-22	17
NUGENT, ALYSSA	SOC	LAW and JUSTICE/ACA	1-2(A)	S1	17
NUGENT, ALYSSA	SOC	LAW and JUSTICE/ACA	1-2(B)	S1	19
NUGENT, ALYSSA	SOC	LAW and JUSTICE/ACA	7-8(A)	S1	27
NUGENT, ALYSSA	SOC	MOD AMER HIST/ACA	3-4(A)	21-22	25
NUGENT, ALYSSA	SOC	MOD AMER HIST/ACC	7-8(B)	21-22	23
ROCCO, LISA	SOC	Contemporary Psychology	7-8(B)	S1	25
ROCCO, LISA	SOC	DEVELOP PSYCHOLOGY	3-4(A)	S1	21
ROCCO, LISA	SOC	DEVELOP PSYCHOLOGY	3-4(B)	S1	26
ROCCO, LISA	SOC	MOD AMER HIST/ACA	5-6(B)	21-22	23
ROCCO, LISA	SOC	MOD AMER HIST/ACA	5-6(A)	21-22	21
ROCCO, LISA	SOC	MOD AMER HIST/ACA	1-2(A)	21-22	23
Sonstrom, Connor	SOC	WORLD HISTORY/ACC	7-8(A)	21-22	22
Sonstrom, Connor	SOC	WORLD HISTORY/ACA	5-6(A)	21-22	14
Sonstrom, Connor	SOC	WORLD HISTORY/ACA	3-4(A)	21-22	16
STAVENS, JOHN	SOC	Human Geography AP	5-6(A)	21-22	24
STAVENS, JOHN	SOC	WORLD HISTORY/ACA	1-2(A)	21-22	11
STAVENS, JOHN	SOC	WORLD HISTORY/ACA	3-4(A)	21-22	12
STAVENS, JOHN	SOC	WORLD HISTORY/ACA	5-6(B)	21-22	24

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
STAVENS, JOHN	SOC	WORLD HISTORY/AP	1-2(B)	21-22	10
Bailey, Amy	SPED	Func Aca/English 9/10 & 11/12	7-8(A)	S1	12
Bailey, Amy	SPED	Func Aca/History 9/10 & 11/12	3-4(A)	S1	12
Bailey, Amy	SPED	Func Aca/Life Skills 9/10 & 11/12	5-6(B)	S1	12
Bailey, Amy	SPED	Func Aca/Math 9/10 & 11/12	7-8(B)	S1	12
Bailey, Amy	SPED	Func Aca/Science 9/10 & 11/12	3-4(B)	S1	12
Bailey, Amy	SPED	Func Aca/Voc Skills 9/10 & 11/12	5-6(A)	S1	12
BRODERICK, COLIN	SPED	Algebra 2	1-2(B)	21-22	11
BRODERICK, COLIN	SPED	English 10	1-2(A)	21-22	11
BRODERICK, COLIN	SPED	Environmental Science	7-8(A)	21-22	12
BRODERICK, COLIN	SPED	Physical Sci/ACA	5-6(B)	21-22	11
BRODERICK, COLIN	SPED	U.S. History	3-4(B)	21-22	11
BRODERICK, COLIN	SPED	Vocational Skills 1	5-6(A)	21-22	10
Croce, Jennifer	SPED	Algebra 2	1-2(B)	21-22	11
Croce, Jennifer	SPED	English 10	1-2(A)	21-22	9
Croce, Jennifer	SPED	Environmental Science	7-8(A)	21-22	10
Croce, Jennifer	SPED	Geometry ACA	5-6(B)	21-22	9
Croce, Jennifer	SPED	U.S. History	3-4(B)	21-22	11
Croce, Jennifer	SPED	Vocational Skills 1	5-6(A)	21-22	8
DAVIES, JAMMY	SPED	Career & Life Skills	5-6(B)	S1	16
DAVIES, JAMMY	SPED	English 10 Essentials	3-4(A)	21-22	12
DAVIES, JAMMY	SPED	Environmental Science	5-6(A)	21-22	12
DAVIES, JAMMY	SPED	Geometry Essentials	1-2(B)	21-22	12
DAVIES, JAMMY	SPED	Life Skills II	1-2(A)	21-22	11
DAVIES, JAMMY	SPED	U.S. History	7-8(B)	21-22	12
DECKER, COURTNEY	SPED	DEV STUDY HALL	5-6(A)	S1	11
DECKER, COURTNEY	SPED	English 11 Essentials	1-2(B)	21-22	19
DECKER, COURTNEY	SPED	English 3/ACA	3-4(B)	21-22	6
DECKER, COURTNEY	SPED	English 3/ACA	5-6(B)	21-22	9
DECKER, COURTNEY	SPED	English 4/ACA	1-2(A)	21-22	8
DIDOMINZIO, MICHAEL	SPED	DEV STUDY HALL	7-8(A)	S1	8
DIDOMINZIO, MICHAEL	SPED	Vocational Education	1-2(B)	21-22	15
DIDOMINZIO, MICHAEL	SPED	Vocational Education	5-6(B)	21-22	15
DIDOMINZIO, MICHAEL	SPED	World History Essentials	3-4(B)	21-22	9
DIDOMINZIO, MICHAEL	SPED	World History/ACA	5-6(A)	21-22	5

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
DIDOMINZIO, MICHAEL	SPED	World History/ACA	3-4(A)	21-22	12
DIGIACOMO, DAVID	SPED	DEV STUDY HALL	3-4(B)	S1	5
DIGIACOMO, DAVID	SPED	Geography Essentials	3-4(A)	S1	13
DIGIACOMO, DAVID	SPED	Modern Am History/ACA	5-6(A)	21-22	10
DIGIACOMO, DAVID	SPED	Modern Am History/ACA	1-2(A)	21-22	11
DIGIACOMO, DAVID	SPED	Modern American History Essentials	1-2(B)	21-22	17
DIGIACOMO, DAVID	SPED	World History/ACA	7-8(B)	21-22	9
GUMPERT, JESSE	SPED	DEV STUDY HALL	7-8(A)	S1	6
GUMPERT, JESSE	SPED	Geometry ACA	3-4(A)	21-22	9
GUMPERT, JESSE	SPED	Geometry Essentials	1-2(A)	21-22	21
KILRAY, MARK	SPED	Biology ACA	1-2(A)	21-22	5
KILRAY, MARK	SPED	Biology ACA	7-8(B)	21-22	12
KILRAY, MARK	SPED	Biology Essentials	3-4(A)	21-22	18
KILRAY, MARK	SPED	Civics/ACA	1-2(B)	S1	2
KILRAY, MARK	SPED	Civics/ACA	5-6(A)	S1	8
KILRAY, MARK	SPED	DEV STUDY HALL	5-6(B)	S1	7
Maruca, Kayla	SPED	Func Aca/English 9/10 & 11/12	1-2(A)	S1	10
Maruca, Kayla	SPED	Func Aca/History 9/10 & 11/12	5-6(A)	S1	6
Maruca, Kayla	SPED	Func Aca/Life Skills 9/10 & 11/12	7-8(B)	S1	9
Maruca, Kayla	SPED	Func Aca/Math 11/12	3-4(B)	S1	11
Maruca, Kayla	SPED	Func Aca/Math 9/10 & 11/12	5-6(B)	S1	11
Maruca, Kayla	SPED	Func Aca/Science 9/10 & 11/12	7-8(A)	S1	7
MONTAGUE, THOMAS	SPED	Adv Math Decision Making	1-2(B)	21-22	10
MONTAGUE, THOMAS	SPED	Adv Math Decision Making	7-8(A)	21-22	13
MONTAGUE, THOMAS	SPED	Algebra 2 Essentials	7-8(B)	21-22	20
MONTAGUE, THOMAS	SPED	Algebra 2/ACA	3-4(A)	21-22	3
MONTAGUE, THOMAS	SPED	Algebra 2/ACA	1-2(A)	21-22	8
MONTAGUE, THOMAS	SPED	DEV STUDY HALL	3-4(B)	S1	9
PHILIPPON, PAUL	SPED	DEV STUDY HALL	5-6(A)	S1	12
PHILIPPON, PAUL	SPED	English 10 Essentials	5-6(B)	21-22	16
PHILIPPON, PAUL	SPED	English 12 Essentials	1-2(A)	21-22	19
PHILIPPON, PAUL	SPED	English 4/ACA	7-8(B)	21-22	6
PHILIPPON, PAUL	SPED	English 2/ACA	3-4(A)	21-22	8
PHILIPPON, PAUL	SPED	English 2/ACA	3-4(B)	21-22	10
TROMBLEY, JENNIFER	SPED	DEV STUDY HALL	5-6(A)	S1	8

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
TROMBLEY, JENNIFER	SPED	English 9 Essentials	1-2(A)	21-22	11
TROMBLEY, JENNIFER	SPED	English 1/ACA	7-8(A)	21-22	8
TROMBLEY, JENNIFER	SPED	English 1/ACA	1-2(B)	21-22	10
TROMBLEY, JENNIFER	SPED	English 1/ACA	3-4(B)	21-22	10
TROMBLEY, JENNIFER	SPED	English 2/ACA	5-6(B)	21-22	4
Viets, Sharon	SPED	DEV STUDY HALL	5-6(A)	S1	9
Viets, Sharon	SPED	Physical Sci/ACA	3-4(A)	21-22	9
Viets, Sharon	SPED	Physical Science Essentials	7-8(B)	21-22	14
Viets, Sharon	SPED	Principles of Chemistry	1-2(B)	21-22	7
Viets, Sharon	SPED	Principles of Chemistry	3-4(B)	21-22	8
Viets, Sharon	SPED	Principles of Chemistry Essentials	7-8(A)	21-22	15
WEILAND, COLLEEN	SPED	Algebra 1 Essentials	7-8(A)	21-22	15
WEILAND, COLLEEN	SPED	DEV STUDY HALL	1-2(A)	S1	11
WEILAND, COLLEEN	SPED	Algebra 1/ACA	5-6(A)	21-22	6
WEILAND, COLLEEN	SPED	Algebra 1/ACA	1-2(B)	21-22	9
WEILAND, COLLEEN	SPED	Algebra 1/ACA	7-8(B)	21-22	10
WEILAND, COLLEEN	SPED	Physical Sci/ACA	3-4(B)	21-22	10
Bantea, Emil	WL	Language and Culture A	1-2(A)	S1	19
Bantea, Emil	WL	Language and Culture A	5-6(B)	S1	24
Bantea, Emil	WL	LATIN 1/ACC	7-8(A)	21-22	19
Bantea, Emil	WL	LATIN 2/ACC	1-2(B)	21-22	19
Bantea, Emil	WL	LATIN 3/ACC	7-8(B)	21-22	15
Bantea, Emil	WL	LATIN 4/ACC	5-6(A)	21-22	8
CRUZ, PAULA	WL	SPANISH 2/ACA	5-6(B)	21-22	16
CRUZ, PAULA	WL	SPANISH 2/ACA	7-8(B)	21-22	16
CRUZ, PAULA	WL	SPANISH 2/ACC	5-6(A)	21-22	18
CRUZ, PAULA	WL	SPANISH 2/ACC	1-2(B)	21-22	19
CRUZ, PAULA	WL	SPANISH 3/ACA	3-4(A)	21-22	22
CRUZ, PAULA	WL	SPANISH 3/ACA	1-2(A)	21-22	23
INFANTE, LUCIA	WL	ITALIAN 1/ACA	5-6(A)	21-22	12
INFANTE, LUCIA	WL	ITALIAN 1/ACA	7-8(A)	21-22	18
INFANTE, LUCIA	WL	ITALIAN 2/ACA	3-4(A)	21-22	8
INFANTE, LUCIA	WL	ITALIAN 3/ACA & ACC	3-4(B)	21-22	12
INFANTE, LUCIA	WL	ITALIAN 4/ACA	5-6(B)	21-22	9
INFANTE, LUCIA	WL	SPANISH 1/ACA	1-2(B)	21-22	22

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
Lanza, Claudia	WL	SPANISH 1/ACA	1-2(A)	21-22	23
Lanza, Claudia	WL	SPANISH 1/ACA	1-2(B)	21-22	24
Lanza, Claudia	WL	SPANISH 1/ACA	7-8(A)	21-22	24
Lanza, Claudia	WL	SPANISH 1/ACC	7-8(B)	21-22	23
Lanza, Claudia	WL	SPANISH 2/ACA	5-6(A)	21-22	18
Lanza, Claudia	WL	SPANISH 2/ACC	5-6(B)	21-22	18
MCDERMOTT, JUSTIN	WL	SPANISH 2/ACA	1-2(A)	21-22	11
MCDERMOTT, JUSTIN	WL	SPANISH 2/ACA	1-2(B)	21-22	14
MCDERMOTT, JUSTIN	WL	SPANISH 3/ACC	3-4(A)	21-22	21
MCDERMOTT, JUSTIN	WL	SPANISH 3/ACC	5-6(B)	21-22	22
MCDERMOTT, JUSTIN	WL	SPANISH 4/ACC	7-8(B)	21-22	14
SCHACHT, ANDREA	WL	SPANISH 1/ACA	5-6(A)	21-22	23
SCHACHT, ANDREA	WL	SPANISH 1/ACA	3-4(A)	21-22	25
SCHACHT, ANDREA	WL	SPANISH 4/ACA	7-8(A)	21-22	14
SCHACHT, ANDREA	WL	SPANISH 4/ACC	1-2(B)	21-22	12
SCHACHT, ANDREA	WL	SPANISH 4/ACC	5-6(B)	21-22	12
SCHACHT, ANDREA	WL	SPANISH 5/AP	3-4(B)	21-22	12
THIBODEAU, KELLY LYNNE	WL	FRENCH 1/ACA	3-4(B)	21-22	20
THIBODEAU, KELLY LYNNE	WL	FRENCH 1/ACA	5-6(B)	21-22	21
THIBODEAU, KELLY LYNNE	WL	FRENCH 1/ACA & ACC	7-8(B)	21-22	25
THIBODEAU, KELLY LYNNE	WL	FRENCH 2/ACA & ACC	5-6(A)	21-22	21
THIBODEAU, KELLY LYNNE	WL	FRENCH 3/ACA & ACC	1-2(A)	21-22	21
THIBODEAU, KELLY LYNNE	WL	FRENCH 4/ACA & ACC	3-4(A)	21-22	14
Grand Total					8265

LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
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LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
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LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
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LESSARD, BARBARA	ART	POTTERY 1	3-4(B)	S1	20
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Edgewood School

345 Mix Street

Bristol, CT 06010

Ms. Kristin Abraham, Principal

(860) 584-7828

**Re: Edgewood Elementary School Roof Replacement
Education Specification****1. RATIONALE:**

Edgewood Elementary School last replaced its roof in 1987. Over the last several years there have been many leaks and patches to the roof that have proven to become a significant expense to maintain.

The Bristol Board of Education is seeking to replace 44,000 sq. ft. ballasted membrane roof at Edgewood Elementary School located at 345 Mix Street.

2. LONG-RANGE PLAN

As part of the 10 Year Capital Improvement Plan, the aged roofs on the City of Bristol public buildings are being replaced. Due to the age of this roof, and the many patches and repairs in the past, the roof is at the end of its life cycle. The roof replacement shall be based on a complete roof system as provided primarily by a single manufacturer, with a minimum 30-year warranty for said roof. Additionally, the roof replacement shall include upgrades to or replacement of roof drain assemblies, skylights, roof hatches, railings, repair of masonry on the roof, and other mechanical upgrades as necessary.

3. THE PROJECT

- Removal of existing ballasted membrane roof system down to the roof deck.
- Deck repairs and or replacement of 1000 +/- s.f. of roof area.
- Installation of tapered insulation @ ¼"/ft. minimum slope.
- Replacing all existing roof drains with new and installation of additional primary roof drains and associated plumbing.
- Installation of all new secondary roof drains and associated plumbing.
- Installation of new flashing and roof edge metal.
- Replacing all existing skylights with new energy efficient units.

- Installation of new and/or replacement of existing roof hatches and ladders with new.
- Installation fall protection railing where required.
- Disconnecting all existing roof mounted MEP equipment, raising equipment curbs as required for new ¼"/ft. tapered insulation and remounting/re-connecting all existing MEP equipment.
- Mechanical roof fans and some HVAC equipment may be replaced as required.
- Extending all plumbing vent stacks as required to meet code.
- Re-pointing of masonry at chimneys.
- Replacing chimney caps where needed.
- The current school includes grades PK-5 and houses various classrooms, a gymnasium, art rooms, music rooms, administration offices, supply spaces and storage, and boiler room.
- No FF&E will be affected.

4. BUILDING SYSTEMS

- Security: N/A
- Public Address: N/A
- Technology: N/A
- Phone Systems: N/A
- Clocks: N/A

5. INTERIOR BUILDING ENVIRONMENT

- Acoustics: Ceilings – If ceiling tiles are damaged due to water leaking through the roof, they shall be replaced as part of the project. If water marks are on the walls, they shall be repainted.
- Lighting: N/A
- HVAC: Some rooftop units will be replaced to allow coordination of curbing and flashing. Others will be raised to accommodate new curbing.
- Plumbing: Roof drains and piping will be added to accommodate the code.

- Windows and Doors: N/A

6. SITE DEVELOPMENT

- Site Acquisitions: N/A
- Parking: N/A
- Drives: N/A
- Walkways: N/A
- Landscaping: N/A
- Site Improvements: N/A

7. COMMUNITY USES

Edgewood Elementary School is used by our community during, before and after school hours, and on some weekends year round. The uses include but are not limited to the following:

- PTO
- After School Activities
- Summer Programs

Various and sometimes multiple areas are used for these functions.

Chippens Hill Middle School Oil Tank Removal and Replacement

DEEP Facility ID 17-50295

551 Peacedale Street

Bristol CT 06010

Principal: Mariliz Fitzpatrick

860-584-3881

Tank 1: 10,000-gallon heating fuel underground storage tank (UST)

Re: Education Specification1. RATIONALE:

The Chippens Hill Middle School has two underground storage tanks. Tank 1 is a 10,000-gallon fiberglass reinforced plastic and houses heating oil. The second tank is a 550-gallon fiberglass reinforce plastic that houses diesel fuel for the site generator. The tanks were installed in August 1992 and will reach the end of their “Life Expectancy” in August 2022. The tanks will be removed and replaced to meet the current codes.

2. LONG RANGE PLAN:

As part of the 10-year Capital Improvement Plan, each year we identify tanks that need to be phased out and removed and or replaced. During the joint board Capital Improvement Plan meeting held on May 25, 2021, these two tanks were identified and approved for replacement.

3. THE PROJECT SCOPE

- Remove and replace the existing 10,000 gallon UST
- Test Soil as necessary

4. BUILDING SYSTEMS

- Security: N/A
- Public Address: N/A
- Technology: N/A
- Phone Systems: N/A
- Clocks: N/A

5. INTERIOR BUILDING ENVIRONMENT

- Acoustics: Ceilings: N/A
- Lighting: N/A
- HVAC: N/A
- Plumbing: N/A
- Windows and Doors: N/A

6. SITE DEVELOPMENT

- Site Acquisitions: N/A
- Parking: N/A
- Drives: N/A
- Walkways: N/A
- Landscaping: N/A
- Site Improvements: N/A

7. COMMUNITY USES

Chippens Hill Middle School is used by our community during, before, and after school hours, and on some weekends year round. The uses include but are not limited to the following:

- PTO
- After School Activities
- Summer Programs

Various and sometimes multiple areas are used for these functions.

Chippens Hill Middle School Diesel Tank Removal and Replacement

DEEP Facility ID 17-50295

551 Peacedale Street

Bristol CT 06010

Principal: Mariliz Fitzpatrick

860-584-3881

Tank 2: 550-gallon Diesel underground storage tank (UST)

Re: Education Specification1. RATIONALE:

The Chippens Hill Middle School has two underground storage tanks. Tank 1 is a 10,000-gallon fiberglass reinforced plastic and houses heating oil. The second tank is a 550-gallon fiberglass reinforce plastic that houses diesel fuel for the site generator. The tanks were installed in August 1992 and will reach the end of their “Life Expectancy” in August 2022. The tanks will be removed and replaced to meet the current codes.

2. LONG RANGE PLAN:

As part of the 10-year Capital Improvement Plan, each year we identify tanks that need to be phased out and removed and or replaced. During the joint board Capital Improvement Plan meeting held on May 25, 2021, these two tanks were identified and approved for replacement.

3. THE PROJECT SCOPE

- Remove and replace the existing 550-gallon UST
- Test Soil as necessary

4. BUILDING SYSTEMS

- Security: N/A
- Public Address: N/A
- Technology: N/A
- Phone Systems: N/A
- Clocks: N/A

5. INTERIOR BUILDING ENVIRONMENT

- Acoustics: Ceilings: N/A
- Lighting: N/A
- HVAC: N/A
- Plumbing: N/A
- Windows and Doors: N/A

6. SITE DEVELOPMENT

- Site Acquisitions: N/A
- Parking: N/A
- Drives: N/A
- Walkways: N/A
- Landscaping: N/A
- Site Improvements: N/A

7. COMMUNITY USES

Chippens Hill Middle School is used by our community during, before, and after school hours, and on some weekends year round. The uses include but are not limited to the following:

- PTO
- After School Activities
- Summer Programs

Various and sometimes multiple areas are used for these functions.



