# COURSE DESCRIPTION

**Course Title:** Arts and Communications STEM Pathway

**Course Number:** 00797

**Course Prerequisites:** None

**Course Description:** The WCSD Arts and Communications Pathway is to provide an in-depth exploration of digital communications and TV studio hands-on experience. Within this pathway, students capture and create media in a variety of formats. Students will use a range of technology and software. This pathway is specifically designed to build upon the skills developed in STEM Academy and to allow students to explore potential career interests.

**Suggested Grade Level**: Grades 9-12 **Length of Course:** Two Semesters **Units of Credit:** 1

**PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:**

CSPG36 - Communications

To find the CSPG information, go to [CSPG](https://www.education.pa.gov/Educators/Certification/Staffing%20Guidelines/Pages/default.aspx)

**Certification verified by the WCSD Human Resources Department:** ☒Yes ☐No

# WCSD STUDENT DATA SYSTEM INFORMATION

**Course Level:** Academic

**Mark Types:** Check all that apply.

☒F – Final Average ☒MP – Marking Period ☒EXM – Final Exam

**GPA Type**: ☐ GPAEL-GPA Elementary ☐ GPAML-GPA for Middle Level ☒ NHS-National Honor Society

☒ UGPA-Non-Weighted Grade Point Average ☒ GPA-Weighted Grade Point Average

**State Course Code**: 11051

To find the State Course Code, go to [State Course Code,](https://nces.ed.gov/forum/sced.asp) download the Excel file for *SCED*, click on SCED 6.0 tab, and chose the correct code that corresponds with the course.

# TEXTBOOKS AND SUPPLEMENTAL MATERIALS

**Board Approved Textbooks, Software, and Materials:**

**Title:** N/A

**Publisher:** N/A

**ISBN #:** N/A

**Copyright Date:** N/A

**WCSD Board Approval Date:** N/A

**Supplemental Materials:** TV Studio; Creative Learning Kits and Technology;

**Curriculum Document**

**WCSD Board Approval:**

**Date Finalized:** 7/26/2023

**Date Approved:** 10/9/2023

**Implementation Year:** 2023-2024

# SPECIAL EDUCATION, 504, and GIFTED REQUIREMENTS

The teacher shall make appropriate modifications to instruction and assessment based on a student’s Individual Education Plan (IEP), Chapter 15 Section 504 Plan (504), and/or Gifted Individual Education Plan (GIEP).

# SCOPE AND SEQUENCE OF CONTENT, CONCEPTS, AND SKILLS

Students may approach course content in different directions and at different speeds. Background knowledge and skills may determine different areas of interest and ability.

Course content is not limited to task grid items, as new and changing technology creates new opportunities to learn.