Bristol Public Schools
Office of Teaching & Learning

Department	Career and Technical Education (CTE)
Department Philosophy	Bristol schools believe in providing students with rich opportunities to ensure career and college readiness. These opportunities include development of skills, practices, and exploration within several career clusters and pathways, beginning at the middle school level. Each CTE curriculum enables students to acquire and strengthen leadership, literacy, numeracy, decision-making, computer skills, and technology skills through 11 career clusters and pathways: (1) architecture and construction, (2) business management, (3) education and training, (4) finance, (5) health science, (6) hospitality and tourism, (7) information technology, (8) manufacturing, (9) marketing, (10) transportation, distribution and logistics, and (11) STEM. Each career cluster provides students with access to hand-on experiences that will allow for students development of skills that will support successful transition to their post secondary experiences.
Course	Technology I: An introduction to Technology
Course Description for Program of Studies	The 6th grade Introduction to Technology class is an exploratory course designed to expose and inspire students to multiple career pathways. Students will be introduced to career pathways and the building blocks of society through project based learning content in Robotics & Coding, Digital Communications & Graphic Design, and Engineering & Technology. Students will gain knowledge and understanding of the world we live in and how their personal skill sets are invaluable and where they fit into society.
Grade Level	6th grade
Pre-requisites	None
Credit (if applicable)	

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[Module 4: Introduction to Tools and Materials](#)

[Module 5: Introduction to Manufacturing](#)

[Module 6: Introduction to Coding/Robotics](#)

Module 1: MS CTE Google Site Portfolio Development			
UNWRAPPED STANDARDS			
Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
ISTE-Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.	<ul style="list-style-type: none">● <i>(3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i>	Create an online portfolio using Google Sites that will be used throughout their middle school years. <ol style="list-style-type: none">1. Online portfolio2. Graphic Design3. Organization of Google Drive	<ul style="list-style-type: none">● <i>Portfolio</i>● <i>Graphic design</i>● <i>Organize</i>● <i>Balance</i>● <i>Digital Footprint</i>
ISTE-Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.	<ul style="list-style-type: none">● <i>(6A)-Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</i>● <i>(6B)-Students create original works or responsibly repurpose or remix digital resources into new creations.</i>● <i>(6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</i>● <i>(6D)-Students publish or present content that customizes the message and medium for their intended audiences.</i>	Graphic design of a web page. <ol style="list-style-type: none">1. Professional looking page2. Proper use of tools available	<ul style="list-style-type: none">● <i>Insert</i>● <i>Theme</i>● <i>Embed</i>
ISTE-Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals,	<ul style="list-style-type: none">● <i>(1a)-Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning</i>	Learning how to organize and collect pieces of work that can be digitally collected.	<ul style="list-style-type: none">● <i>Page</i>● <i>Subpage</i>

informed by the learning sciences.	<i>outcomes.</i>		
		Navigation of Google Sites	<ul style="list-style-type: none"> ● <i>Table of Contents</i> ● <i>Link</i>

UNIT 1: MS CTE Google Site Portfolio Development

Essential Questions

- How can I use Google Sites to organize and build a technology education exploration portfolio?

Throughout the course:

- What are the types of technology education offered by Bristol Public Schools?
- What careers are associated with each of the technology education pathways offered at Bristol Schools?
- What skills are required for entry into each career pathway explored?
- How can I use this portfolio to make decisions about my academic path through middle, high school and beyond?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
ISTE	<ul style="list-style-type: none"> • I can organize my Google Drive to ensure that my assignments are easily located. • I can create an online portfolio using Google Sites to track my progress throughout my middle school career. 	<table border="1"> <tr> <td></td> <td>Selected Response (SR)</td> </tr> <tr> <td></td> <td>Constructed Response (CR)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> • <i>Each of the above standards should be found throughout the unit sequences.</i> • <i>(1a)-Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.</i> 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> • <i>Organize Google Drive</i> • <i>Introduction to Sites</i> • <i>Create a Google Site-General Components</i> 				
	Selected Response (SR)											
	Constructed Response (CR)											
Pacing:	1 block	<table border="1"> <tr> <td>X</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>	X	Performance (P)		Observation (O)	Assessments: <ul style="list-style-type: none"> • <i>Organization of the Google Drive</i> • <i>Creation of Google Sites</i> 					
X	Performance (P)											
	Observation (O)											
ISTE	<ul style="list-style-type: none"> • I can organize my content on a Google Site in a meaningful way. 	<table border="1"> <tr> <td></td> <td>Selected Response (SR)</td> </tr> <tr> <td>x</td> <td>Constructed Response (CR)</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> • <i>(3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i> • <i>(6A)-Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.</i> 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> • <i>Create a Google Site-Add Pages and Organizational Features</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
Pacing:	0.5 Blocks		Assessments: <ul style="list-style-type: none"> • <i>Google Site Organization and Construction</i> 									
ISTE	<ul style="list-style-type: none"> • I can use the building tools provided in Google Sites to 		Lesson Progression and Standards Connection: <ul style="list-style-type: none"> • <i>(3c)-Students curate information from digital</i> 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> • <i>Task-Navigating the Google</i> 								

	organize and display my products.		Selected Response	<p><i>resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.</i></p> <ul style="list-style-type: none"> ● (6A)-Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication. ● (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. ● (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	<p><i>Sites Building Tools, Build the portfolio framework for Grade 6 (include subpages for each module).</i></p>	
			Constructed Response			
Pacing:	0.5 blocks	x	Performance (P)			<p>Assessments:</p> <ul style="list-style-type: none"> ● Google Site Portfolio Framework-Rubric (attach link)
			Observation			

Module 2: Introduction to Technology and Engineering

UNWRAPPED STANDARDS

Advance CTE/ISTE/ITEE Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 1 Nature and Characteristics of Technology and Engineering	<ul style="list-style-type: none"> ● 1J. Develop innovative products and systems that solve problems and extend capabilities based on individual or collective needs and wants. ● 1K. Compare and contrast the contributions of science, engineering, mathematics, and technology in the development of technological systems. ● 1L. Explain how technology and engineering are closely linked to creativity, which can result in both intended and unintended innovations. ● 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. 	<ul style="list-style-type: none"> ● Reverse engineer current technologies ● Understand the steps to the engineering design process. ● Apply the engineering design process ● Identify how the engineering design cycle is used in careers. 	<ul style="list-style-type: none"> ● Engineering design cycle ● Criteria ● Development ● Testable ● Limitation ● Impact ● Specification ● Consideration ● Replica ● Prototype ● Priority ● Model ● Trade-off ● Test results ● Redesign process ● Design system ● Element ● Iterative ● Optimal
STEL 5 Influence of Society on Technological Development	<ul style="list-style-type: none"> ● 5F. Analyze how an invention or innovation was influenced by its historical context. ● 5G. Evaluate trade-offs based on various perspectives as part of a decision process that recognizes the need for careful compromises among competing factors. 		
STEL 6 History of Technology	<ul style="list-style-type: none"> ● 6C. Compare various technologies and how they have contributed to human progress. ● 6D. Engage in a research and development process to simulate how inventions and innovations have evolved through systematic tests and refinements. ● 6E. Verify how specialization of function has been at the heart of many technological improvements. 		
STEL 7 Design in Technology and	<ul style="list-style-type: none"> ● 7P. Illustrate the benefits and opportunities 		

Engineering Education	<p>associated with different approaches to design.</p> <ul style="list-style-type: none"> ● 7Q. Apply the technology and engineering design process. ● 7R. Refine design solutions to address criteria and constraints. ● 7S. Create solutions to problems by identifying and applying human factors in design. ● 7T. Assess design quality based upon established principles and elements of design. ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 		
STEL 8 Applying, Maintaining, and Assessing Technological Products and Systems	<ul style="list-style-type: none"> ● 8H. Research information from various sources to use and maintain technological products or systems. ● 8K. Design methods to gather data about technological systems. 		

UNIT 2: Introduction to Technology and Engineering

Essential Questions:

- How does technology change?
- What is the impact of the engineering design cycle on past and present technologies?
- How does the iterative process of engineering design improve outcomes?

Throughout the course:

- What are the types of technology education offered by Bristol Public Schools?
- What careers are associated with each of the technology education pathways offered at Bristol Schools?
- What skills are required for entry into each career pathway explored?
- How can I use this portfolio to make decisions about my academic path through middle, high school and beyond?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL	<ul style="list-style-type: none"> • I can compare technology from the past to current/future technology. • I can predict how the changes were made/designed to advance the technology. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td></td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	X	Constructed Response (CR)	X	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> • 5F. Analyze how an invention or innovation was influenced by its historical context. • 5G. Evaluate trade-offs based on various perspectives as part of a decision process that recognizes the need for careful compromises among competing factors. • 1L. Explain how technology and engineering are closely linked to creativity, which can result in both intended and unintended innovations. • 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> • Task-Improving Technology Over Time <p>Assessments:</p> <ul style="list-style-type: none"> • Formative-Task Discussion and Technology Analysis
	Selected Response (SR)											
X	Constructed Response (CR)											
X	Performance (P)											
	Observation (O)											
Pacing:	2 block											
STEL	<ul style="list-style-type: none"> • I can understand the components of the engineering design cycle. • I can apply the components of the engineering design cycle to solve a problem. • I can use the engineering design cycle to solve a problem. • I can assess and iterate my design to support a better solution. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td></td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> • 7P. Illustrate the benefits and opportunities associated with different approaches to design. • 7Q. Apply the technology and engineering design process. • 7R. Refine design solutions to address criteria and constraints. • 7S. Create solutions to problems by identifying and applying human factors in design. • 7T. Assess design quality based upon established principles and elements of design. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> • Engineering Design Cycle Activity • Performance Task: Lego Engineering and Iterations for Improved Success <p>Assessments:</p>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
Pacing:	5 Blocks											

			<ul style="list-style-type: none"> ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 	<ul style="list-style-type: none"> ● Student self assessment and design iteration ● Student Journal/Reflection 								
ISTE	<ul style="list-style-type: none"> ● I can develop a Google Slide presentation to show the engineering cycle in action. ● I can describe a career that uses the engineering design cycle. ● I can showcase my work and reflect on my MS Technology Portfolio. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>X</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	X	Constructed Response	x	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. ● (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. ● (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Google slides creation demonstrating their knowledge of the engineering design cycle. ● Identify connecting high school pathways and course offerings.
	Selected Response											
X	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	1 block			Assessments: <ul style="list-style-type: none"> ● Creation of Google Slides presentation ● Portfolio Post-Engineering Design Reflection 								

Module 3: Introduction to Graphic Design

UNWRAPPED STANDARDS

Advance CTE/ISTE/ITEE Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2S. Defend decisions related to a design problem. 	<p>Use design thinking to create a product.</p> <p>Understand the elements of design and their relationship to the outcome of the produce</p> <p>Use computer skills and software to develop and construct a product.</p>	Elements of Design Line Shape Color Texture Type Space Image Balance Contrast Emphasis Proportion Pattern Rhythm Unity Variety
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7Q. <i>Apply the technology and engineering design process.</i> ● 7R. Refine design solutions to address criteria and constraints. ● 7T. Assess design quality based upon established principles and elements of design. ● 7V. Improve essential skills necessary to successfully design. 	<p>Understand the connection between graphic design and marketing.</p>	
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● TEP-7 (<i>communication</i>)-Exhibits effective technical, writing, graphic, and oral communication skills. 		

UNIT 3: Introduction to Graphic Design

Essential Questions:

- What is graphic design?
- What are the elements of graphic design?
- How are the elements in graphic design used in marketing?
- How can you recreate famous pieces by focusing on the elements of design?

Throughout the course:

- What are the types of technology education offered by Bristol Public Schools?
- What careers are associated with each of the technology education pathways offered at Bristol Schools?
- What skills are required for entry into each career pathway explored?
- How can I use this portfolio to make decisions about my academic path through middle, high school and beyond?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments				
STEL	<ul style="list-style-type: none"> ● I can describe the seven elements of graphic design. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Lesson-Introduction to graphic design</i>
	Selected Response (SR)							
	Constructed Response (CR)							
Pacing:	.5 block	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Performance (P)	X	Observation (O)	<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.6-8.7 ● Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> ●
	Performance (P)							
X	Observation (O)							
STEL	<ul style="list-style-type: none"> ● I can identify and describe the seven elements of graphic design in a product. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>7Q. Apply the technology and engineering design process.</i> ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Task-Explorations/Explanation of the elements of graphic design.</i>
	Selected Response (SR)							
	Constructed Response (CR)							
Pacing:	.5 Blocks	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Performance (P)	X	Observation (O)	<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.6-8.7 ● Integrate quantitative or technical information expressed in words in a text with a version of 	<p>Assessments:</p> <ul style="list-style-type: none"> ●
	Performance (P)							
X	Observation (O)							

			<i>that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</i>									
STEL	<ul style="list-style-type: none"> I can work collaboratively to recreate a professional advertisement using graphic design. I can define marketing. I can explain how the advertisement meets the goals of marketing. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>X</td><td>Performance (P)</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	X	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 7T. Assess design quality based upon established principles and elements of design. 7V. Improve essential skills necessary to successfully design. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will work collaboratively to recreate a famous piece using graphic design.
	Selected Response											
	Constructed Response											
X	Performance (P)											
	Observation											
Pacing:	2 Blocks		CCSS Connections: <ul style="list-style-type: none"> CCSS.ELA-LITERACY.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	Assessments: <ul style="list-style-type: none"> Completion of graphic design 								
STEL	<ul style="list-style-type: none"> I can apply the elements of graphic design to meet a real-world need. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>X</td><td>Performance</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	X	Performance		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7T. Assess design quality based upon established principles and elements of design. 7V. Improve essential skills necessary to successfully design. 2Q. Predict outcomes of a future product or system at the beginning of the design process. 2S. Defend decisions related to a design problem. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will complete an assignment creating an infographic.
	Selected Response											
	Constructed Response											
X	Performance											
	Observation											
Pacing:	2 Blocks		CCSS Connections: <ul style="list-style-type: none"> CCSS.ELA-LITERACY.RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Infographic 								
STEL	<ul style="list-style-type: none"> I can use the elements of design to create an advertisement for a career in graphic design. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> </table>		Selected Response	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7T. Assess design quality based upon established principles and elements of design. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Elements of Design Project-Advertisement for 						
	Selected Response											

		<table border="1"> <tr> <td></td> <td>(SR)</td> </tr> <tr> <td></td> <td>Constructed Response (CR)</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		(SR)		Constructed Response (CR)	x	Performance (P)		Observation (O)	<ul style="list-style-type: none"> ● 7V. Improve essential skills necessary to successfully design. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2S. Defend decisions related to a design problem. 	<i>Favorite Product</i>
	(SR)											
	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
Pacing:	1 Block		CCSS Connections: ●	Assessments: ●								
ISTE	<ul style="list-style-type: none"> ● I can research and describe a career that uses the elements of design. ● I can showcase my work and reflect on my MS Technology Portfolio. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>X</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	X	Constructed Response	x	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. ● (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. ● (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Google (slide, doc, etc) creation demonstrating their knowledge of the elements of design and the related career opportunities. ● Identify connecting high school pathways and course offerings.
	Selected Response											
X	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	1 block			Assessments: <ul style="list-style-type: none"> ● Portfolio Post-Elements of Design Reflection 								

Module 4: Introduction to Tools and Materials

UNWRAPPED STANDARDS

Advance CTE/ISTE/ITEE Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. 	<ul style="list-style-type: none"> ● Students will learn the safety rules for working in the makerspace. ● Students will understand the importance of following directions. ● Personal safety ● Safe use of hand tools ● Safe use of power tools ● Reading a plan to create a product. ● Reading measurement tools. ● Measuring and manipulating materials to devise a final product. 	<ul style="list-style-type: none"> ● Design ● Develop ● Evaluate ● Production ● Power tools ● Vice ● Hand tools ● Electrical safety ● Maker ● Making ● Makerspace ● Innovation
STEL 3 Integration of Knowledge, Technologies, and Practices	<ul style="list-style-type: none"> ● 3G. Explain how knowledge gained from other content areas affects the development of technological products and systems. 		
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7Q. Apply the technology and engineering design process. ● 7T. Assess design quality based upon established principles and elements of design. ● 7V. Improve essential skills necessary to successfully design. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 		

Module 4: Introduction to Tools and Materials

Essential Questions:

- What are the safety requirements in the MakerSpace?
- What tools are used in the makerspace, and what is the function of each tool?
- What types of materials can be manipulated in a MakerSpace?
- How is a design plan used to create a project with an intended outcome?

Throughout the course:

- What are the types of technology education offered by Bristol Public Schools?
- What careers are associated with each of the technology education pathways offered at Bristol Schools?
- What skills are required for entry into each career pathway explored?
- How can I use this portfolio to make decisions about my academic path through middle, high school and beyond?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments				
STEL	<ul style="list-style-type: none"> • I can demonstrate safe behaviors and actions within the makerspace. • I can accomplish safety procedures in the event of an emergency • I can locate and describe how to use essential safety equipment in the makerspace 	<table border="1"> <tr> <td>Selected Response (SR)</td> </tr> <tr> <td>Constructed Response (CR)</td> </tr> <tr> <td>Performance (P)</td> </tr> <tr> <td>Observation (O)</td> </tr> </table>	Selected Response (SR)	Constructed Response (CR)	Performance (P)	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> • <i>TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects.</i> • <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> • <i>Safety presentation</i> • <i>Tour of makerspace and location safety tools</i> • <i>Signed safety contract</i>
Selected Response (SR)								
Constructed Response (CR)								
Performance (P)								
Observation (O)								
Pacing:	2.0 Blocks		<p>CCSS Connections:</p> <ul style="list-style-type: none"> • CCSS.ELA-LITERACY.RST.6-8.7 • Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> • <i>Safety quiz</i> 				
STEL	<ul style="list-style-type: none"> • I can design a poster to describe the safety protocols in the makerspace. 	<table border="1"> <tr> <td>Selected Response (SR)</td> </tr> <tr> <td>Constructed Response (CR)</td> </tr> </table>	Selected Response (SR)	Constructed Response (CR)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> • <i>TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects.</i> • <i>7Q. Apply the technology and engineering design process.</i> • <i>7T. Assess design quality based upon established principles and elements of design.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> • <i>Design poster on safety</i> 		
Selected Response (SR)								
Constructed Response (CR)								

		<table border="1"> <tr> <td></td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Performance (P)		Observation (O)	<ul style="list-style-type: none"> ● 7V. Improve essential skills necessary to successfully design. 					
	Performance (P)											
	Observation (O)											
Pacing:	1 Blocks		CCSS Connections: <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.6-8.7 ● Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> ● Creation of safety poster 								
STEL	<ul style="list-style-type: none"> ● I can identify and describe tools and materials for a career. ● I can follow safety instructions in order to demonstrate safe use of tools and materials in the Makerspace. ● I can accurately measure using a 1/16" scale measurement tool ● I can create a finished product using a set of plans 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td></td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response		Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. ● 3G. Explain how knowledge gained from other content areas affects the development of technological products and systems. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Presentation of tools and materials ● Introduction to various careers ● Project: Build a Product in makerspace following a plan
	Selected Response											
	Constructed Response											
	Performance (P)											
	Observation											
Pacing:	12 Blocks		CCSS Connections: <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.6-8.3 ● Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. ● CCSS.ELA-LITERACY.RST.6-8.7 ● Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> ● 								
ISTE	<ul style="list-style-type: none"> ● I can research and describe a career that uses a makerspace. ● I can describe the tools used by individuals in this career and their purpose in developing a product. ● I can showcase my work and reflect on my MS Technology 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>X</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> </table>		Selected Response	X	Constructed Response	x	Performance (P)	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. ● (6C)-Students communicate complex ideas 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Google (slide, doc, etc) creation demonstrating their knowledge of the makerspace tools and materials and the related career opportunities. ● Identify connecting high 		
	Selected Response											
X	Constructed Response											
x	Performance (P)											

	Portfolio.	Observation	<p><i>clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.</i></p> <ul style="list-style-type: none"> • <i>(6D)-Students publish or present content that customizes the message and medium for their intended audiences.</i> 	<p><i>school pathways and course offerings.</i></p>
Pacing:	1 block			<p>Assessments:</p> <ul style="list-style-type: none"> • <i>Portfolio Post-Makerspace Reflection</i>

Module 5: Introduction to Manufacturing

UNWRAPPED STANDARDS

Advance CTE/ISTE/ITEE Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2M. Differentiate between inputs, processes, outputs, and feedback in technological systems. ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. 	<ul style="list-style-type: none"> ● Students will learn to use a 3D modeling software ● Students will use the software to create a model that will be 3D printed. ● Understand the differences between additive and subtractive manufacturing. ● Investigate the career opportunities in manufacturing. 	<ul style="list-style-type: none"> ● 3 Axis(X,Y,Z) ● Extrude ● Degrees ● Width ● Height ● Filament ● Additive manufacturing ● Subtractive manufacturing ● Manufacturing ● CAD ● CAM ● Prototyping ● Digital fabrication ● Automation ● Production ● Flow chart ● Assembly line ● Defect
STEL 3 Integration of Knowledge, Technologies, and Practices	<ul style="list-style-type: none"> ● 3F. Apply a product, system, or process developed for one setting to another setting. ● 3G. Explain how knowledge gained from other content areas affects the development of technological products and systems. 		
STEL 4 Impacts of Technology	<ul style="list-style-type: none"> ● 4M. Devise strategies for reducing, reusing, and recycling wasted caused from the creation and use of technology. 		
STEL 6 History of Technology	<ul style="list-style-type: none"> ● 6C. Compare various technologies and how they have contributed to human progress. ● 6E. Verify how specialization of function has been at the heart of many technological improvements. 		
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7P. Illustrate the benefits and opportunities associated with different approaches to design. ● 7Q. Apply the technology and engineering design process. ● 7R. Refine design solutions to address criteria and constraints. 		

	<ul style="list-style-type: none"> ● 7T. Assess design quality based upon established principles and elements of design. ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. ● TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. ● TEP-5 Critiques technological products and systems to identify areas of improvement. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 		

UNIT 5: Introduction to Manufacturing

Essential Questions:

- What is manufacturing?
- What are the types of manufacturing?
- What types of products are manufactured in Connecticut?
- How can we use our makerspace to manufacture goods?
- What technologies are used in manufacturing?

Throughout the course:

- What are the types of technology education offered by Bristol Public Schools?
- What careers are associated with each of the technology education pathways offered at Bristol Schools?
- What skills are required for entry into each career pathway explored?
- How can I use this portfolio to make decisions about my academic path through middle, high school and beyond?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL	<ul style="list-style-type: none"> ● I can use 3D modeling software to create a prototype of a finished product using additive manufacturing. ● I can describe a career that uses manufacturing to create a product. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 30px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td></td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities.</i> ● <i>TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects.</i> ● <i>TEP-5 Critiques technological products and systems to identify areas of improvement.</i> ● <i>TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects.</i> ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> ● <i>4M. Devise strategies for reducing, reusing, and recycling wasted caused from the creation and use of technology.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>3D modeling software instruction</i> ● <i>Creation of Prototype</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
Pacing:	3 Blocks		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.6-8.3 ● Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. ● CCSS.ELA-LITERACY.RST.6-8.7 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Creation of 3D modeling design prototype.</i> 								

			<ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 									
STEL	<ul style="list-style-type: none"> I can use computer aided design (CAD) software to create a product using subtractive manufacturing. I can describe a career that uses manufacturing to create a product. 	<table border="1"> <tr> <td></td> <td>Selected Response (SR)</td> </tr> <tr> <td></td> <td>Constructed Response (CR)</td> </tr> <tr> <td></td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. TEP-5 Critiques technological products and systems to identify areas of improvement. TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 4M. Devise strategies for reducing, reusing, and recycling wasted caused from the creation and use of technology. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> CAD/CAM software instruction Creation of Prototype
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											
	Observation (O)											
<p>Pacing:</p>	<p>3 Blocks</p>		<p>CCSS Connections:</p> <ul style="list-style-type: none"> CCSS.ELA-LITERACY.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. CCSS.ELA-LITERACY.RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> Creation of Finished Product 								
<p>ISTE</p>	<ul style="list-style-type: none"> I can research and describe a career in manufacturing. I can describe the tools and technologies used by individuals in this manufacturing and their purpose in developing a product. I can showcase my work and reflect on my MS Technology Portfolio. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>X</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	X	Constructed Response	x	Performance (P)		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Google (slide, doc, etc) creation demonstrating their knowledge of the manufacturing and the related career opportunities. Identify connecting high school pathways and course offerings.
	Selected Response											
X	Constructed Response											
x	Performance (P)											
	Observation											

Pacing:	1 block		<i>models or simulations.</i> <ul style="list-style-type: none"> ● (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	Assessments: <ul style="list-style-type: none"> ● Portfolio Post-Manufacturing a prototype
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Module 6: Introduction to Coding/Robotics

UNWRAPPED STANDARDS

Advance CTE/ISTE/ITEE Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL-1 Nature and Characteristics of Technology and Engineering	<ul style="list-style-type: none"> ● 1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems. ● 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. 	<ul style="list-style-type: none"> ● Understanding the basic components of block programming. ● Using the design process to support the programming of a robot to meet a specific outcome. ● Building academic language around computer programming and robotics ● Make a connection between the careers in robotics and knowledge of coding. 	<ul style="list-style-type: none"> ● abstraction ● accessibility ● algorithm ● binary ● binary alphabet ● bit ● block-based programming language ● Blockly ● bug ● byte ● click ● code ● command ● computational thinking ● computer science ● conditionals ● data ● debugging ● decompose ● define (a function) ● digital footprint ● DNS (domain name service) ● double-click ● drag ● drop ● event ● event handler ● fiber optic cable ● for loop ● function ● function call ● function definition ● input
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2M. Differentiate between inputs, processes, outputs, and feedback in technological systems. ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. 		
STEL 3 Integration of Knowledge, Technologies, and Practices	<ul style="list-style-type: none"> ● 3G. Explain how knowledge gained from other content areas affects the development of technological products and systems. 		
STEL 4 Impacts of Technology	<ul style="list-style-type: none"> ● 4M. Devise strategies for reducing, reusing, and recycling wasted caused from the creation and use of technology. 		
STEL 6 History of Technology	<ul style="list-style-type: none"> ● 6C. Compare various technologies and how they have contributed to human progress. ● 6D. Engage in a research and development process to simulate how inventions and innovations have evolved through systematic 		

	<p>tests and refinements.</p> <ul style="list-style-type: none"> ● 6E. Verify how specialization of function has been at the heart of many technological improvements. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-1 Uses system models to show how parts of a technological system work together. ● TEP-5 Critiques technological products and systems to identify areas of improvement. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 		<ul style="list-style-type: none"> ● Internet ● IP address ● iteration ● loop ● online ● output ● packets ● pattern matching ● Parameter ● persistence ● pixel ● program ● programming ● repeat ● run program ● search engine ● servers ● toolbox ● trustworthy ● URL (universal resource locator) ● username ● variable ● website ● while loop ● Wi-Fi ● workspace

UNIT 6: Introduction to Coding and Robotics

Essential Questions:

- What are the core features of programming languages?
- How does programming enable creativity and individual expression?
- What practices and strategies will help me as I write programs?
- What is the relationship between coding and robotics?
- What are the functions of robots in today’s society?
- What are the skills needed to work with robots?

Throughout the course:

- What are the types of technology education offered by Bristol Public Schools?
- What careers are associated with each of the technology education pathways offered at Bristol Schools?
- What skills are required for entry into each career pathway explored?
- How can I use this portfolio to make decisions about my academic path through middle, high school and beyond?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL	<ul style="list-style-type: none"> ● I can understand the core features of computer coding. ● I can make sense of the terms used in coding. ● I can create the proper sequence of block code to complete a task. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td></td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> ● <i>1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Demonstration of instructions</i> ● <i>Demonstration of how block coding works.</i> ● <i>Construct an infographic about the essential vocabulary related to coding.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
Pacing:	3 blocks		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.6-8.7 ● Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Finished product</i> 								
STEL	<ul style="list-style-type: none"> ● I can research and describe a career that uses computer programming. ● I can describe how robots are 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> </table>		Selected Response (SR)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>6C. Compare various technologies and how they have contributed to human progress.</i> ● <i>6D. Engage in a research and development</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Presentation of various careers that use computer programming and robotics.</i> 						
	Selected Response (SR)											

	<p>used in the real world and their career applications.</p> <ul style="list-style-type: none"> I can identify the relationship between coding and robotics. 	<table border="1"> <tr> <td>x</td> <td>Constructed Response (CR)</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	<p><i>process to simulate how inventions and innovations have evolved through systematic tests and refinement.</i></p>			
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
Pacing:	1 Block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> 	<p>Assessments:</p> <ul style="list-style-type: none"> Presentation 								
STEL	<ul style="list-style-type: none"> I can explain the 3 main categories of robotics and what makes them different. I can use a block program to get a robot to complete a specific task. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>x</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	x	Constructed Response	x	Performance		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> TEP-1 Uses system models to show how parts of a technological system work together. TEP-5 Critiques technological products and systems to identify areas of improvement. TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Students will be shown how to use the Sphero robots Students will be presented with information on various types of Robotics.
	Selected Response											
x	Constructed Response											
x	Performance											
	Observation											
Pacing:	4 blocks		<p>CCSS Connections:</p> <ul style="list-style-type: none"> CCSS.ELA-LITERACY.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	<p>Assessments:</p> <ul style="list-style-type: none"> Students will be given a performance task to complete with the Sphero Robots. 								
ISTE	<ul style="list-style-type: none"> I can research and describe a career in coding/robotics. I can describe the tools and technologies used by individuals in that code and their purpose in developing a product. I can showcase my work and reflect on my MS Technology Portfolio. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>X</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	X	Constructed Response	x	Performance (P)		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Google (slide, doc, etc) creation demonstrating their knowledge of coding/robotics and the related career opportunities. Identify connecting high school pathways and course offerings.
	Selected Response											
X	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	1 block			<p>Assessments:</p> <ul style="list-style-type: none"> Portfolio Post-Coding and Robotics 								



Bristol Public Schools
Office of Teaching & Learning

Department	Career and Technical Education (CTE)
Department Philosophy	Bristol schools believe in providing students with rich opportunities to ensure career and college readiness. These opportunities include development of skills, practices, and exploration within several career clusters and pathways, beginning at the middle school level. Each CTE curriculum enables students to acquire and strengthen leadership, literacy, numeracy, decision-making, computer skills, and technology skills through 11 career clusters and pathways: (1) architecture and construction, (2) business management, (3) education and training, (4) finance, (5) health science, (6) hospitality and tourism, (7) information technology, (8) manufacturing, (9) marketing, (10) transportation, distribution and logistics, and (11) STEM. Each career cluster provides students with access to hand-on experiences that will allow for students development of skills that will support successful transition to their post secondary experiences.
Course	Technology II: Coding, Robotics, and Manufacturing Production
Course Description for Program of Studies	7th Grade Technology is an elective course designed to provide students further exploration and experience in career pathways. Students will delve deeper into the building blocks of society through coding and robotics, manufacturing, and an introduction to construction. Project based learning will guide students to develop a deeper insight of multiple career fields. The projects will also help students comprehend their individually unique skill sets in relation to industry and how their distinct skills are beneficial to industry and society.
Grade Level	7
Pre-requisites	None
Credit (if applicable)	

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Module 1: Coding

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL-1 Nature and Characteristics of Technology and Engineering	<ul style="list-style-type: none"> ● 1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems. ● 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. 	<ul style="list-style-type: none"> ● Understanding the basic components of block programming. ● Make a comparison from line coding to block coding. ● Using the design process to support the programming of a robot to meet a specific outcome. ● Building academic language around computer programming 	<ul style="list-style-type: none"> ● HTML ● Python ● Variables ● abstraction ● accessibility ● algorithm ● binary ● binary alphabet ● bit ● block-based programming language ● Blockly ● bug ● byte ● click ● code ● command ● computational thinking ● computer science ● conditionals ● data ● debugging ● decompose ● define (a function) ● digital footprint ● DNS (domain name service) ● double-click ● drag ● drop ● event ● event handler ● fiber optic cable ● for loop ● function ● function call
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2M. Differentiate between inputs, processes, outputs, and feedback in technological systems. ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. 		
STEL 6 History of Technology	<ul style="list-style-type: none"> ● 6C. Compare various technologies and how they have contributed to human progress. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-1 Uses system models to show how parts of a technological system work together. ● TEP-5 Critiques technological products and systems to identify areas of improvement. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral 		

	communication skills.		
<p>ISTE 1.5 Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.</p>	<ul style="list-style-type: none"> ● 1.5.a-Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions. ● 1.5.b-Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making. ● 1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving. ● 1.5.d-Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions. 		<ul style="list-style-type: none"> ● function definition ● input ● Internet ● IP address ● iteration ● loop ● online ● output ● packets ● pattern matching ● Parameter ● persistence ● pixel ● program ● programming ● repeat ● run program ● search engine ● servers ● toolbox ● trustworthy ● URL (universal resource locator) ● username ● variable ● website ● while loop ● Wi-Fi ● workspace

Module 1: Coding

Essential Questions:

- What careers require knowledge of coding?
- What is the difference between block and line coding?
- What are the advantages and disadvantages of using line code?
- How is line code used to complete an autonomous task?
- What coding opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
Hyperlink standard code Advance CTE.	<ul style="list-style-type: none"> ● I can explore various careers in coding and explain their importance. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available coding at the high school level. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td>Selected Response (SR)</td> </tr> <tr> <td></td> <td>Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">X</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)	X	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will research different careers in coding.</i> ● <i>Students will understand the computer science offerings available at the high school level.</i>
	Selected Response (SR)											
	Constructed Response (CR)											
X	Performance (P)											
	Observation (O)											
Pacing:	1 block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● 								
STEL ISTE	<ul style="list-style-type: none"> ● I can identify and explain the difference between line coding and block coding. ● I can explain why some code is best written in the line code format. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td>Selected Response (SR)</td> </tr> <tr> <td></td> <td>Constructed Response (CR)</td> </tr> <tr> <td></td> <td>Performance (P)</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)	x	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>2M. Differentiate between inputs, processes, outputs, and feedback in technological systems.</i> ● <i>2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used.</i> ● <i>1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will be given examples of line coding and block coding and asked to identify the differences.</i> ● <i>CER-Line Code vs Block Code</i>
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											
x	Observation (O)											
Pacing:	1 Blocks		<p>CCSS Connections:</p> <p>CCSS.ELA-LITERACY.RST.6-8.7</p>	<p>Assessments:</p> <ul style="list-style-type: none"> ● CER 								

			<ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). CCSS.ELA-LITERACY.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 									
STEL ISTE	<ul style="list-style-type: none"> I can utilize my knowledge of line coding to complete an identified task. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance (P)</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance (P)		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> EP-1 Uses system models to show how parts of a technological system work together. TEP-5 Critiques technological products and systems to identify areas of improvement. TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Students will complete a coding assignment utilizing line coding.
	Selected Response											
	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	1 block		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3</p> <ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	<p>Assessments:</p> <ul style="list-style-type: none"> Completion of coding assignment 								
STEL ISTE	<ul style="list-style-type: none"> I can write a line code to accomplish an autonomous task. I can refine my code to complete a task more efficiently. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> 1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving. 1.5.d-Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Students will complete a coding assignment utilizing line coding.
	Selected Response											
	Constructed Response											
x	Performance											
	Observation											
Pacing:	1 block		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7</p> <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> Completion of coding assignment. 								

<p>STEL ISTE</p>	<ul style="list-style-type: none"> • I can record my learning on my google site portfolio. • I can complete a reflection about the skill of coding and define my interest in future study of the topic. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	x	Performance		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> • (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. • (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. • (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> • Students will add an image of their completed code to their Google Site. • Reflection Prompt
	Selected Response											
	Constructed Response											
x	Performance											
	Observation											
<p>Pacing:</p>	<p>1 block</p>			<p>Assessments:</p> <ul style="list-style-type: none"> • Google Site Portfolio 								

Module 2: Robotics

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL-1 Nature and Characteristics of Technology and Engineering	<ul style="list-style-type: none"> ● 1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems. ● 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. 	<ul style="list-style-type: none"> ● Understanding the components of a robot. ● Understand the role of robotics in today's society. ● Understanding the roles and robotic responses related to various sensors. ● Programming robots to meet a specified task or variety of tasks. ● Computing procedures to advance a robot through a field of tasks. 	<ul style="list-style-type: none"> ● Acceleration ● Accuracy ● Active sensor ● Actuator ● Algorithm ● Android ● Autonomous robot ● Capacitor ● Closed loop control ● Controller ● Coordinates ● Degrees ● Degrees of freedom ● Electronics ● End effector ● Error ● Feedback ● Feedback loop ● Fuzzy logic ● Gain ● Gripper ● Hardware ● Infrared sensor ● Input device ● Instruction ● Joint ● Laser ● Light probe ● Linear motion ● Mechatronics ● Motor ● Optical encoder ● Photoelectric sensor ● Phototransistor
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2M. Differentiate between inputs, processes, outputs, and feedback in technological systems. ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. 		
STEL 3 Integration of Knowledge, Technologies, and Practices	<ul style="list-style-type: none"> ● 3G. Explain how knowledge gained from other content areas affects the development of technological products and systems. 		
STEL 6 History of Technology	<ul style="list-style-type: none"> ● 6E. Verify how specialization of function has been at the heart of many technological improvements. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-1 Uses system models to show how parts of a technological system work together. ● TEP-5 Critiques technological products and 		

	<p>systems to identify areas of improvement.</p> <ul style="list-style-type: none"> ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 		<ul style="list-style-type: none"> ● Precision ● Robot ● Roll ● Sensor ● Signal ● Simulation ● Software
<p>ISTE 1.5 Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.</p>	<ul style="list-style-type: none"> ● 1.5.a-Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions. ● 1.5.b-Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making. ● 1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving. ● 1.5.d-Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions. 		

Module 2 Robotics

Essential Questions:

- What careers require knowledge of robotics?
- How have robotics impacted human efficiency?
- What are various forms of sensors used by robots? What is the function of each sensor?
- How are robots programmed to complete a task or variety of tasks?
- What robotics opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL ISTE	<ul style="list-style-type: none"> ● I can explore the careers in robotics and explain their importance relative to human efficiency. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available for robotics at the high school level. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)	X	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> ● <i>1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> ● <i>6E. Verify how specialization of function has been at the heart of many technological improvements.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will research the different careers that utilize robotics and add to their portfolio.</i>
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											
X	Observation (O)											
Pacing:	1 block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Google Portfolio</i> 								
STEL ISTE	<ul style="list-style-type: none"> ● I can identify the various sensors used by robots. ● I can explain how each sensor is used to control robot behavior. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>2M. Differentiate between inputs, processes, outputs, and feedback in technological systems.</i> ● <i>2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used.</i> ● <i>2Q. Predict outcomes of a future product or system at the beginning of the design process.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Sensor testing and exploration.</i> 		
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											

		<table border="1"> <tr> <td>x</td> <td>Observation (O)</td> </tr> </table>	x	Observation (O)	<ul style="list-style-type: none"> ● 2R. Compare how different technologies involve different sets of processes. 							
x	Observation (O)											
Pacing:	● 1 Block		CCSS Connections:	Assessments:								
			●	●								
STEL ISTE	<ul style="list-style-type: none"> ● I can program a robot to complete a series of different tasks utilizing the different sensors. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> <tr> <td>x</td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	X	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. ● 1.5.a-Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions. ● 1.5.b-Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making. ● 1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving. ● 1.5.d-Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions. ● 2M. Differentiate between inputs, processes, outputs, and feedback in technological systems. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Students will complete a series of challenges using the different sensors. ● Video capture of at least one robotics challenge.
	Selected Response											
	Constructed Response											
X	Performance											
x	Observation											
Pacing:	6 blocks		CCSS Connections:	Assessments:								
			●	● Completion of robotic challenges								
STEL ISTE	<ul style="list-style-type: none"> ● I can video my robotics challenge. ● I can correctly add my video to my Google Site portfolio. ● I can complete a reflection about the skill of programming robots and define my interest in future study of the topic. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	X	Performance		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. ● (6C)-Students communicate complex ideas clearly and effectively by creating or using a 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Students will add a video to their google site of the robot completing the challenge. ● Reflection Prompt
	Selected Response											
	Constructed Response											
X	Performance											
	Observation											

Pacing:	1 block		<p><i>variety of digital objects such as visualizations, models or simulations.</i></p> <ul style="list-style-type: none"> • <i>(6D)-Students publish or present content that customizes the message and medium for their intended audiences.</i> 	<p>Assessments:</p> <ul style="list-style-type: none"> • <i>Successful upload to their Google Site.</i>
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Module 3: Manufacturing