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| **Performance Indicator** | **Standard Addressed** |  |
| **ORIENTATION AND SAFETY** |  |  |
| Complete record keeping, updating ePortfolio in a frequent and timely fashion. | 15.4.8.C |  |
| Proficiently operate computers with different operating systems: Windows and Mac OS. | 15.4.12.E |  |
| Perform housekeeping duties daily, cable management, physical memory, tool replacement. | ISTE 2b |  |
| Follow verbal instructions to complete work assignments and rules. | ISTE 1b |  |
| Follow written instructions to complete work assignments and rules. | ISTE  3b |  |
| Follow emergency action plan (all inclusive). | ISTE  7b |  |
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| **CONTENT PLANNING** |  |  |
| Determining audience | ISTE 2d |  |
| Meeting time constraints | ISTE 5b |  |
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| Scripting: writing copy and considering dialogue | ISTE 4b |  |
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| **DIGITAL PHOTOGRAPHY** |  |  |
| Physical camera instruction | ISTE 1c |  |
| Lighting considerations | ISTE  6d |  |
| Using zoom - optical or digital | ISTE  5d |  |
| ISO - camera sensor sensitivity - as low as possible for conditions (assess scene) | ISTE  5a |  |
| Aperture - depth of field - lower number is a smaller depth of field (assess subject) | ISTE  6c |  |
| Shutter Speed - motion blur - faster is less blur | ISTE  5b |  |
| Rule of thirds - composition - focus at interception points | ISTE  6b |  |
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| **PHOTO EDITING / DIGITAL DESIGN** |  |  |
| Photoshop use - layering | ISTE 6c |  |
| Photoshop use - basic tools of moving and selecting | ISTE 4a |  |
| Photoshop use - adding masks | ISTE 6c |  |
| Photoshop use - adjusing levels to specific selections | ISTE 6b |  |
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| Photoshop use - exporting completed compositions | ISTE  6c |  |
| Lightroom use - applying masks | ISTE 6c |  |
| Lightroom use - applying filters | ISTE 6b |  |
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| **VIDEO CAPTURE** |  |  |
| Physical camera instruction | ISTE 1c |  |
| Basic settings of FPS, resolution | ISTE  5a |  |
| Lighting considerations | ISTE  6d |  |
| Tripod use | ISTE 4c |  |
| Planning / executing shots | ISTE 5b |  |
| Focus and iris | ISTE 6a |  |
| Capturing audio from the camera | ISTE 7c |  |
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| **VIDEO EDITING** |  |  |
| Premiere use - white balance | ISTE 6c |  |
| Premiere use - marking in/out | ISTE 5d |  |
| Premiere use - importing clips into project | ISTE 6c |  |
| Premiere use - panels | ISTE 6c |  |
| Premiere use - using multiple audio and video tracks | ISTE 6c |  |
| Premiere use - effect controls | ISTE 6c |  |
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| Premiere use - audio transitions | ISTE 6c |  |
| Premiere use - video transitions | ISTE 6c |  |
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| **AUDIO ENGINEERING** |  |  |
| Capturing Audio | ISTE 6a |  |
| Cutting - removing unnecessary audio | ISTE  5b |  |
| Splicing different audios together | ISTE  5b |  |
| Blending levels - volume | ISTE  5b |  |
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| **CONTROL BOOTH OPERATION** |  |  |
| Navigating TriCaster UI | ISTE  6a |  |
| Lighting rig manipulation | ISTE  4b |  |
| Matte setup and adjustment | ISTE  5b |  |
| Microphone setup and levels | ISTE  4a |  |
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| Accessing and transferring completed files | ISTE  3d |  |
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| **GENERAL STEM PERFORMANCE MEASURES** |  |  |
| Hardware Knowledge: Cables (USB, Lightning, Ethernet, Audio) | 15.4.12.C |  |
| Software Knowledge: Operating Systems (Windows, MacOS, ChromeOS) | 15.4.12.E |  |
| Software Knowledge: Mobile Operating Systems (Android, iOS) | 15.4.12.E |  |
| Software Knowledge: file types for images (jpg, png, svg, converting) | 15.4.12.G |  |
| Software Knowledge: file types for audio (wav, mp3, converting) | 15.4.12.G |  |
| Software Knowledge: file types for video (mp4, mov, converting) | 15.4.12.G |  |
| Software Knowledge: file types for office work (docx, pdf, converting) | 15.4.12.G |  |
| Tool Knowledge: hand tools (screwdriver types, wrench types, pliers) | 3.4.12.A3 |  |
| Hardware Knowledge: Displays (FPS levels, Refresh Rates, Resolutions (1080p vs. 4k)) | 15.4.12.C |  |
| Hardware Knowledge: Removable Media (SD cards, USB drives, transfer speeds) | 15.4.12.C |  |
| Hardware Knowledge: Mobile Devices (Cell Phone Distinctions, SIM cards, removable media) | 15.4.12.C |  |
| Performance Measure: Touch Type at least 50 WPM | 3.4.12.A3 |  |
| Performance Measure: Track Data with Excel | 3.4.12.A3 |  |
| Performance Measure: Microsoft Office Organization (tabs, ribbon, ruler, saving) | 3.4.12.A3 |  |
| Performance Measure: Digital Organization (folders, files, File Explorer vs. Finder | 3.4.12.A3 |  |
| Performance Measure: Keyboard Shortcuts (app switching, tab switching, opening, closing) | 3.4.12.A3 |  |
| Performance Measure: Sending a professional email | 3.4.12.A3 |  |
| Extension: Use multiple kits together to create an original project |  |  |

**ASSESSMENTS**

**PDE Academic Standards, Assessment Anchors, and Eligible Content:** The teacher must be knowledgeable of the PDE Academic Standards, Assessment Anchors, and Eligible Content and incorporate them regularly into planned instruction.

**Formative Assessments:** The teacher will utilize a variety of assessment methods to conduct in-process evaluations of student learning.

**Effective formative assessments for this course include:**

**Teacher will use standards-based assessment throughout the course.**

* Discussions
* Teacher Observation/Questioning
* Summarizing
* Outlining
* Oral Presentations
* Journaling
* Presentation/Projects

**Summative Assessments: The** teacher will utilize a variety of assessment methods to evaluate student learning at the end of an instructional task, lesson, and/or unit.

**Effective summative assessments for this course include:**

* Task Grid Utilization and Portfolio