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2M. Differentiate between inputs, processes, outputs, and feedback in technological systems. ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2R. Compare how different technologies involve different sets of processes. ● 2S. Defend decisions related to a design problem. 	<ul style="list-style-type: none"> ● Students will learn to use a 3D modeling software ● Students will use the software to create a model that will be 3D printed. ● Understand the differences between additive and subtractive manufacturing. ● Investigate the career opportunities in manufacturing. ● Mimic an assembly line to manufacture a product in the makerspace 	<ul style="list-style-type: none"> ● 3 Axis(X,Y,Z) ● Extrude ● Degrees ● Width ● Height ● Filament ● Additive manufacturing ● Subtractive manufacturing ● Manufacturing ● CAD ● CAM ● Prototyping ● Digital fabrication ● Automation ● Production ● Flow chart ● Assembly line ● Defect ● Finished goods ● Make to assemble ● Make to order ● Make to stock ● Operational technology
STEL 3 Integration of Knowledge, Technologies, and Practices	<ul style="list-style-type: none"> ● 3F. Apply a product, system, or process developed for one setting to another setting. ● 3G. Explain how knowledge gained from other content areas affects the development of technological products and systems. 		
STEL 4 Impacts of Technology	<ul style="list-style-type: none"> ● 4M. Devise strategies for reducing, reusing, and recycling wasted caused from the creation and use of technology. 		
STEL 6 History of Technology	<ul style="list-style-type: none"> ● 6C. Compare various technologies and how they have contributed to human progress. ● 6E. Verify how specialization of function has been at the heart of many technological improvements. 		
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7P. Illustrate the benefits and opportunities associated with different approaches to design. ● 7Q. Apply the technology and engineering 		

	<p>design process.</p> <ul style="list-style-type: none"> ● 7R. Refine design solutions to address criteria and constraints. ● 7T. Assess design quality based upon established principles and elements of design. ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. ● TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. ● TEP-5 Critiques technological products and systems to identify areas of improvement. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 		
1.7 Global Collaborator Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.	<ul style="list-style-type: none"> ● <i>1.7.c-Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.</i> 		

Module 3: Manufacturing

Essential Questions:

- What are the different types of manufacturing careers?
- How does manufacturing support society in the 21st century?
- What are the safety protocols for the makerspace?
- Why do manufacturers complete a prototype before making a final product?
- Why is it important for each team member to follow specifications when working on a manufacturing line?
- How does a production line support the efficient construction of a product at the bulk scale?
- What manufacturing opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL ISTE	<ul style="list-style-type: none"> ● I can explore the careers in manufacturing and explain their importance to 21st century society. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available for manufacturing at the high school level. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)	X	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> ● <i>1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> ● <i>6E. Verify how specialization of function has been at the heart of many technological improvements.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will research the various careers in manufacturing</i>
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											
X	Observation (O)											
Pacing:	1 block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Google Site Portfolio Addition</i> 								
STEL ISTE	<ul style="list-style-type: none"> ● I can demonstrate safe behaviors and actions within the makerspace. ● I can explain and accomplish safety procedures in the event of an emergency. ● I can locate and describe how to 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects.</i> ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will receive a review of the safety protocols necessary to work in the makerspace.</i> ● <i>Students will complete a safety contract.</i> 				
	Selected Response (SR)											
	Constructed Response (CR)											

	use the essential safety equipment in the makerspace.	<table border="1"> <tr> <td></td> <td>Performance (P)</td> </tr> <tr> <td>x</td> <td>Observation (O)</td> </tr> </table>		Performance (P)	x	Observation (O)						
	Performance (P)											
x	Observation (O)											
Pacing:	1 Block		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3 <ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	Assessments: <ul style="list-style-type: none"> Safety Contract completion and safety quiz 								
STEL ISTE	<ul style="list-style-type: none"> I can use a 3D modeling software to create a prototype of a product that I will manufacture. I can follow safety protocols when using tools and materials in the Makerspace. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	x	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. TEP-5 Critiques technological products and systems to identify areas of improvement. TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will use a 3D modeling software to create a prototype of a product that they will manufacture.
	Selected Response											
	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	2 blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3 <ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Completion of 3D design 								
STEL ISTE	<ul style="list-style-type: none"> I can follow directions to complete a task to the proper specifications. I can safely follow instructions on how to properly use tools and materials in the Makerspace 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> </table>		Selected Response		Constructed Response	X	Performance	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 7V. Improve essential skills necessary to 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will follow directions to complete tasks/projects. 		
	Selected Response											
	Constructed Response											
X	Performance											

		x Observation	successfully design.									
Pacing:	7 blocks		CCSS Connections: •	Assessments: • Completion of project								
STEL ISTE	<ul style="list-style-type: none"> I can explain how the efficiency of product production changes when a production line is created. I can work collaboratively to manufacture a product at the bulk scale. I can safely follow instructions on how to properly use tools and materials in the Makerspace 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>X</td><td>Performance</td></tr> <tr><td>x</td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	X	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7P. Illustrate the benefits and opportunities associated with different approaches to design. 7Q. Apply the technology and engineering design process. 7U. Evaluate the strengths and weaknesses of different design solutions. 7V. Improve essential skills necessary to successfully design. 1.7.c-Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will follow directions to complete an assignment.
	Selected Response											
	Constructed Response											
X	Performance											
x	Observation											
Pacing:	7 blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3 <ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Completion of project 								
STEL ISTE	<ul style="list-style-type: none"> I can showcase my manufactured product at various stages in my portfolio. I can complete a reflection about the manufacturing production and define my interest in future study of the topic. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>X</td><td>Performance</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	X	Performance		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. (6D)-Students publish or present content that customizes the message and medium for their 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will add images of a manufactured product at various stages to their google site portfolio. Reflection Prompt
	Selected Response											
	Constructed Response											
X	Performance											
	Observation											
Pacing:	2 block			Assessments: <ul style="list-style-type: none"> Successful upload to their Google Site. 								

			<i>intended audiences.</i>	
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Module 4: Introduction to Construction

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
Advance CTE ACC01 Architecture and Construction	<ul style="list-style-type: none"> ● ACC01.01.04 Use appropriate formulas to determine ratios, fractions, and proportion measures. ● ACC01.01.05 Use appropriate formulas to determine measurements of dimensions, spaces and structures. 	<ul style="list-style-type: none"> ● Understand the significance of measurement. ● Use design software to design a home ● Create a mock-up of the home design. ● Understand the basic process from plans to structure. 	<ul style="list-style-type: none"> ● Architecture ● Design ● Pre-construction ● Morph ● Edit ● Architect ● Architectural style ● Aesthetic ● Replication ● Functionality ● Functional ● Design ● Specification ● Structure ● Dimensions ● Prototype ● Enhance ● Scope ● Symbol
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7P. Illustrate the benefits and opportunities associated with different approaches to design. ● 7Q. Apply the technology and engineering design process. ● 7R. Refine design solutions to address criteria and constraints. ● 7T. Assess design quality based upon established principles and elements of design. ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 		
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. ● TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. ● TEP-5 Critiques technological products and systems to identify areas of improvement. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. 		

	<ul style="list-style-type: none">• <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i>		
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Module 4: ESSENTIAL QUESTIONS

Essential Questions

- What are the careers in the architecture and construction fields?
- Why is precise measurement essential in architecture and construction?
- How do contractors and architects complete a prototype?
- What does it mean to have an architectural style?
- How do you translate from a set of plans to a finished product?
- What architecture and construction opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL ISTE	<ul style="list-style-type: none"> ● I can explore the careers in construction and explain their importance. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available for architecture and construction at the high school level. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)	X	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> ● <i>1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> ● <i>6E. Verify how specialization of function has been at the heart of many technological improvements.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will research the various careers in construction.</i>
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											
X	Observation (O)											
Pacing:	1 block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● 								
STEL ISTE	<ul style="list-style-type: none"> ● I can accurately measure utilizing a 16th scale. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>ACC01.01.04 Use appropriate formulas to determine ratios, fractions, and proportion measures.</i> ● <i>ACC01.01.05 Use appropriate formulas to determine measurements of dimensions, spaces and structures.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will demonstrate they can accurately measure to within 1/16th of an inch.</i> 				
	Selected Response (SR)											
	Constructed Response (CR)											

Pacing:	1 block	<table border="1"> <tr> <td></td> <td>Performance (P)</td> </tr> <tr> <td>X</td> <td>Observation (O)</td> </tr> </table>		Performance (P)	X	Observation (O)	CCSS Connections: <i>CCSS.ELA-LITERACY.RST.11-12.4</i> <ul style="list-style-type: none"> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics. 	Assessments: <ul style="list-style-type: none"> Proper measurements. 				
	Performance (P)											
X	Observation (O)											
STEL ISTE	<ul style="list-style-type: none"> I can accurately identify components that comprise a residential framing structure. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> </table>		Selected Response		Constructed Response	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will be taught the different components of a residential framing structure 				
	Selected Response											
	Constructed Response											
Pacing:	3 blocks	<table border="1"> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>	x	Performance (P)		Observation	CCSS Connections: <i>CCSS.ELA-LITERACY.RST.11-12.4</i> <ul style="list-style-type: none"> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics. 	Assessments: <ul style="list-style-type: none"> Students will label the components . 				
x	Performance (P)											
	Observation											
STEL ISTE	<ul style="list-style-type: none"> I can build a representative structure from a set of plans. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	X	Performance		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7P. Illustrate the benefits and opportunities associated with different approaches to design. 7Q. Apply the technology and engineering design process. 7T. Assess design quality based upon established principles and elements of design. 7V. Improve essential skills necessary to successfully design. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will build a framing structure following a set of plans.
	Selected Response											
	Constructed Response											
X	Performance											
	Observation											
Pacing:	1 block		CCSS Connections: <i>CCSS.ELA-LITERACY.RST.11-12.4</i> <ul style="list-style-type: none"> Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics. 	Assessments: <ul style="list-style-type: none"> Completed structure 								
STEL ISTE	<ul style="list-style-type: none"> I can explain how a structure is defined as an architectural style. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> </table>		Selected Response	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7P. Illustrate the benefits and opportunities associated with different approaches to design. 7T. Assess design quality based upon 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will be shown different housing structures 						
	Selected Response											

		<table border="1"> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td></td> <td>Performance</td> </tr> <tr> <td>x</td> <td>Observation</td> </tr> </table>		Constructed Response		Performance	x	Observation	<p><i>established principles and elements of design.</i></p> <ul style="list-style-type: none"> ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 			
	Constructed Response											
	Performance											
x	Observation											
Pacing:	1 block		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.11-12.4</p> <ul style="list-style-type: none"> ● Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics. 	<p>Assessments:</p> <ul style="list-style-type: none"> ● 								
STEL ISTE	<ul style="list-style-type: none"> ● I can showcase my house design on my google portfolio. ● I can complete a reflection about the architecture and construction and define my interest in future study of the topic. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	X	Performance		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. ● (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. ● (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● Students will add images of a manufactured product at various stages to their google site portfolio. ● Reflection Prompt
	Selected Response											
	Constructed Response											
X	Performance											
	Observation											
Pacing:	2 block			<p>Assessments:</p> <ul style="list-style-type: none"> ● Successful upload to their home design and reflection to their Google Site portfolio. 								



Bristol Public Schools
Office of Teaching & Learning

Department	Career and Technical Education (CTE)
Department Philosophy	Bristol schools believe in providing students with rich opportunities to ensure career and college readiness. These opportunities include development of skills, practices, and exploration within several career clusters and pathways, beginning at the middle school level. Each CTE curriculum enables students to acquire and strengthen leadership, literacy, numeracy, decision-making, computer skills, and technology skills through 11 career clusters and pathways: (1) architecture and construction, (2) business management, (3) education and training, (4) finance, (5) health science, (6) hospitality and tourism, (7) information technology, (8) manufacturing, (9) marketing, (10) transportation, distribution and logistics, and (11) STEM. Each career cluster provides students with access to hand-on experiences that will allow for students development of skills that will support successful transition to their post secondary experiences.
Course	Technology III-Engineering, Construction, Graphic Communications
Course Description for Program of Studies	8th Grade Technology is an elective course designed to provide students further exploration and experience in technical career pathways. Students will deepen their understanding of the building blocks of society through Engineering, Construction, and an introduction to Graphic Communications. Project based learning will guide students to a deeper understanding of technical career field opportunities. Students will comprehend their individually unique skill sets in relation to industry and how their distinct skills are beneficial to industry and society.
Grade Level	8
Pre-requisites	None
Credit (if applicable)	

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[Module 1: Engineering](#)

[Module 2: Graphic Communications](#)

[Module 3: Construction](#)

Module 1: Engineering

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 1 Nature and Characteristics of Technology and Engineering	<ul style="list-style-type: none"> ● 1J. Develop innovative products and systems that solve problems and extend capabilities based on individual or collective needs and wants. ● 1K. Compare and contrast the contributions of science, engineering, mathematics, and technology in the development of technological systems. ● 1L. Explain how technology and engineering are closely linked to creativity, which can result in both intended and unintended innovations. ● 1M. Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. 	<ul style="list-style-type: none"> ● Understand the components of the design process. ● Consider constraints and limitations in design and prototype. ● Communicate the specifications of the design and product. ● Define the ways in which the design meets the constraints and limitations of the problem. ● Generate and assess a prototype. ● Record and reflect on the design process in the google portfolio. 	<ul style="list-style-type: none"> ● Accuracy ● Analysis ● Argument ● Assessment ● Causation ● Claim ● Communicate ● Constraints ● Control ● Correlation ● Criteria Design (v.) ● Error Diagram (n.) ● Effectiveness ● Efficiency ● Function ● Evaluate ● Evidence ● Failure ● Inference ● Hypothesis ● Impact (n.) ● Implication ● Model ● Observation ● Investigate Limit ● Performance ● Plan (n.) ● Parallax ● Patterns ● Problem ● Process ● Precision ● Predict ● Quantitative Reasoning
STEL 5 Influence of Society on Technological Development	<ul style="list-style-type: none"> ● 5F. Analyze how an invention or innovation was influenced by its historical context. ● 5G. Evaluate trade-offs based on various perspectives as part of a decision process that recognizes the need for careful compromises among competing factors. 		
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7P. Illustrate the benefits and opportunities associated with different approaches to design. ● 7Q. Apply the technology and engineering design process. ● 7R. Refine design solutions to address criteria and constraints. ● 7S. Create solutions to problems by identifying and applying human factors in design. ● 7T. Assess design quality based upon established principles and elements of design. 		

	<ul style="list-style-type: none"> ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 		
<p>ISTE 1.4 Innovative Designer Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.</p>	<ul style="list-style-type: none"> ● 1.4.a-Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. ● 1.4.b-Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks. ● 1.4.c-Students develop, test and refine prototypes as part of a cyclical design process. ● 1.4.d-Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. 		<ul style="list-style-type: none"> ● Prototype ● Qualitative ● Relevance ● Reliability ● Refine ● Reflect ● Requirements ● Scale ● Repeatability ● Reproducibility ● Test (v.) ● Theory ● Simulation ● Specifications (Specs) ● Uncertainty ● Variability ● Trade-Off ● Trueness
<p>Advance CTE ACC01 Architecture and Construction</p>	<ul style="list-style-type: none"> ● ACC01.01.04 Use appropriate formulas to determine ratios, fractions, and proportion measures. ● ACC01.01.05 Use appropriate formulas to determine measurements of dimensions, spaces and structures. 		

Module 1: Engineering

Essential Questions:

- What are the different types of engineering careers?
- How does the design process support innovation?
- How does the design process ensure a product that solves the problem?
- What are the safety protocols for the makerspace?
- What is the importance of design specifications and measurements?
- What engineering opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL ISTE	<ul style="list-style-type: none"> ● I can explore the careers in engineering and explain their importance. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available for the continued study of engineering at the high school level. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 30px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)		Performance (P)	X	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> ● <i>6E. Verify how specialization of function has been at the heart of many technological improvements.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Explanation and research of different careers and research.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
	Performance (P)											
X	Observation (O)											
Pacing:	1 block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Portfolio Addition</i> 								
STEL ISTE	<ul style="list-style-type: none"> ● I can demonstrate safe behaviors and actions within the makerspace. ● I can explain and accomplish safety procedures in the event of an emergency. ● I can locate and describe how to use the essential safety equipment in the makerspace. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 30px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)	x	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects.</i> ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Students will receive a review of the safety protocols necessary to work in the makerspace.</i> ● <i>Students will complete a safety contract.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
x	Observation (O)											
Pacing:	1 Block		<p>CSS Connections:</p> <p><i>CCSS.ELA-LITERACY.RST.6-8.3</i></p>	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Safety Contract completion</i> 								

			<ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	and safety quiz								
STEL ISTE	<ul style="list-style-type: none"> I can apply the engineering design process to solve a problem. I can understand the criteria and constraints related to the problem I need to solve. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	x	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 1.4.a-Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. 1.4.d-Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. 7Q. Apply the technology and engineering design process. 7R. Refine design solutions to address criteria and constraints. 7S. Create solutions to problems by identifying and applying human factors in design. 7T. Assess design quality based upon established principles and elements of design. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will design a mock-up of a prototype using the engineering design process.
	Selected Response											
	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	1 block		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3 <ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	Assessments: <ul style="list-style-type: none"> Completion of prototype design 								
STEL ISTE	<ul style="list-style-type: none"> I can accurately measure to the nearest 1/16 " using a measuring device. I can create a physical prototype of my design and accurately communicate its measurements using the 1/16" scale. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance</td> </tr> <tr> <td>x</td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	x	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ACC01.01.04 Use appropriate formulas to determine ratios, fractions, and proportion measures. ACC01.01.05 Use appropriate formulas to determine measurements of dimensions, spaces and structures. 1.4.c-Students develop, test and refine prototypes as part of a cyclical design process. 1.4.d-Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will use measuring devices to accurately measure their prototypes.
	Selected Response											
	Constructed Response											
x	Performance											
x	Observation											
Pacing:	2 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3 <ul style="list-style-type: none"> Follow precisely a multistep procedure when 	Assessments: <ul style="list-style-type: none"> Build prototype Provide specifications for the 								

			<i>carrying out experiments, taking measurements, or performing technical tasks.</i>	<i>prototype within 1/16 of an inch accuracy.</i>								
STEL ISTE	<ul style="list-style-type: none"> I can construct, safely test, and evaluate a prototype. I can explain how my design and prototype meet the criteria and constraints of the problem 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>x</td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	x	Constructed Response	X	Performance		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7U. Evaluate the strengths and weaknesses of different design solutions. 7V. Improve essential skills necessary to successfully design. 1.4.a-Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems. 1.4.b-Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks. 1.4.c-Students develop, test and refine prototypes as part of a cyclical design process. 1.4.d-Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will test their prototypes to evaluate their design.
	Selected Response											
x	Constructed Response											
X	Performance											
	Observation											
Pacing:	5 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.3 <ul style="list-style-type: none"> Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. 	Assessments: <ul style="list-style-type: none"> Successful completion of testing. 								
STEL ISTE	<ul style="list-style-type: none"> I can record my learning on my google site portfolio. I can complete a reflection about engineering and define my interest in future study of the topic. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>x</td> <td>Constructed Response</td> </tr> <tr> <td>X</td> <td>Performance</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	x	Constructed Response	X	Performance		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will create a document that will demonstrate their knowledge of the Engineering Design Process.
	Selected Response											
x	Constructed Response											
X	Performance											
	Observation											
Pacing:	1 Block		CCSS Connections:	Assessments:								

			<ul style="list-style-type: none">•	<ul style="list-style-type: none">• <i>Document showcasing the components of the design process and its application to the design problem.</i>
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Module 2: Graphic Communications

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
STEL 2 Core Concepts of Technology and engineering	<ul style="list-style-type: none"> ● 2N. Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used. ● 2Q. Predict outcomes of a future product or system at the beginning of the design process. ● 2S. Defend decisions related to a design problem. 	<ul style="list-style-type: none"> ● Students will apply elements of graphic design to constructing a marketing brochure for a home. ● Students will ensure the use of the design elements in their marketing piece. ● Students will use software to develop and publish their graphic design piece. 	<ul style="list-style-type: none"> ● <i>Alignment</i> ● <i>Bleed</i> ● <i>DPI</i> ● <i>Focal Point</i> ● <i>Grid</i> ● <i>Illustrator (Adobe)</i> ● <i>PhotoShop (Adobe)</i> ● <i>Kerning</i> ● <i>Line</i> ● <i>Negative Space</i> ● <i>Raster images</i> ● <i>RGB</i> ● <i>Six elements of design</i> ● <i>Typography</i> ● <i>Texture</i> ● <i>Vector image</i> ● <i>GIF</i> ● <i>Gradient</i> ● <i>Pixelation</i> ● <i>Asymmetrical</i> ● <i>Symmetrical</i> ● <i>Baseline</i> ● <i>Contrast</i> ● <i>Copy</i> ● <i>Crop</i> ● <i>Drop shadow</i> ● <i>Element</i> ● <i>Fill</i> ● <i>Font</i> ● <i>Gradient</i> ● <i>Gutter</i> ● <i>Mock up</i> ● <i>Sharpen</i> ● <i>Spread</i>
STEL 7 Design in Technology and Engineering Education	<ul style="list-style-type: none"> ● 7Q. <i>Apply the technology and engineering design process.</i> ● 7R. Refine design solutions to address criteria and constraints. ● 7T. Assess design quality based upon established principles and elements of design. ● 7V. Improve essential skills necessary to successfully design. 	<ul style="list-style-type: none"> ● Students will assess their marketing pieces to ensure the use of the elements of graphic design. ● Students will reflect on the use of the elements of design and how they improved the final marketing product. 	
Technology and Engineering Practices	<ul style="list-style-type: none"> ● TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 		
ISTE 1.5 Computational Thinker Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.	<ul style="list-style-type: none"> ● 1.5.a-Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions. ● 1.5.b-Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate 		

	<p>problem-solving and decision-making.</p> <ul style="list-style-type: none">● 1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.● 1.5.d-Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.		<ul style="list-style-type: none">● <i>Text wrap</i>
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Module 2: Graphic Communications

Essential Questions:

- What careers require graphic design skills?
- How does software and technology support graphic designers?
- How does the incorporation of the elements of design improve the final product?
- What is the relationship between marketing and graphic design?
- What engineering opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments				
STEL ISTE	<ul style="list-style-type: none"> ● I can explore the careers in graphic design and explain their importance. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available for the continued study of graphic design at the high school level. 	<table border="1" style="width: 100%;"> <tr><td style="text-align: center;">Selected Response (SR)</td></tr> <tr><td style="text-align: center;">Constructed Response (CR)</td></tr> <tr><td style="text-align: center;">Performance (P)</td></tr> <tr><td style="text-align: center;">Observation (O)</td></tr> </table>	Selected Response (SR)	Constructed Response (CR)	Performance (P)	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Explanation and research of different careers in graphic design.</i>
Selected Response (SR)								
Constructed Response (CR)								
Performance (P)								
Observation (O)								
Pacing:	1 Block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Portfolio</i> 				
STEL ISTE	<ul style="list-style-type: none"> ● I can explore graphic design software. ● I can use the graphic design software to complete a simple project. 	<table border="1" style="width: 100%;"> <tr><td style="text-align: center;">Selected Response (SR)</td></tr> <tr><td style="text-align: center;">Constructed Response (CR)</td></tr> <tr><td style="text-align: center;">Performance (P)</td></tr> <tr><td style="text-align: center;">X Observation (O)</td></tr> </table>	Selected Response (SR)	Constructed Response (CR)	Performance (P)	X Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>7Q. Apply the technology and engineering design process.</i> ● <i>1.5.a-Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.</i> ● <i>1.5.c-Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Introduction to graphic design lessons and software exploration.</i>
Selected Response (SR)								
Constructed Response (CR)								
Performance (P)								
X Observation (O)								

Pacing:	1 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Final product. 								
STEL ISTE	<ul style="list-style-type: none"> I can use graphic design software to complete an introductory project. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance (P)</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7Q. Apply the technology and engineering design process. 7T. Assess design quality based upon established principles and elements of design. 7V. Improve essential skills necessary to successfully design. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will design a document that will demonstrate their knowledge of graphic design.
	Selected Response											
	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	2 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Document displaying the criteria for the graphic design project. 								
STEL ISTE	<ul style="list-style-type: none"> I can accurately find the value of the home based on a house of my choice. I can create a brochure advertising a home that is for sale. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance</td></tr> <tr><td>x</td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based activities. TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills. 7Q. Apply the technology and engineering design process. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Research of various home prices in the area. Creation of brochures in graphic design software.
	Selected Response											
	Constructed Response											
x	Performance											
x	Observation											
Pacing:	3 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Spreadsheet of houses that list the locations and price of various homes. Construct brochure draft 								
STEL ISTE	<ul style="list-style-type: none"> I can assess my home sale brochure for elements of design. 		Lesson Progression and Standards Connection: <ul style="list-style-type: none"> 7T. Assess design quality based upon 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Creation of brochure in 								

	<ul style="list-style-type: none"> I can use my knowledge of the elements of design to refine my home sale brochure. I can reflect on the differences between my original brochure and my refined brochure and predict the impact on marketing the home. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td>x</td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance</td></tr> <tr><td>x</td><td>Observation</td></tr> </table>		Selected Response	x	Constructed Response	x	Performance	x	Observation	<p><i>established principles and elements of design.</i></p> <ul style="list-style-type: none"> 7V. Improve essential skills necessary to successfully design. 	<p><i>photoshop incorporating the elements of design.</i></p>
	Selected Response											
x	Constructed Response											
x	Performance											
x	Observation											
Pacing:	2 Blocks		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7</p> <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> Final Completion of Brochure 								
STEL ISTE	<ul style="list-style-type: none"> I can record my learning on my google site portfolio. I can complete a reflection about graphic design and define my interest in future study of the topic. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td>x</td><td>Constructed Response</td></tr> <tr><td>X</td><td>Performance</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response	x	Constructed Response	X	Performance		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Students will create a document that will demonstrate their knowledge of graphic design.
	Selected Response											
x	Constructed Response											
X	Performance											
	Observation											
Pacing:	1 Block		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7</p> <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> Document showcasing the components of the design process and its application to the design problem. 								

Module 3: Construction

UNWRAPPED STANDARDS

Advance CTE/ISTE/STEL Standards	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
<p>Advance CTE</p> <ul style="list-style-type: none"> ● AC 1.2: Utilize vocabulary and visual cues in context of design and construction situations. ● AC 6.1: Interpret drawings used in project planning. ● AC 6.2: Recognize how specifications and standards are arranged for proper access. ● AC 6.3: Use architect's plan, manufacturer's illustrations and other materials to communicate specific data and visualize proposed work. ● AC 6.4: Describe the written standards and specifications that apply. 	<ul style="list-style-type: none"> ● Confirm understanding of verbal and visual instructions. ● Ask questions concerning details of instructions. ● Perform assignments as requested. ● Recognize elements and symbols of blueprints and drawings ● Use specifications and standards. ● Apply specifications and standards appropriately. ● Sketch/draw/illustrate concepts and ideas. ● Draw or sketch plan/layout to be completed. ● Use proper measurements to determine layout. ● Interpret and explain standards and specifications. 	<ul style="list-style-type: none"> ● Use design software ● Compare and contrast elements of design for different home styles ● Create a home design following an architectural style. ● Create a balsa wood prototype of that home design. ● Understand the elements required in framing a structure and transfer knowledge to balsa wood prototype. ● Ensure proper finishing of the prototypes. 	<ul style="list-style-type: none"> ● Adhesion ● Adhesive ● Annual growth ring ● Beam ● Bearing ● Board ● Bow ● Brace ● Building area ● Building height ● Cantilever ● Chalking ● Compression ● Cure ● Filler ● Fine finish ● Finger joint ● Gloss ● Grade ● Grain ● Joint-butt ● Joint-end ● Joist ● Knot ● Laminate ● Lumber ● Interior ● Exterior ● Rafter ● Rip ● Varnish ● Warp
<p>STEL 7 Design in Technology and Engineering Education</p>	<ul style="list-style-type: none"> ● 7P. Illustrate the benefits and opportunities associated with different approaches to design. ● 7Q. Apply the technology and engineering design process. ● 7T. Assess design quality based upon established principles and elements of design. ● 7U. Evaluate the strengths and weaknesses of different design solutions. ● 7V. Improve essential skills necessary to successfully design. 		
<p>Technology and Engineering Practices</p>	<ul style="list-style-type: none"> ● TEP-2 (creativity)-Exhibits innovative and original ideas in the context of design-based 		

	<p>activities.</p> <ul style="list-style-type: none"> ● TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. ● TEP-5 Critiques technological products and systems to identify areas of improvement. ● TEP-6 (collaboration)-Demonstrated productive teamwork in design-based projects. ● <i>TEP-7 (communication)-Exhibits effective technical, writing, graphic, and oral communication skills.</i> 		
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Module 3: Construction

Essential Questions

- What are the careers in the construction field?
- What does it mean to have an architectural style?
- How does design software support and inform those in a construction career?
- What are the similarities and differences for a floor plan to an elevation plan?
- How do you translate from a set of plans to a finished product?
- How do you translate a design to balsa wood prototype?
- What wood working techniques are required in framing a structure?
- What architecture and construction opportunities are available to me at the high school level?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
STEL ISTE	<ul style="list-style-type: none"> ● I can explore the careers in construction and explain their importance. ● I can understand the opportunities in the Bristol region related to this career choice. ● I can understand the opportunities available for the continued study of construction at the high school level. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td></td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)		Constructed Response (CR)		Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>1K. Compare and contrast the contributions of science, engineering, and technology in the development of technological systems.</i> ● <i>3G. Explain how knowledge gained from other content areas affects the development of technological products and systems.</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Explanation and research of different careers in graphic design.</i>
	Selected Response (SR)											
	Constructed Response (CR)											
	Performance (P)											
	Observation (O)											
Pacing:	1 Block		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Portfolio</i> 								
STEL ISTE	<ul style="list-style-type: none"> ● I can explore construction design software. ● I can create a floor plan that meets required specifications. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Performance (P)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● <i>Confirm understanding of verbal and visual instructions.</i> ● <i>Ask questions concerning details of instructions.</i> ● <i>Perform assignments as requested.</i> ● <i>Recognize elements and symbols of blueprints and drawings</i> ● <i>Use specifications and standards.</i> ● <i>Apply specifications and standards</i> 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Creation of floor plan using a floor plan program.</i> 		
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											

		<table border="1"> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Observation (O)	<p><i>appropriately.</i></p> <ul style="list-style-type: none"> ● Sketch/draw/illustrate concepts and ideas. ● Draw or sketch plan/layout to be completed. ● Use proper measurements to determine layout. ● Interpret and explain standards and specifications. 							
	Observation (O)											
Pacing:	1 Block		CCSS Connections: <ul style="list-style-type: none"> ● 	Assessments: <ul style="list-style-type: none"> ● Creation of floor plan. 								
STEL ISTE	<ul style="list-style-type: none"> ● I can compare and contrast the design elements of architectural house styles. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>x</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation</td> </tr> </table>		Selected Response	x	Constructed Response	x	Performance (P)		Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● Recognize elements and symbols of blueprints and drawings ● 7P. Illustrate the benefits and opportunities associated with different approaches to design. ● 7Q. Apply the technology and engineering design process. ● 7T. Assess design quality based upon established principles and elements of design. ● 7U. Evaluate the strengths and weaknesses of different design solutions. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Research of various house styles in the area
	Selected Response											
x	Constructed Response											
x	Performance (P)											
	Observation											
Pacing:	2 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> ● Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> ● Google slideshow of different house styles researched. 								
STEL ISTE	<ul style="list-style-type: none"> ● I can explain the difference between an elevation and a floor plan. ● I can read and understand the basic elements of a floor plan. ● I can read and understand the basic elements of an elevation plan. 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td>x</td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance</td> </tr> <tr> <td>x</td> <td>Observation</td> </tr> </table>		Selected Response	x	Constructed Response	x	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> ● Recognize elements and symbols of blueprints and drawings ● Use specifications and standards. ● Draw or sketch plan/layout to be completed. ● Use proper measurements to determine layout. ● Interpret and explain standards and specifications. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> ● Students will differentiate between elevation plans and floor plans
	Selected Response											
x	Constructed Response											
x	Performance											
x	Observation											
Pacing:	1 Block		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> ● Integrate quantitative or technical information expressed in words in a text with a version of 	Assessments: <ul style="list-style-type: none"> ● Exit ticket. 								

			<i>that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</i>									
STEL ISTE	<ul style="list-style-type: none"> I can select a home design and make a plan to construct a structure to represent that design to the specifications. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance</td></tr> <tr><td>x</td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> Recognize elements and symbols of blueprints and drawings Use specifications and standards. Draw or sketch plan/layout to be completed. Use proper measurements to determine layout. Interpret and explain standards and specifications. TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Design and process of building a model of the project.
	Selected Response											
	Constructed Response											
x	Performance											
x	Observation											
Pacing:	2 Blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Model of project. 								
STEL ISTE	<ul style="list-style-type: none"> I can safely follow instructions on how to properly use tools and materials in the Makerspace. I can construct a structure to represent my home design to the specifications. I can accurately measure to the nearest 1/16" using a measuring device to ensure my project meets specifications. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance</td></tr> <tr><td>x</td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance	x	Observation	Lesson Progression and Standards Connection: <ul style="list-style-type: none"> Recognize elements and symbols of blueprints and drawings Use specifications and standards. Draw or sketch plan/layout to be completed. Use proper measurements to determine layout. Interpret and explain standards and specifications. TEP-3 (making and doing)-Exhibits safe and effective ways of producing technological products, systems, and projects. 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will use the appropriate tools in order to build their model of the project. Students will use measuring devices to accurately measure their prototypes.
	Selected Response											
	Constructed Response											
x	Performance											
x	Observation											
Pacing:	6 blocks		CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7 <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	Assessments: <ul style="list-style-type: none"> Model of project. Final prototype with 1/16 of an inch accuracy. 								
STEL ISTE	<ul style="list-style-type: none"> I can safely follow instructions on how to properly use tools and 		Lesson Progression and Standards Connection: <ul style="list-style-type: none"> TEP-3 (making and doing)-Exhibits safe and 	Mandatory Lessons/Activities: <ul style="list-style-type: none"> Students will prepare their 								

	<p>materials in the Makerspace.</p> <ul style="list-style-type: none"> I can add a finish to my project. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td></td><td>Constructed Response</td></tr> <tr><td>x</td><td>Performance</td></tr> <tr><td>x</td><td>Observation</td></tr> </table>		Selected Response		Constructed Response	x	Performance	x	Observation	<p><i>effective ways of producing technological products, systems, and projects.</i></p>	<p><i>prototype for proper finishing.</i></p>
	Selected Response											
	Constructed Response											
x	Performance											
x	Observation											
Pacing:	1 Block		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7</p> <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> Finished product 								
STEL ISTE	<ul style="list-style-type: none"> I can record my learning on my google site portfolio. I can complete a reflection about graphic design and define my interest in future study of the topic. 	<table border="1"> <tr><td></td><td>Selected Response</td></tr> <tr><td>x</td><td>Constructed Response</td></tr> <tr><td>X</td><td>Performance</td></tr> <tr><td></td><td>Observation</td></tr> </table>		Selected Response	x	Constructed Response	X	Performance		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> (3c)-Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions. (6C)-Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. (6D)-Students publish or present content that customizes the message and medium for their intended audiences. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> Students will create a document that will demonstrate their knowledge of graphic design.
	Selected Response											
x	Constructed Response											
X	Performance											
	Observation											
Pacing:	1 Block		<p>CCSS Connections: CCSS.ELA-LITERACY.RST.6-8.7</p> <ul style="list-style-type: none"> Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). 	<p>Assessments:</p> <ul style="list-style-type: none"> Document showcasing the components of the design process and its application to the design problem. 								

BPS Ongoing Curriculum Revision: As part of the implementation process, teachers and supervisors will revisit the written curriculum to ensure that it is optimized for student learning.

Course	Unit Title	Curricular Area	Change From	Revise To	Rationale
Manufacturing Design					No changes made as of October 2021
Accounting 2					No changes made as of October 2021
Sports and Entertainment Marketing					Waiting for access to view revisions
Information Processing II					No changes made as of October 2021
Medical Terminology					No changes made as of October 2021
ECE Introduction to Allied Health					No changes made as of October 2021
Intro to CWE					No changes made as of October 2021
CWE 50					No changes made as of October 2021
CWE 100					No changes made as of October 2021

BPS Ongoing Curriculum Revision: As part of the implementation process, teachers and supervisors will revisit the written curriculum to ensure that it is optimized for student learning. Minor changes to standards, learning targets, priorities, common learning experiences, assessments will be reflected below. Major curricular revisions will be done when 1) standards have been revised by the state of CT, OR 2) the curriculum is up for revision on the district revision timeline, OR 3) when more than 50% of the learning targets will be revised. Courses will be considered new when the course does not currently exist within the program of study.

Course	Unit Title	Curricular Area	Change From	Revise To	Rationale
Middle School Math					No changes made as of October 2021
AP Statistics					No changes made as of October 2021
BPA Math					No Phase 1 Revisions Made as of October 2021
AP Calculus					No changes made as of October 2021

BPS Ongoing Curriculum Revision: As part of the implementation process, teachers and supervisors will revisit the written curriculum to ensure that it is optimized for student learning. Minor changes to standards, learning targets, priorities, common learning					
Course	Unit Title	Curricular Area	Change From	Revise To	Rationale
Course	Unit Title	Curricular Area	Change From	Revise To	Rationale
Science 6-8	Whale Songs (Waves)-Grade 8	Unit Order	Grade 8	Grade 6	Waves are repeated in grade 9 and chemistry unit in grade 6 was not developmentally appropriate. (September 2021)
Science 6-8	Energy Drink (Chemistry)-Grade 6	Unit Order	Grade 6	Grade 8	Chemistry unit not developmentally appropriate because of access to mathematics, waves unit more applicable to developmental needs. (September 2021)
Science 6-8	Unit 1-Reverse Bioengineering the Woolly mammoth (Grade 8)	Discipline Vocabulary	Added more discipline specific vocabulary by standard.	Vocab now includes: communities, competition, mating for life, probability, diversity, multicellular, unicellular, gene, dominant, recessive, expression, Mendelian genetics, daughter cell, cell division, parent cell, sex cell, probability, descent, common ancestry, vestigial, homologous, time scale, modern time, similarities, analogous, suppression, survival, reproduction, environment, population dynamics, histogram, line graph	As the teachers unpacked this unit in preparation for teaching, new vocabulary was identified to support learners. (October 2019)
Science 6-8	Unit 1-Sports Injuries (Grade 7)	Standard prioritization	MS ETS1-1 - Priority standard in Unit 1	Removed MS ETS1-1 from priority standards	Standard is repeated in other units. Pacing was impacted by keeping this standard in this unit of instruction.
Science 6-8	Unit 1-Sports Injuries	Discipline Vocabulary	Added more discipline specific vocabulary by standard.	Vocab now includes: microscope, living, non-living, types of cells: muscle, bone, skin, red blood cell, animal, plan, organelle, heart, arteries, capillary, vein, blood vessel, lungs, alveoli, trachea, oxygen, carbon dioxide, stomach, mouth, esophagus, large intestine, small intestine, rectum, anus, absorption, brain, nerves, spinal cord, spinal column, neuron, nerve cell, muscle, cardiac, voluntary, striated, smooth, skeletal system: ligament, tendon, bone, central, peripheral, voluntary, involuntary	As the teachers unpacked this unit in preparation for teaching, new vocabulary was identified to support learners. (October 2019)
Physical Science	Unit 3 - Learning Sequence 2	Lesson Sequence	Add more specific learning sequence to incorporate additional sequence topics	New sequence now includes albedo, specific heat and temperature conversions	
Physical Science	Unit 3 - A Year Without Summer/Yellowstone Caldera	Discipline Vocabulary	Added more discipline specific vocabulary by standard.	Removed from vocab: Sun, Life cycle of star, radiometric dating, Charles Lyell, Ancient Core, Isotope, Radioactive Decay, Feedback loops Added to Vocab: electromagnetic radiation, Magnetic Polarity Reversal, Island Formation, Hotspot, Earthquake, Revolution, Rotation, Weather, Elliptical, Equinox, Solstice, Acid rain, Permeability, pH, Acid, Base	The phenomoma of this course was split to better support student learning. Because stars and energy were defined in detail during unit 1, it was removed from this unit and additional content relative to plate tectonics was added.
Biology - Academic	Unit 3 - Learning Sequence 6	Student Objectives	Added more discipline specific student objectives	Objectives now include: monohybrid, dihybrid, heterozygous, homozygous	As the teachers unpacked this unit in preparation for teaching, new vocabulary was identified to support learners. (October 2019)
Biology - Academic	Unit 3	Discipline Vocabulary	Added more discipline specific vocabulary by standard.	Added to Vocab: transcription, translation, codon, nucleotide, chromosome, expression, gene, offspring, protein, heritable trait, cell plate, cytokinesis, daughter cell, prophase, anaphase, telophase, metaphase, punnett squares, monohybrid, dihybrid, sex-linked, codominance, incomplete dominance, polygenic	As the teachers unpacked this unit in preparation for teaching, new vocabulary was identified to support learners. (October 2019)
Chemistry	Unit 2	Discipline Vocabulary	Added more discipline specific vocabulary by standard.	Added to Vocab: electronegativity, electrons, valence, charge, ions, cations, anions, phase change, melting, boiling, kinetic energy, intermolecular, electrical force, coulomb's law, VSEPR (acc),	As the teachers unpacked this unit in preparation for teaching, new vocabulary was identified to support learners. (October 2019)
Environmental Issues and Sustainability					No changes made as of October 2021
Botany					No changes made as of October 2021
BPA Science					No Phase 1 Revisions Made as of October 2021
Oceanography					No changes made as of October 2021
AP Environmental Science					No changes made as of October 2021
AP Chemistry					No changes made as of October 2021
AP Principles of Computer Science					No changes made as of October 2021
Biotechnology and Forensics					No changes made as of October 2021
Physics					No changes made as of October 2021
AP Biology					No changes made as of October 2021
ECE Biology					No changes made as of October 2021
Anatomy and Physiology					No changes made as of October 2021



Bristol Public Schools
Office of Teaching & Learning

Department	Career and Technical Education (CTE)
Department Philosophy	Bristol schools believe in providing students with rich opportunities to ensure career and college readiness. These opportunities include development of skills, practices, and exploration within several career clusters and pathways. Each CTE curriculum enables students to acquire and strengthen leadership, literacy, numeracy, decision-making, computer skills, and technology skills through 11 career clusters and pathways: (1) architecture and construction, (2) business management, (3) education and training, (4) finance, (5) health science, (6) hospitality and tourism, (7) information technology, (8) manufacturing, (9) marketing, (10) transportation, distribution and logistics, and (11) STEM. Each career cluster provides students with access to hand-on experiences that will allow for students development of skills that will support successful transition to their post secondary experiences.
Course	Baking and Pâtisserie
Course Description for Program of Studies	The course is an introduction to baking and pastry with intensive hands-on laboratory training. Laboratory classes emphasize basic ingredients and production techniques for breads, rolls, folded doughs, batters, basic cakes, cake decorating, pies, and cookies.
Grade Level	10-12
Pre-requisites	Introduction to Foods and Nutrition
Credit (if applicable)	0.5

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[Curricular Theme: Planning, Preparation, and Production](#)

[Recipes: Baking and Patisserie](#)

Curricular Theme: Safety and Sanitation

UNWRAPPED STANDARDS

<u>Advance CTE Standard</u>	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
HTC06.05: Review safety and sanitation procedures applicable to the work area to ensure a safe and healthy work environment.	<ul style="list-style-type: none"> ● HTC06.05.01: Examine overall safety procedures to maintain safe work areas in hospitality and tourism workplaces. ● HTC06.05.03 Practice personal safety while at the work site and on work related assignments to avoid injuries or accidents. 	<ul style="list-style-type: none"> ● Classify different types of fires and how to contain them. ● Identify proper fire evacuation procedures. ● Outline proper response to emergency situations. ● Use appropriate safety equipment and clothing. ● Demonstrate safe use of equipment commonly used in hospitality and tourism. 	Safety Sanitation
HTC06.07 Analyze the potential effects caused by common chemicals and hazardous materials used in the hospitality and tourism industry in order to prevent health problems that may result from exposure to these elements.	<ul style="list-style-type: none"> ● HTC06.07.01 Follow industry standards to comply with safety polices and procedures. 	<ul style="list-style-type: none"> ● Apply Hazcom and Hazardous Material practices and MSDS Procedures for handling and disposing of chemicals. ● Illustrate compliance with OSHA safety regulations and practices. 	Chemical Hazardous Material MSDS OSHA
HTC06.03 Assess types and sources of workplace hazards common to hospitality and tourism work settings in order to demonstrate a working understanding of key health and safety concerns.	<ul style="list-style-type: none"> ● HTC06.03.01 Demonstrate methods to correct common hazards 	<ul style="list-style-type: none"> ● Identify and describe common hazards in the workplace. ● Identify and describe major sources of information about hazards in the workplace (e.g., MSDS, work procedures, exposure control plans, training materials, labels, and signage). Identify sources of combustible/flammable materials, fire and emergencies to establish a fire safe environment. ● Interpret safety signs and symbols. 	Hazard

<p>NASAFACS: 8.2 Demonstrate food safety and sanitation procedures</p>	<ul style="list-style-type: none"> ● 8.2.1 Identify characteristics of major food borne pathogens, their role in causing illness, foods involved in outbreaks, and methods of prevention. ● 8.2.6 Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods. ● 8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods, between raw and ready-to-eat foods, and between animal and fish sources and other food products. ● 8.2.10 Demonstrate safe and environmentally responsible waste disposal and recycling methods. ● 8.2.11 Demonstrate ability to maintain necessary records to document time and temperature control, HACCP, employee health, maintenance of equipment, and other elements of food preparation, storage, and presentation. 		<p>Pathogens Foodborne illness Cross contamination Temp sheets Cleaning sheets</p>
<p>NASAFACS: 8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.</p>	<ul style="list-style-type: none"> ● 8.3.1 Operate tools and equipment following safety procedures and OSHA requirements. ● 8.3.2 Maintain tools and equipment following safety procedures and OSHA requirements. ● 8.3.3 Demonstrate procedures for cleaning and sanitizing equipment, serving dishes, glassware, and utensils to meet industry standards and OSHA requirements. ● 8.3.5 Demonstrate procedures for safe and secure storage of equipment and tools. ● 8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware. 		<p>Cleaning Sanitizing</p>
<p>NASAFACS: 8.6 Demonstrate implementation of food service management and leadership functions.</p>	<ul style="list-style-type: none"> ● 8.6.1 Apply principles of purchasing, receiving, issuing, and storing in food service operations. ● 8.6.2 Practice inventory procedures including first in/first out concept, date marking, and specific record keeping. ● 8.6.10 Apply principles of inventory management, labor cost and control techniques, 		<p>Receiving Inventory FIFO Date Marking Record keeping Inventory management</p>

	production planning and control, and facilities management to front and back of the house operations.		
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Curricular Theme-Safety and Sanitation

Theme Narrative: The contents of this unit are interwoven throughout the Baking and Patisserie course. Students are provided an overview of major safety and sanitation procedures prior to engineering the culinary lab. Throughout the course, students will deepen their understanding of safety and sanitation processes and procedures as they interweave them with baking skills.

Essential Questions:

- What are the characteristics and qualities of a safe kitchen?
- What are common kitchen hazards and chemicals?
- How can you mitigate common hazards in a culinary environment?
- What are food borne pathogens and how can they be prevented in a kitchen?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
HTC06.05	<ul style="list-style-type: none"> ● I can understand and explain safety procedures and precautions to maintain a safe work environment. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)		Performance (P)	x	Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● HTC06.05.01: Examine overall safety procedures to maintain safe work areas in hospitality and tourism workplaces. ● HTC06.05.03 Practice personal safety while at the work site and on work related assignments to avoid injuries or accidents. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Safety and sanitation learning targets and skills are embedded with all content throughout this course. Focus on specific elements of safety and sanitation will vary based on concepts and skills required in the unit taught.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
	Performance (P)											
x	Observation (O)											
Pacing:	<ul style="list-style-type: none"> ● 1 block-General safety procedures and precautions. ● Ongoing-application of content as required by planned lab experiences. 		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● CCSS.ELA-LITERACY.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Observation/assessment of safe and sanitary actions within the culinary lab and pre/post lab quizzes.</i> 								
HTC06.03 HTC06.07	<ul style="list-style-type: none"> ● I can identify and correct common kitchen hazards and chemicals. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)		Performance (P)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● HTC06.03.01 Demonstrate methods to correct common hazards ● HTC06.07.01 Follow industry standards to comply with safety policies and procedures. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Safety and sanitation learning targets and skills are embedded with all content throughout this course. Focus on specific elements of safety and sanitation will vary based on concepts and skills required in the unit taught.</i> 		
	Selected Response (SR)											
x	Constructed Response (CR)											
	Performance (P)											

<p>Pacing:</p>	<ul style="list-style-type: none"> ● 0.5 block-General kitchen hazards and chemicals ● Ongoing-application of content as required by planned lab experiences. 	<table border="1"> <tr> <td data-bbox="693 103 741 175">x</td> <td data-bbox="741 103 1016 175">Observation (O)</td> </tr> </table>	x	Observation (O)	<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● <i>CCSS.ELA-LITERACY.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</i> 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Observation/assessment of safe and sanitary actions within the culinary lab and pre/post lab quizzes.</i> 						
x	Observation (O)											
<p>NASAFAC S8.2</p>	<ul style="list-style-type: none"> ● I can identify major food borne pathogens and how to prevent them. 	<table border="1"> <tr> <td data-bbox="693 363 741 435"></td> <td data-bbox="741 363 1016 435">Selected Response</td> </tr> <tr> <td data-bbox="693 435 741 522">x</td> <td data-bbox="741 435 1016 522">Constructed Response</td> </tr> <tr> <td data-bbox="693 522 741 581"></td> <td data-bbox="741 522 1016 581">Performance (P)</td> </tr> <tr> <td data-bbox="693 581 741 639"></td> <td data-bbox="741 581 1016 639">Observation</td> </tr> </table>		Selected Response	x	Constructed Response		Performance (P)		Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● 8.2.1 Identify characteristics of major food borne pathogens, their role in causing illness, foods involved in outbreaks, and methods of prevention. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Safety and sanitation learning targets and skills are embedded with all content throughout this course. Focus on specific elements of safety and sanitation will vary based on concepts and skills required in the unit taught.</i>
	Selected Response											
x	Constructed Response											
	Performance (P)											
	Observation											
<p>Pacing:</p>	<ul style="list-style-type: none"> ● 0.5 block-General food borne pathogens and prevention ● Ongoing-application of content as required by planned lab experiences. 		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● <i>CCSS.ELA-LITERACY.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</i> 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Observation/assessment of safe and sanitary actions within the culinary lab and pre/post lab quizzes.</i> 								

Curricular Theme: Careers and Employability

UNWRAPPED STANDARDS

Advance CTE Standard	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
NASAFACS: 8.1 Analyze career paths within the food production and food services industries.	<ul style="list-style-type: none"> ● 8.1.1 Explain the roles, duties, and functions of individuals engaged in food production and services careers. ● 8.1.2 Analyze opportunities for employment and entrepreneurial endeavors. ● 8.1.3 Summarize education and training requirements and opportunities for career paths in food production and services. ● 8.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities. 	●	<ul style="list-style-type: none"> ● Food industry ● Entrepreneurial ● Career
NASAFACS: 8.4 Demonstrate menu planning principles and techniques based on standardized recipes to meet customer needs.	<ul style="list-style-type: none"> ● 8.4.1 Use computer based menu systems to develop and modify menus. ● 8.4.2 Apply menu-planning principles to develop and modify menus. ● 8.4.3 Analyze food, equipment, and supplies needed for menus. ● 8.4.4 Develop a variety of menu layouts, themes, and design styles. ● 8.4.5 Prepare requisitions for food, equipment, and supplies to meet production requirements. ● 8.4.6 Record performance of menu items to analyze sales and determine menu revisions. ● 8.4.7 Apply principles of Measurement, Portion Control, Conversions, Food Cost Analysis and Control, Menu Terminology, and Menu Pricing to menu planning. 	●	<ul style="list-style-type: none"> ● Menu ● Theme ● Design ● Production ● Performance of items ● Analyze sales ● Food cost analysis
HTC09.02 Identify career opportunities in one or more hospitality and tourism career pathways to broaden awareness of careers available within the	<ul style="list-style-type: none"> ● HTC09.02.01 Research career opportunities based upon their fit with personal career goals in the hospitality and tourism industries ● HTC09.02.02 Match personal interests and aptitudes to careers in the hospitality and 	<ul style="list-style-type: none"> ● Locate and interpret career information for at least one career cluster. Identify job requirements for career pathways. Identify educational and credentialing 	<ul style="list-style-type: none"> ● Aptitudes ● Entry level ● Skilled level ● Supervisory

<p>career cluster</p>	<p>tourism industry when researching opportunities within the pathways.</p> <ul style="list-style-type: none"> ● HTC09.02.03 Examine entry-level, skilled level, and supervisory positions and the qualifications and skills needed for different levels of hospitality and tourism employment. 	<p>requirements for career cluster and pathways</p> <ul style="list-style-type: none"> ● Identify personal interests and aptitudes. Identify job requirements and characteristics of selected careers. Compare personal interests and aptitudes with job requirements and characteristics of career selected. Modify career goals based on results of personal interests and aptitudes with career requirements and characteristics. 	
<p>ESS07.01 Employ leadership skills to accomplish organizational goals and objectives.</p>	<ul style="list-style-type: none"> ● ESS07.01.02 Exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem solution, and investment in individuals when leading a group in solving a problem. ● ESS07.01.03 Exhibit traits such as compassion, service, listening, coaching, developing others, team development, and understanding and appreciating others when acting as a manager of others in the workplace. ● ESS07.01.04 Exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living, and change when interacting with others in general. ● ESS07.01.06 Exhibit traits such as innovation, intuition, adaptation, life-long learning and coachability to develop leadership potential over time. ● ESS07.01.07 Analyze leadership in relation to trust, positive attitude, integrity, and willingness to accept key responsibilities in a work situation. 	<ul style="list-style-type: none"> ● 	<ul style="list-style-type: none"> ● Leadership ● Employability
<p>ESS07.03 Employ teamwork skills to achieve collective goals and use team member's talents effectively.</p>	<ul style="list-style-type: none"> ● ESS07.03.01 Work with others to achieve objectives in a timely manner. ● ESS07.03.02 Promote the full involvement and use of team member's individual talents and skills. ● ESS07.03.03 Employ conflict-management skills to facilitate solutions. ● ESS07.03.05 Demonstrate teamwork processes 		<ul style="list-style-type: none"> ● Teamwork ● Accountability ● Objectives

	<p>that provide team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability, and conflict resolution.</p> <ul style="list-style-type: none"> ● ESS07.03.07 Demonstrate commitment to and a positive attitude toward team goals. ● ESS07.03.08 Take responsibility for shared group and individual work tasks. ● ESS07.03.09 Assist team members in completing their work. ● ESS07.03.10 Adapt effectively to changes in projects and work activities. ● ESS07.03.11 Negotiate effectively to arrive at decisions. 		
ESS07.04 Establish and maintain effective working relationships with all levels of personnel and other departments in order to accomplish objectives and tasks.	<ul style="list-style-type: none"> ● ESS07.04.03 Manage personal skills to accomplish assignments. ● ESS07.04.04 Treat people with respect. ● ESS07.04.06 Demonstrate sensitivity to and value for diversity. ● ESS07.04.07 Manage stress and control emotions. 		Respect
ESS09.01 Identify and demonstrate positive work behaviors and personal qualities needed to be employable.	<ul style="list-style-type: none"> ● ESS09.01.01 Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation. ● ESS09.01.02 Demonstrate flexibility and willingness to learn new knowledge and skills. ● ESS09.01.03 Exhibit commitment to the organization. 		

Curricular Theme-Careers and Employability

Theme Narrative: The contents of this unit are interwoven throughout the Baking and Patisserie course. Students are provided an overview of employability skills for the food and beverage industry. . Throughout the course, students will deepen their understanding of employability and employability skills as they interweave them with baking skills.

Essential Questions

- What are the career options in the food and beverage industry?
- What are the ways in which culinary certifications can advance my opportunities in the food and beverage industry?
- How are the food industry and business entrepreneurial endeavors connected?
- What are the employability skills required for success in the food industry?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
NASAFAC S: 8.1 HTC09.02	<ul style="list-style-type: none"> ● I can identify careers in the food industry. ● I can analyze opportunities for employment and entrepreneurial endeavors. ● I can summarize education and training requirements and opportunities for career paths in the food industry. ● I can compare and contrast careers in the food industry and choose the best career path for me. 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;"></td> <td style="text-align: center;">Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">Constructed Response (CR)</td> </tr> <tr> <td></td> <td style="text-align: center;">Performance (P)</td> </tr> <tr> <td></td> <td style="text-align: center;">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)		Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● 8.1.1 Explain the roles, duties, and functions of individuals engaged in food production and services careers. ● 8.1.2 Analyze opportunities for employment and entrepreneurial endeavors. ● 8.1.3 Summarize education and training requirements and opportunities for career paths in food production and services. ● HTC09.02.01 Research career opportunities based upon their fit with personal career goals in the hospitality and tourism industries ● HTC09.02.02 Match personal interests and aptitudes to careers in the hospitality and tourism industry when researching opportunities within the pathways. ● HTC09.02.03 Examine entry-level, skilled level, and supervisory positions and the qualifications and skills needed for different levels of hospitality and tourism employment. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Food industry career project and presentation</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
	Performance (P)											
	Observation (O)											
<p>Pacing:</p>	<ul style="list-style-type: none"> ● 3 blocks-Career Exploration ● Ongoing-application of content as required by planned lab and classroom experiences. 		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● <i>CCSS.ELA-LITERACY.SL.11-12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</i> 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Project</i> 								

ESS09.01	<ul style="list-style-type: none"> • I can identify the traits needed to be employable. • I can role-play to demonstrate positive and negative traits in a job. 	<table border="1"> <tr> <td data-bbox="693 151 741 241"></td> <td data-bbox="741 151 1016 241">Selected Response (SR)</td> </tr> <tr> <td data-bbox="693 241 741 334">x</td> <td data-bbox="741 241 1016 334">Constructed Response (CR)</td> </tr> <tr> <td data-bbox="693 334 741 399"></td> <td data-bbox="741 334 1016 399">Performance (P)</td> </tr> <tr> <td data-bbox="693 399 741 461"></td> <td data-bbox="741 399 1016 461">Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)		Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> • ESS09.01.01 Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation. • ESS09.01.02 Demonstrate flexibility and willingness to learn new knowledge and skills. • ESS09.01.03 Exhibit commitment to the organization. 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> • <i>Employability skills and learning targets and skills are embedded with all content throughout this course. Focus on specific elements of safety and sanitation will vary based on concepts and skills required in the unit taught.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
	Performance (P)											
	Observation (O)											
<p>Pacing:</p>	<p>1 block</p>		<p>CCSS Connections:</p> <ul style="list-style-type: none"> • <i>CCSS.ELA-LITERACY.SL.11-12.6 Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grades 11-12 Language standards 1 and 3 here for specific expectations.)</i> 	<p>Assessments:</p> <ul style="list-style-type: none"> • <i>Observation/assessment of employability actions within the culinary lab and classroom.</i> 								

Curricular Theme: Planning, Preparation, and Production

UNWRAPPED STANDARDS

Advance CTE Standard	Performance Elements	Key Concepts/Big Ideas	Academic Vocabulary
HTPA04.01 Manage and use basic reading, writing, and mathematical skills for food production and guest services to provide a positive guest experience.	<ul style="list-style-type: none"> ● HTPA04.01.01 Apply mathematical, reading, and writing skills to correctly deliver food products and guest service 	<ul style="list-style-type: none"> ● Convert recipes. ● Use proper measurements of ingredients. ● Calculate menu and recipe costs. ● Read and comprehend recipes, operational manuals, inventory control sheets, menus, correspondence, training manuals, etc. ● Use basic writing skills (grammar, punctuation, spelling) to produce inventory control sheets, recipes, menus, correspondence, employee evaluations, etc. 	<ul style="list-style-type: none"> ● Convert ● Equivalent ● Weight ● Volume ● Interpret ● Understand
NASAFACS: 8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.	<ul style="list-style-type: none"> ● 8.5.1 Demonstrate professional skills in safe handling of knives, tools, and equipment. ● 8.5.2 Demonstrate professional skill for a variety of cooking methods including roasting, broiling, smoking, grilling, sauteing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies. ● 8.5.3 Utilize weights and measurement tools to demonstrate knowledge of portion control and proper scaling and measurement techniques. ● 8.5.4 Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding a variety of foods. ● 8.5.7 Prepare various fruits, vegetables, starches, legumes, dairy products, fats, and oils using safe handling and professional preparation techniques. 	<ul style="list-style-type: none"> ● Explain the use of a variety of sauces. ● Choose appropriate cooking procedures (sauté, broil, bake, etc.). ● Employ knowledge of nutritional values. ● Exhibit high quality food presentation. ● Use of scales and other food service equipment. ● Sharpen knives safely. ● Use pots and pans for different food preparations. ● Explain how to store and retrieve foods in a variety of settings (cold, hot, dry, etc.) ● Detail characteristics of French, Russian, Bistro style and other forms of service. Identify types of 	<ul style="list-style-type: none"> ● Equipment (full list available at request) ● Cooking methods (full list available at request) ● Technique ● Method ● Ingredient ● Prepare ● Mise en place

	<ul style="list-style-type: none"> ● 8.5.9 Prepare sandwiches, canapes, and appetizers using safe handling and professional preparation techniques. ● 8.5.10 Prepare breads, baked goods and desserts using safe handling and professional preparation techniques. ● 8.5.11 Prepare breakfast meats, eggs, cereals, and batter products using safe handling and professional preparation techniques. ● 8.5.12 Demonstrate professional plating, garnishing, and food presentation techniques. 	<p>dining utensils and proper uses. Show proper set up procedures for the dining room/counter. Explain menu items. Detail the process of “upselling” and other forms of marketing at tableside.</p>	
HTPA09.01 Implements the company's standard operating procedures related to food and beverage production and guest service to provide quality products and services.	<ul style="list-style-type: none"> ● HTPA09.01.02 Evaluate prepared foods for quality and presentation to meet quality standards. ● HTPA09.01.04 Match equipment with correct cooking methodology. 	<ul style="list-style-type: none"> ● Show consistent appearance in prepared foods Detail ways to monitor quality of prepared food 	<p>Plating Quality Portion</p>

Curricular Theme: Planning, Preparation, and Production

Theme Narrative: This unit comprises the baking and patisserie skills and recipes that will support building the students foundational knowledge of baking. Students will build their understanding of safety and sanitation, employability skills as they delve into baking skills and “whip things up” in the culinary lab. Students will learn the basics of the creaming method, muffin method, biscuit method, lamination, pate a choux pastry, yeast breads, cakes and cake decorating.

Essential Questions:

- What are the different ways to mix and prepare baked good doughs/batters, and why is it important to understand the different methods and when to use them?
- What is the difference between quick bread and yeast bread, and how do the leavening agents in each work?
- How are different icings structured, and why are they used for different applications?
- How can you evaluate baked goods, and determine how to improve techniques and outcomes in the future?

CTE Standard	Learning Targets: I can	Summative Assessment Strategy	Lesson Progression and Connection to ELA/Math CCSS	Common Learning Experiences and Assessments								
HTPA04.0 1	<ul style="list-style-type: none"> ● I can convert recipes to be larger or smaller. ● I can use correct measurements of needed ingredients. ● I can understand recipes and apply them properly. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td>Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● HTPA04.01.01 Apply mathematical, reading, and writing skills to correctly deliver food products and guest service 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Recipe conversion and measurement skill learning targets are embedded with all recipes throughout this course.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
<p>Pacing:</p>	<ul style="list-style-type: none"> ● 1 blocks-Recipe Conversion/measurement ● Ongoing-application of content as required by planned lab and classroom experiences. 		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● <i>HS.N-Q.A.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.</i> 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Observation/assessment of recipe conversions and measurement within the culinary lab and classroom.</i> 								
NASAFAC S: 8.3 NASAFAC S: 8.5 HTPA09.0 1	<ul style="list-style-type: none"> ● I can identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware. ● I can demonstrate professional skills in safe handling of knives, tools, and equipment. 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20px;"></td> <td>Selected Response (SR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Constructed Response (CR)</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Performance (P)</td> </tr> <tr> <td></td> <td>Observation (O)</td> </tr> </table>		Selected Response (SR)	x	Constructed Response (CR)	x	Performance (P)		Observation (O)	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● 8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware. ● 8.5.1 Demonstrate professional skills in safe handling of knives, tools, and equipment. ● HTPA09.01.04 Match equipment with correct cooking methodology 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Food processing and equipment skill learning targets are embedded with all recipes throughout this course.</i>
	Selected Response (SR)											
x	Constructed Response (CR)											
x	Performance (P)											
	Observation (O)											
<p>Pacing:</p>	<ul style="list-style-type: none"> ● 2 blocks-Food Processing/Equipment Handling ● Ongoing-application of content 		<p>CCSS Connections:</p> <ul style="list-style-type: none"> ● 	<p>Assessments:</p> <ul style="list-style-type: none"> ● <i>Observation/assessment of food processing and</i> 								

	as required by planned lab and classroom experiences.			<i>equipment use within the culinary lab and classroom.</i>								
NASAFAC S: 8.2 NASAFAC S: 8.2 NASAFAC S: 8.3 NASAFAC S: 8.6 NASAFAC S: 8.4 ESS07.01 ESS07.03 ESS07.04 NASAFAC S: 8.1	<p>Food Preparation</p> <ul style="list-style-type: none"> ● I can demonstrate professional skill for a variety of cooking methods including sauteing, pan frying, deep frying, poaching, steaming, and baking using professional equipment and current technologies. ● I can utilize weights and measurement tools for different recipes. ● I can apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding a variety of foods. ● I can prepare various foods using safe handling and professional preparation techniques. ● I can demonstrate professional plating, garnishing, and food presentation techniques. <p>Safety and Sanitation</p> <ul style="list-style-type: none"> ● I can properly store and handle food, preventing cross contamination. ● I can dispose of waste in appropriate, safe, and environmentally friendly ways. ● I can maintain records to document time and temperature control, maintenance of equipment, and cleaning of equipment. ● I can maintain food inventory using FIFO, date marking, and record keeping. <p>Menu</p> <ul style="list-style-type: none"> ● I can make and modify menus using technology, including 	<table border="1"> <tr> <td></td> <td>Selected Response</td> </tr> <tr> <td></td> <td>Constructed Response</td> </tr> <tr> <td>x</td> <td>Performance (P)</td> </tr> <tr> <td>x</td> <td>Observation</td> </tr> </table>		Selected Response		Constructed Response	x	Performance (P)	x	Observation	<p>Lesson Progression and Standards Connection:</p> <ul style="list-style-type: none"> ● 8.5.2 Demonstrate professional skill for a variety of cooking methods including roasting, broiling, smoking, grilling, sauteing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies. ● 8.5.3 Utilize weights and measurement tools to demonstrate knowledge of portion control and proper scaling and measurement techniques. ● 8.5.4 Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding a variety of foods. ● 8.5.7 Prepare various fruits, vegetables, starches, legumes, dairy products, fats, and oils using safe handling and professional preparation techniques. ● 8.5.9 Prepare sandwiches, canapes, and appetizers using safe handling and professional preparation techniques. ● 8.5.10 Prepare breads, baked goods and desserts using safe handling and professional preparation techniques. ● 8.5.11 Prepare breakfast meats, eggs, cereals, and batter products using safe handling and professional preparation techniques. ● 8.5.12 Demonstrate professional plating, garnishing, and food presentation techniques. ● 8.2.6 Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods. ● 8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods, between raw and ready-to-eat foods, and between animal and fish sources and other food products. ● 8.2.10 Demonstrate safe and environmentally responsible waste disposal and recycling 	<p>Mandatory Lessons/Activities:</p> <ul style="list-style-type: none"> ● <i>Lesson and lab on:</i> <ul style="list-style-type: none"> ○ <i>Cookies or similar (creaming method)</i> ○ <i>Muffins or similar (muffin method)</i> ○ <i>Scones or similar (biscuit method)</i> ○ <i>Puff pastry or similar (lamination)</i> ○ <i>Cream Puffs or similar (pate a choux pastry)</i> ○ <i>Bread or similar (yeast)</i> ○ <i>Cake decorating</i> ● <i>Incorporate Safety and Sanitation standards throughout the lessons and labs as applicable to recipe preparation.</i> ● <i>Incorporate Career and Employability standards throughout the lessons and labs.</i>
	Selected Response											
	Constructed Response											
x	Performance (P)											
x	Observation											

	<p>different designs and layouts.</p> <ul style="list-style-type: none"> ● I can plan a menu, including design, food items, cost, equipment, culture of origin. <p>Employability</p> <ul style="list-style-type: none"> ● I can demonstrate employability skills, including but not limited to leadership, teamwork, dependability, positive attitude, good customer service, respecting others, and holding myself accountable. ● I can create a portfolio of my work throughout the semester to show my improvement and commitment to learning new skills. 		<p>methods.</p> <ul style="list-style-type: none"> ● 8.2.11 Demonstrate ability to maintain necessary records to document time and temperature control, HACCP, employee health, maintenance of equipment, and other elements of food preparation, storage, and presentation. ● 8.3.1 Operate tools and equipment following safety procedures and OSHA requirements. ● 8.3.2 Maintain tools and equipment following safety procedures and OSHA requirements. ● 8.3.3 Demonstrate procedures for cleaning and sanitizing equipment, serving dishes, glassware, and utensils to meet industry standards and OSHA requirements. ● 8.3.5 Demonstrate procedures for safe and secure storage of equipment and tools. ● 8.6.1 Apply principles of purchasing, receiving, issuing, and storing in food service operations. ● 8.6.2 Practice inventory procedures including first in/first out concept, date marking, and specific record keeping. ● 8.6.10 Apply principles of inventory management, labor cost and control techniques, production planning and control, and facilities management to front and back of the house operations. ● 8.4.1 Use computer based menu systems to develop and modify menus. ● 8.4.2 Apply menu-planning principles to develop and modify menus. ● 8.4.3 Analyze food, equipment, and supplies needed for menus. ● 8.4.4 Develop a variety of menu layouts, themes, and design styles. ● 8.4.5 Prepare requisitions for food, equipment, and supplies to meet production requirements. ● 8.4.6 Record performance of menu items to analyze sales and determine menu revisions. ● 8.4.7 Apply principles of Measurement, Portion Control, Conversions, Food Cost Analysis and Control, Menu Terminology, and Menu Pricing to menu planning. 	
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Pacing:	30 blocks		CCSS Connections: <ul style="list-style-type: none"> ● <i>HS.N-Q.A.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.</i> ● <i>CCSS.ELA-LITERACY.W.11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</i> ● <i>CCSS.ELA-LITERACY.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</i> 	Assessments: <ul style="list-style-type: none"> ● <i>Performance Tasks: Cooking and recipe adaptation</i> ● <i>Performance Task: Safe Behaviors and actions in the Kitchen</i>
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Recipes: Baking and Patisserie

Table of recipes to support student development of baking and patisserie skills.

Creaming Method (3 Days)	Muffin method (2 days)	Biscuit Method (2 days)	Lamination (4 days)
Shortbread Cookies Chocolate Chip Cookies Pound Cake Oatmeal Cookies	Blueberry Muffins Corn Muffins Pumpkin Muffins Pancakes/Waffles	Drop Biscuits Rolled Biscuits Buttermilk Biscuits Shortcake	Croissants Pie crust/Pie Babka
Pate a choux pastry (3 days)	Yeast Breads (4 days)	Cakes (2 days)	Cake Decorating (4 days)
Cream Puff Eclair Profiterole	Pizza Dough Egg Bread Rolls Pretzels Loaf bread	Sponge cake/Cupcakes	Royal Icing Piping techniques Sugar flowers Fondant



Bristol Public Schools
Office of Teaching & Learning

Department	Music
Department Philosophy	The visual and performing arts are critical in the development of every child. In a diverse and ever changing society, the visual and performing arts are integral in the consistency, appreciation, and creativity of tomorrow's leaders. The fine arts are a universal language, allowing students to learn unique skills and means of expression that contributes back to our society. We believe visual and performing arts create lifelong learners harnessed with empathy and skills necessary to understand our past, present and future world.
Course	Digital Music
Course Description for Program of Studies	This course introduces students to digital music using computers, synthesizers and digital audio workstations to create original music. Students will collaborate with others to create works across other subjects such as art, theater, film, dance, english.
Grade Level	9-12
Pre-requisites	none
Credit (if applicable)	.5

P indicates standard will be a priority for the unit; **S** indicates a supporting standard

District Learning Expectations and Standards	Tools of the Trade	Interdisciplinary Collaboration	Post-Production
Creating			
MU:Cr1.1 Generate and conceptualize artistic ideas and work.	P		
MU:Cr2.1 Organize and develop artistic ideas and work.		P	
MU:Cr3.1 Refine and complete artistic work.		S	P
Performing			
MU:Pr4.1 Select, analyze and interpret artistic work for presentation.	P	S	
MU:Pr5.1 Develop and refine artistic techniques and work for presentation.		S	

MU:Pr6.1 Convey meaning through the presentation of artistic work.			
Respond			
MU:Re7.1 Perceive and analyze artistic work.		S	
MU:Re8.1 Interpret intent and meaning in artistic work.			
MU:Re9.1 Apply criteria to evaluate artistic work.	S		P
Connecting			
MU:Cn10.0 Synthesize and relate knowledge and personal experiences to make art.			
MU:Cn11.1 Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.		P	

ESSENTIAL QUESTIONS OF STANDARDS

- How do musicians generate creative ideas?
- How does understanding the structure and context of musical works inform performance?
- How do we judge the quality of musical work(s) and performance(s)?
- How do musicians make creative decisions?
- How do musicians improve the quality of their creative work?
- How do performers select repertoire?
- How do performers interpret musical works?
- When is creative work ready to share?
- How do we judge the quality of musical work(s) and performance(s)?
- How do individuals choose music to experience?
- How do the other arts, other disciplines, contexts and daily life inform creating, performing, and responding to music?

ENDURING UNDERSTANDING OF STANDARDS

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.
- The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Musicians evaluate and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.
- Performers' interest in and knowledge of musical works, understanding of their own abilities, and the context for a performance influence the selection of repertoire.
- Musicians' creative choices are influenced by their context, expressive intent, and established criteria.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- Musicians' presentation of creative work is the culmination of a process of creation and communication.
- The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria.

UNIT 1: Tools of the Trade

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Cr1.1. T.HSI (Proficient)	Generate melodic, rhythmic, and harmonic ideas for compositions or improvisations using digital tools.		Content Knowledge	Music Theory, Music Notation, Loop-based composition, Live recording, Sound manipulation
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	RESOURCES
			Physical Skill	
			Product Development	
			Learning Behavior	
	Learning Behavior			
MU:Pr4.2. T.HSI	Describe how context, structural aspects of the music, and digital media/tools inform prepared and improvised performances.		Content Knowledge	Computers, mics, cables (hardware) Notation, loop, DAW software Instructional videos Peer/teacher evaluations and guidance
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
		X	Learning Behavior	
MU:Re9.1. T.HSI	Evaluate music using criteria based on analysis, interpretation, digital and electronic features, and personal interests.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Compose and realize musical ideas using notation software
- Create musical sketches/soundscapes using loops
- Record live sounds using microphones
- Manipulate sound and layer/overdub tracks using DAW

UNIT 2: Interdisciplinary Collaboration

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Cr2.1. T.HSII (Accomplished)	Select melodic, rhythmic, and harmonic ideas to develop into a larger work that exhibits unity and variety using digital and analog tools.		Content Knowledge	Compose original music, record & edit podcast, Create music for a specific use. Workflows, deadlines Collaboration
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Physical Skill	Understanding the needs of 'client'
			Product Development	RESOURCES
			Learning Behavior	Interdisciplinary peer or teachers, Timeline flowcharts with deadlines for deliverables, Scripts, Videos, etc...
MU:Cr3.1. T.HSI (Proficient)	Drawing on feedback from teachers and peers, develop and implement strategies to improve and refine the technical and expressive aspects of draft compositions and improvisations.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.1. T.HSI	Develop and explain the criteria used for selecting a varied repertoire of music based on interest, music reading skills, and an understanding of the performer's technical and technological skill.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	

MU:Pr4.3. T.HSI	Demonstrate how understanding the context, expressive challenges, and use of digital tools in a varied repertoire of music influence prepared or improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	
MU:Pr5.1. T.HSII	Develop and implement rehearsal strategies to improve and refine the technical and expressive aspects of prepared and improvised performances in a varied repertoire of music.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
		X	Learning Behavior	
MU:Re7.I. T.HSII	Select and critique contrasting musical works, defending opinions based on manipulations of the elements of music, digital and electronic aspects, and the purpose and context of the works.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Cn11.0 .T.HSII	Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts and daily life.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
		X	Learning Behavior	

LEARNING TARGETS

I CAN

- Connect with students in other disciplines to create a collaborative work
- - English (or language arts) / Civics: create a podcast
 - . record interviews
 - . compose theme/incidental music
- - Theater: compose music for a theatrical performance
 - . write and notate music
 - . arrange with instruments (virtual or real)
 - . record singer/instrumentalist (if necessary)
- - Arts: compose music for an art installation
 - . write and notate music
 - . arrange with instruments (virtual or real)
 - . record singer/instrumentalist (if necessary)
- - Film: compose music for a video / record sound effects and dialogue
 - . write and notate music
 - . arrange with instruments (virtual or real)
 - . record actors
 - . mix sound effects
- - Other cross-discipline projects (Video Game Design, Choreography, Website Design, Music Video Production, Social Media Marketing And Communication, etc.)

UNIT 3 : Post-Production

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Cr3. 2.T.HSII	Share compositions and improvisations that demonstrate an accomplished level of musical and technological craftsmanship as well as the use of digital and analog tools and resources in developing and organizing musical ideas.		Content Knowledge	Mixing and Mastering Product, Deliverables
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re9. 1.T.HSII	Apply criteria to evaluate music based on analysis, interpretation, artistic intent, digital, electronic, and analog features, and musical qualities.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
		X	Learning Behavior	

LEARNING TARGETS

I CAN

- Assemble audio elements
- Link audio to video elements

- Edit and master audio (effects, panning, level, ...)
- Create a high-quality finished product on time
- Present the collaborative work to the public



Bristol Public Schools
Office of Teaching & Learning

Department	Music
Department Philosophy	The visual and performing arts are critical in the development of every child. In a diverse and ever changing society, the visual and performing arts are integral in the consistency, appreciation, and creativity of tomorrow's leaders. The fine arts are a universal language, allowing students to learn unique skills and means of expression that contributes back to our society. We believe visual and performing arts create lifelong learners harnessed with empathy and skills necessary to understand our past, present and future world.
Course	A Cappella
Course Description for Program of Studies	This is a semester based course where students will learn how to sing in a small group. Students will learn vocal techniques used in contemporary college A Cappella style (Glee, Pitch Perfect, or Pentatonix). This will include learning vocal percussion (beatboxing), microphone technique, arranging and writing. Student's will also have the opportunity to sing solos and enhance their ability to connect with their peers and audience.
Grade Level	9-12
Pre-requisites	None
Credit (if applicable)	.5

MU:Pr6.1 Convey meaning through the presentation of artistic work.	P	P	P						P	P		P	S			P			
Responding																			
MU:Re7.1 Perceive and analyze artistic work.										S									
MU:Re8.1 Interpret intent and meaning in artistic work.			S						S		P								
MU:Re9.1 Apply criteria to evaluate artistic work.													P				P		
Connecting																			
MU:Cn10.0 Synthesize and relate knowledge and personal experiences to make art.																			
MU:Cn11.1 Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.											S								

ESSENTIAL QUESTION OF STANDARDS

- When is a performance judged ready to present? How do context and the manner in which the musical work is presented influence audience response?
- How do we discern the musical creators' and performers' expressive intent?
- How does understanding the structure and context of musical works inform performance?
- How do musicians make creative decisions?
- How do we judge the quality of musical work(s) and performance(s)?
- How does understanding the structure and context of the music influence a response?
- How do the other arts, other disciplines, contexts and daily life inform creating, performing, and responding to music?
- When is a performance judged ready to present? How do context and the manner in which the musical work is presented influence audience response?

ENDURING UNDERSTANDING OF STANDARDS

- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Through their use of elements and structures of music, creators and performers provide clues to their expressive intent.
- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- The personal evaluation of musical works and performances is informed by analysis, interpretation, and established criteria.
- Response to music is informed by analyzing context (social, cultural, and historical) and how creators and performers manipulate the elements of music.
- Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.

UNIT 1: Posture and Breath Support

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1. E.HSI (Proficient)	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres. b. Demonstrate an understanding of expressive intent by connecting with an audience through prepared and improvised performances.		Content Knowledge	Thorax (intercostal muscles), diaphragm
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		x	Physical Skill	All breathing is from the diaphragm
			Product Development	RESOURCES
			Learning Behavior	ENT diagram, thorax diagram

LEARNING TARGETS

I CAN

- Stand or sit using proper posture.
- Identify muscle groups used in singing.
- Prepare my body for the physical act of singing.

UNIT 2: Articulation

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1. E.HSI (Proficient)	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres. b. Demonstrate an understanding of expressive intent by connecting with an audience through prepared and improvised performances.		Content Knowledge	Legato, staccato, accent
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
		X	Physical Skill	Should have previous exposure
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Identify staccato, accent, legato within my music.
- Perform staccato, accent, legato.
- Explain and understand why staccato, accent, and legato are used within selected repertoire

UNIT 3: Phrasing

Vocal Awareness/Technique

Standard	Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1.E. HSII (Accomplished) a. Demonstrate mastery of the technical demands and an understanding of expressive qualities of the music in prepared and improvised performances of a varied repertoire representing diverse cultures, styles, genres, and historical periods. b. Demonstrate an understanding of intent as a means for connecting with an audience through prepared and improvised performances.		Content Knowledge	Phrasing
		Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
	X	Physical Skill	All notes are monodynamic
		Product Development	
		Learning Behavior	
MU:Re8.1.E .HSI (Proficient) Explain and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, (when appropriate) the setting of the text, and personal research.	X	Content Knowledge	
		Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		Physical Skill	
		Product Development	
		Learning Behavior	

LEARNING TARGETS

I CAN

- Recognize the natural rise and fall of a vocal line.
- Find the word that represents the apex (peak) of the phrase.
- Sing a vocal line with direction and meaning.

UNIT 4: Vocal Percussion

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1.E.HSIII (Advance d)	a. Demonstrate an understanding and mastery of the technical demands and expressive qualities of the music through prepared and improvised performances of a varied repertoire representing diverse cultures, styles, genres, and historical periods in multiple types of ensembles.		Content Knowledge	Vocal Percussion
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	That it is hard or impossible to do.
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Create drum sound vocally.
- Understand basic rhythms.

UNIT 5: Pitch & Rhythm

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.2. E.HSI (Proficient)	a. Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.	X	Content Knowledge	<ul style="list-style-type: none"> • Treble and bass clef • 16th notes, whole notes, dotted notes
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	What standard notation is (i.e. the staff).
			Product Development	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Learning Behavior	Quarter and eighth notes

LEARNING TARGET

I CAN

- Read standards notes and perform them. (notes on the treble and bass clef)
- Identify written notes; their pitch and duration. (16th notes to whole notes, and dotted notes)
- Sing correct pitch and duration as indicated by the music.

UNIT 6: Key Signatures

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.2. E.HSI (Proficient)	a. Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.	X	Content Knowledge	solfège, key signature, and how sharps and flats affect the “do”
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	That “do” is fixed
			Product Development	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Learning Behavior	Basic solfège scale

LEARNING TARGETS

I CAN

- Find and sing the ‘do’ note of C in written music.
- Find and sing the ‘do’ note of G in written music.
- Find and sing the ‘do’ note of F in written music.
- Find and sing the ‘do’ note of D in written music.
- Find and sing the ‘do’ note of Bb in written music.
- Find and sing the ‘do’ note of A in written music.
- Find and sing the ‘do’ note of Eb in written music.

UNIT 7: Time Signatures

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.2. E.HSI (Proficient)	a. Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.	X	Content Knowledge	Compound and simple meter
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	That 6/8 and 3/4 are the same meter
			Product Development	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Learning Behavior	Ability to keep a steady beat

LEARNING TARGET

I CAN

- Identify the difference between compound and simple meters. (2/4, 2/2, 3/4, 3/8, 4/4, 6/8, 6/4, 9/8, 12/8)
- Perform simple and compound meters and know where each of the beats are.
- Associate beats with conductor's gesture.

UNIT 8: Road Map Symbols

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.2. E.HSI (Proficient)	a. Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.	X	Content Knowledge	<ul style="list-style-type: none"> repeat signs, CODA, DS, and first/second endings
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	That you do not need to go back to the beginning when there is a repeat Read/sing through first and second ending (forgetting to repeat and jump to 2nd ending)
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Identify repeat signs, CODA, DS, and first/second endings
- Follow the score returning to the correct measure with the road map symbols.

UNIT 9: Solfège

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.2. E.HSI (Proficient)	a. Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.	X	Content Knowledge	solfège
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
		X	Physical Skill	Exposure to solfège
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Sing a scale using solfège syllables.
- Jump to any scale degree (interval) from do.
- Identify 'do' in the key signature of the musical passage.
- Sing musical passages with solfège syllables.

UNIT 10: Conducting Gestures

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1. E.HSI (Proficient)	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres.		Content Knowledge	Conducting, upbeat and downbeat
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	COMMON MISCONCEPTIONS
			Product Development	Forgetting to look at the conductor to know when and how to sing/articulate
			Learning Behavior	
MU:Re8.1. E.HSI (Proficient)	Explain and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, (when appropriate) the setting of the text, and personal research.	X	Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Start and end music phrases together with others.
- Follow directions/gestures for appropriate synchronization.
- Associate beats with conductor's gesture.
- Prepare and perform for upbeats and downbeats

UNIT 11: Arranging

Vocal Awareness/Technique

Standard	Type of Standard	Concepts and Disciplinary-Specific Vocabulary	
MU:Cr2.1.C .HSII (Accomplished)	a. Assemble and organize multiple sounds or musical ideas to create initial expressive statements of selected sonic events, memories, images, concepts, texts, or storylines.	Content Knowledge	
		Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		Physical Skill	
	X	Product Development	
		Learning Behavior	
MU:Cr3.1.C .HSII (Accomplished)	Identify, describe, and apply selected teacher-provided or personally-developed criteria to assess and refine the technical and expressive aspects of evolving drafts leading to final versions.	Content Knowledge	
		Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		Physical Skill	
		X	Product Development
		Learning Behavior	
MU:Re9.1.C .HSI (Proficient)	Describe the effectiveness of the technical and expressive aspects of selected music and performances, demonstrating understanding of fundamentals of music theory. Describe the way(s) in which critiquing others' work and receiving feedback from others can be applied in the personal creative process.	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)
			Physical Skill
			Product Development
			Learning Behavior
		COMMON MISCONCEPTIONS	
		It is easy to arrange music	
		PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT	
		Foundational music reading and theory skills	

LEARNING TARGETS

I CAN:

- Arrange songs for various ensemble groups.
- Analyze scores to understand voice leading, harmonization and arranging norms.

UNIT 12: Dynamics

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Re7.2.E .HSI (Proficient)	Explain how the analysis of passages and understanding the way the elements of music are manipulated inform the response to music.		Content Knowledge	Dynamics ranging from pp-ff and sfz
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
			Physical Skill	Not vary the dynamics enough
			Product Development	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Learning Behavior	Ability to sing at different volumes
MU:Pr6.1.E. HSI (Proficient)	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres. b. Demonstrate an understanding of expressive intent by connecting with an audience through prepared and improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Identify and perform ff in written music.

- Identify and perform *f* in written music.
- Identify and perform *mf* in written music.
- Identify and perform *mp* in written music.
- Identify and perform *p* in written music.
- Identify and perform *pp* in written music.
- Identify and perform *sfz* in written music.

UNIT 13: Diction

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Re8.1. E.HSI (Proficient)	Explain and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, (when appropriate) the setting of the text, and personal research.	x	Content Knowledge	Diction
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
			Physical Skill	Singing everything in an American accent
			Product Development	
			Learning Behavior	
MU:Cn11.0 .E.HSII (Accomplished)	Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.		Content Knowledge	
		x	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Perform the correct vowels and consonants.
- Make myself understandable to others.

UNIT 14: Vowel Color & Intonation

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1. E.HSI (Proficient)	a. Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres.		Content Knowledge	Larynx, pharynx, soft palette placement, mask, resonance
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	That pop stars sing correctly
			Product Development	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Learning Behavior	Breathing technique

LEARNING TARGETS

I CAN

- Shape my vocal tract appropriately.
- Identify muscles and spaces that affect the vowel color.
- Adjust tongue position for each of the italian singing vowels (ah, eh, ee, oh, oo)
- Adjust soft palette position for each of the italian singing vowels (ah, eh, ee, oh, oo)
- Place vowel sounds into the mask

UNIT 15: Meaning & Interpretation

Vocal Awareness/Technique

Standard	Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1.E. HSII (Accomplished)	a. Demonstrate mastery of the technical demands and an understanding of expressive qualities of the music in prepared and improvised performances of a varied repertoire representing diverse cultures, styles, genres, and historical periods. b. Demonstrate an understanding of intent as a means for connecting with an audience through prepared and improvised performances.		Content Knowledge
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)
		X	Physical Skill
			Product Development
			Learning Behavior
MU:Re9.1.E. HSI (Proficient)	Evaluate works and performances based on personally- or collaboratively-developed criteria, including analysis of the structure and context.		Content Knowledge
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)
			Physical Skill
			Product Development
			Learning Behavior
			N/A
			COMMON MISCONCEPTIONS
			Bringing in prior knowledge of a song's meaning

LEARNING TARGETS

I CAN

- Understand the meaning of the text.
- Understand the context of the text.
- Sing so others can understand the text.
- Convey the meaning of the song using expression and body language.

UNIT 16: Ballance

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.HSII (Accomplished)	a. Develop and apply criteria to select a varied repertoire to study and perform based on an understanding of theoretical and structural characteristics and expressive challenges in the music, the technical skill of the individual or ensemble, and the purpose and context of the performance.	X	Content Knowledge	Ballance
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	I can sing the right notes and it's right - but it needs to blend within the group
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Listen to the overall volume levels of each part.
- Adjust my personal volume level to match others.

UNIT 17: Blend

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.HSII (Accomplished)	a. Develop and apply criteria to select a varied repertoire to study and perform based on an understanding of theoretical and structural characteristics and expressive challenges in the music, the technical skill of the individual or ensemble, and the purpose and context of the performance.	X	Content Knowledge	Vowel color and intonation
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		X	Physical Skill	"Ah" sound is the same
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Listen to vowel colors of others.
- Match vowel colors to others.

UNIT 18: Microphone Technique

Vocal Awareness/Technique

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.3.T.HSI (Proficient)	Demonstrate how understanding the context, expressive challenges, and use of digital tools in a varied repertoire of music influence prepared or improvised performances.	x	Content Knowledge	EQ system, frequencies, compression
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
		x	Physical Skill	That microphone placement doesn't matter and will pick up your voice anywhere
			Product Development	RESOURCES
			Learning Behavior	microphones, mixing board

LEARNING TARGETS

I CAN

- Use and hold microphones.
- Adjust EQ settings to fortify vocal quality.



Bristol Public Schools
Office of Teaching & Learning

Department	Music
Department Philosophy	The visual and performing arts are critical in the development of every child. In a diverse and ever changing society, the visual and performing arts are integral in the consistency, appreciation, and creativity of tomorrow's leaders. The fine arts are a universal language, allowing students to learn unique skills and means of expression that contributes back to our society. We believe visual and performing arts create lifelong learners harnessed with empathy and skills necessary to understand our past, present and future world.
Course	Jazz Band
Course Description for Program of Studies	This is a semester based course where students will learn how to perform jazz music together in a small group. Students will learn styles of Salsa, Latin, and Swing to name a few. They will also learn how to perform in modes common to jazz music. This will allow students the opportunity to learn how to improvise and perform solos.
Grade Level	9-12
Pre-requisites	Previous or current enrollment in another ensemble
Credit (if applicable)	.5

P indicates standard will be a priority for the unit; **S** indicates a supporting standard

District Learning Expectations and Standards	Jazz Articulation	Style	Blues Scales	Modes	Tempo	Rhythm	ID in Text
Creating							
MU:Cr1.1 Generate and conceptualize artistic ideas and work.	S		P	P			
MU:Cr2.1 Organize and develop artistic ideas and work.	S						
MU:Cr3.1 Refine and complete artistic work.	S						
Performing							
MU:Pr4.1 Select, analyze and interpret artistic work for presentation.	P	S	S	S	P		P
MU:Pr5.1 Develop and refine artistic techniques and work for presentation.		S					
MU:Pr6.1 Convey meaning through the presentation of artistic work.	P	P			S	P	S
Responding							

MU:Re7.1 Perceive and analyze artistic work.		S				S	
MU:Re8.1 Interpret intent and meaning in artistic work.		P			S		
MU:Re9.1 Apply criteria to evaluate artistic work.							
Connecting							
MU:Cn10.0 Synthesize and relate knowledge and personal experiences to make art.	S						
MU:Cn11.1 Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.		S					

ESSENTIAL QUESTIONS OF STANDARDS

- How do musicians generate creative ideas?
- How do musicians make creative decisions?
- How do musicians improve the quality of their creative work?
- How does understanding the structure and context of musical works inform performance?
- When is a performance judged ready to present? How do context and the manner in which the musical work is presented influence audience response?
- How do musicians make meaningful connections to creating, performing, and responding?
- How do performers select repertoire?
- How do we discern the musical creators' and performers' expressive intent?
- How do performers interpret musical works?
- How do individuals choose music to experience?

ENDURING UNDERSTANDING OF STANDARDS

- The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.
- Musicians' creative choices are influenced by their expertise, context, and expressive intent.
- Musicians evaluate and refine their work through openness to new ideas, persistence, and the application of appropriate criteria.
- Analyzing creators' context and how they manipulate elements of music provides insight into their intent and informs performance.
- Musicians judge performance based on criteria that vary across time, place, and cultures. The context and how a work is presented influence the audience response.
- Musicians connect their personal interests, experiences, ideas, and knowledge to creating, performing, and responding.
- Performers' interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire.
- Performers make interpretive decisions based on their understanding of context and expressive intent.
- Through their use of elements and structures of music, creators and performers provide clues to their expressive intent.
- Individuals' selection of musical works is influenced by their interests, experiences, understandings, and purposes.

UNIT 1: Jazz Articulation

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Cr1.1. E.Hs novice-	Compose and improvise melodic and rhythmic ideas or motives that reflect characteristic(s) of music or text(s) studied in rehearsal.		Content Knowledge	Dot tonguing, du tonguing, da tonguing, dit tonguing
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Cr2.1. E.Hs novice.	Select and develop draft melodic and rhythmic ideas or motives that demonstrate understanding of characteristic(s) of music or text(s) studied in rehearsal.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Cr3.1. E.Hs novice	Evaluate and refine draft compositions and improvisations based on knowledge, skill, and teacher-provided criteria.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.2. E.Hs	Demonstrate, using music reading skills where appropriate, how the setting and formal	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	characteristics of musical works contribute to understanding the context of the music in prepared or improvised performances.		Physical Skill
		X	Product Development
			Learning Behavior
MU:Pr6.1.E.Hs intermediate	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Content Knowledge
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)
		X	Physical Skill
			Product Development
			Learning Behavior
MU:Cn10.0.E.HSI	Demonstrate how interests, knowledge, and skills relate to personal choices and intent when creating, performing, and responding to music.		Content Knowledge
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)
			Physical Skill
			Product Development
			Learning Behavior

LEARNING TARGETS

I CAN

- Perform using jazz articulations
- Demonstrate an understanding of jazz articulations..
- Identify and demonstrate different jazz articulations.
- Improvise melodies using various jazz articulations.

UNIT 2: Swing and Straight Styles

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Swing and straight
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
			Physical Skill	All jazz is swing
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	

MU:Pr6.1. E.Hs intermediate	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: swing.
- Perform music using swing style.
- Demonstrate an understanding of the difference between swing and straight styles.
- Improvise a melody using swing rhythms.

UNIT 3: Blues

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Blues
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT
			Physical Skill	Major scales
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Major scales
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	Major scales
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	

			Learning Behavior	
MU:Pr6.1. E.Hs intermediate	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: blues.
- Perform music using blues style and scale.
- Demonstrate an understanding of the blues.
- Improvise a melody using the blues scales.

UNIT 4: Ballad

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Ballad
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Ballad
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	Ballad
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	Demonstrate attention to technical accuracy and expressive qualities in prepared	X	Content Knowledge	Ballad
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1.E.Hs intermediate	Identify and support interpretations of the expressive content and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: ballad.
- Perform music using ballad style.
- Improvise a melody ballad style.

UNIT 5: Latin Styles

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Latin style
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
			Physical Skill	Latin=Hispanic
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	

MU:Pr6.1. E.Hs intermediate	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: latin.
- Perform music using latin style.
- Demonstrate an understanding of the difference between latin and straight styles.
- Improvise a melody using latin rhythms and styles.

RESOURCES

-Tito Puente

UNIT 6: Samba

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Samba
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Samba
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	Samba
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	Demonstrate attention to technical accuracy and expressive qualities in prepared	X	Content Knowledge	Samba
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: samba.
- Perform music using samba style.
- Demonstrate an understanding of the difference between samba and straight styles.
- Improv a melody using samba rhythms and style.

UNIT 7: Salsa

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
Standards: MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Salsa
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	Demonstrate attention to technical accuracy and	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1.E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: salsa.
- Perform music using salsa style.
- Demonstrate an understanding of the difference between salsa and straight styles.
- Improvise a melody using salsa rhythms and style.

UNIT 8: Bossanova

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Bossanova
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Bossanova
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	Bossanova
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	MU:Pr6.1.E.Hs intermediate Demonstrate attention to	X	Content Knowledge	Bossanova
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: bossanova.
- Perform music using bossanova style.
- Demonstrate an understanding of the difference between bossanova and straight styles.
- Improving a melody using bossanova rhythms and style.

UNIT 9: Rock

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Rock
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS
			Physical Skill	Rock is loud and fast
		X	Product Development	COMMON MISCONCEPTIONS
		X	Learning Behavior	Rock is loud and fast
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	MU:Pr6.1.E.Hs intermediate Demonstrate attention to technical accuracy and	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: rock.
- Perform music using rock style.
- Demonstrate an understanding of the difference between rock and straight styles.
- Improvising a melody using rock rhythms and style.

UNIT 10: Funk

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Funk
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Funk
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	Funk
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	Demonstrate attention to technical accuracy and	X	Content Knowledge	Funk
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: funk.
- Perform music using funk style.
- Demonstrate an understanding of the difference between funk and straight styles.
- Improvise a melody using funk rhythms and style.

UNIT 11: Shuffle

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Shuffle
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Shuffle
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge	Shuffle
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr6.1. E.Hs	MU:Pr6.1.E.Hs intermediate Demonstrate attention to technical accuracy and	X	Content Knowledge	Shuffle
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	

intermediate	expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: shuffle.
- Perform music using shuffle style.
- Demonstrate an understanding of the difference between shuffle and straight styles.
- Improv a melody using shuffle rhythms and style.

UNIT 12: Waltz

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary	
MU:Pr4.1. E.Hs intermediate	Select a varied repertoire to study based on music reading skills (where appropriate), an understanding of formal design in the music, context, and the technical skill of the individual and ensemble.		Content Knowledge	Jazz Waltz	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	COMMON MISCONCEPTIONS	
			Physical Skill		Waltz is only for dancing
		X	Product Development		
		X	Learning Behavior		
	Content Knowledge				
MU:Pr4.2. E.Hs novice	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge		
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)		
			Physical Skill		
		X	Product Development		
			Learning Behavior		
MU:Pr4.3. E.Hs intermediate	Demonstrate understanding and application of expressive qualities in a varied repertoire of music through prepared and improvised performances.	X	Content Knowledge		
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)		
			Physical Skill		
		X	Product Development		
			Learning Behavior		
MU:Pr6.1. E.Hs	Demonstrate attention to technical accuracy and expressive qualities in prepared	X	Content Knowledge		
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)		

intermediate	and improvised performances of a varied repertoire of music representing diverse cultures and styles.		Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs intermediate	Identify and support interpretations of the expressive intent and meaning of musical works, citing as evidence the treatment of the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Describe the different styles of music in relation to jazz: jazz waltz.
- Perform music using jazz waltz style.
- Demonstrate an understanding of the difference between jazz waltz and straight styles.
- Improvising a melody using jazz waltz rhythms and style.

UNIT 13: Scales

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.1. E.Hs novice.	Select varied repertoire to study based on interest, music reading skills (where appropriate), an understanding of the structure of the music, context, and the technical skill of the individual or ensemble		Content Knowledge	Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian modes, pentatonic scales, blues scale
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	Major Scales
		X	Product Development	
		X	Learning Behavior	
MU:Pr4.2. E.HSI	Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Cr1.1. E.Hs novice	Compose and improvise melodic and rhythmic ideas or motives that reflect characteristic(s) of music or text(s) studied in rehearsal.	X	Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	

		Learning Behavior	
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LEARNING TARGETS

I CAN

- Demonstrate understanding of how a blues scale is formed, how modes are formed, how pentatonic scales are formed,
- Perform blues scales in Concert Bb, C, Eb, and F Major Scales, Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, and Locrian modes, pentatonic scales.
- Improv using a blues scale, modes, and pentatonic scales over chords.

UNIT 14: Identifying in the Text

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary	
MU:Pr4.2. E.HSI	Demonstrate, using music reading skills where appropriate, how compositional devices employed and theoretical and structural aspects of musical works impact and inform prepared or improvised performances.		Content Knowledge	mute techniques, pitch bend, turn, lip turn, and squeeze	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	PRIOR KNOWLEDGE NEEDED TO MASTER STANDARDS FOR THIS UNIT	
			Physical Skill		Jazz articulation, key signatures
		X	Product Development		
			Learning Behavior		
MU:Pr6.1. E.Hs intermediate	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures and styles.	X	Content Knowledge		
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)		
			Physical Skill		
		X	Product Development		
			Learning Behavior		

LEARNING TARGETS

I CAN

- Identify a glissando, mute techniques, pitch bend, turn, lip turn, and squeeze
- Perform a glissando, mute techniques, pitch bend, turn, lip turn, and squeeze in music
- Demonstrate understanding of a glissando, mute techniques, pitch bend, turn, lip turn, and squeeze

UNIT 15: Tempo

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr4.2. E.Hs novice-	Demonstrate, using music reading skills where appropriate, how knowledge of formal aspects in musical works inform prepared or improvised performances.		Content Knowledge	Swing and ballad
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Pr4.3. E.Hs novice	Identify expressive qualities in a varied repertoire of music that can be demonstrated through prepared and improvised performances.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re8.1. E.Hs novice	Identify interpretations of the expressive intent and meaning of musical works, referring to the elements of music, contexts, and (when appropriate) the setting of the text.		Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
		X	Physical Skill	
			Product Development	
			Learning Behavior	

MU:Pr6.1. E.Hs novice	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.	X	Content Knowledge	
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Identify swing (132), ballad tempo (60-80), in the music
- Define swing tempo (132), ballad tempo (60-80)
- Perform swing tempo (132) tempo, ballad tempo (60-80) by following a conductor

UNIT 16: Rhythm

UNWRAPPED STANDARDS

Standard		Type of Standard		Concepts and Disciplinary-Specific Vocabulary
MU:Pr6.1. E.Hs novice	Demonstrate attention to technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music.	X	Content Knowledge	Straight 16ths
		X	Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
		X	Product Development	
			Learning Behavior	
MU:Re7.1. E.Hs novice	Identify reasons for selecting music based on characteristics found in the music, connection to interest, and purpose or context.	X	Content Knowledge	
			Skill (Problem-Solving, Writing, Speaking, Listening, Reasoning)	
			Physical Skill	
			Product Development	
			Learning Behavior	

LEARNING TARGETS

I CAN

- Perform straight 16th notes when performing swing
- Demonstrate understanding of proper rhythms using swing style.