# Scope & Sequence

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| Course Name: Printing and Imaging Technology I Lab **TSDS PEIMS Code:** 13009610 | | | **Course Credit:** 2.0  **Course Requirements:** Recommended for Grades 9-12.  **Prerequisites:** None.  **Corequisite:** Printing and Imaging Technology I. |
| **Course Description:** Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to demonstrate an understanding of the printing industry with a focus on digital prepress and digital publishing. This course must be taken concurrently with Printing and Imaging Technology I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Printing and Imaging Technology I to allow students sufficient time to master the content of both courses. | | | |
| **NOTE:** This is a suggested scope and sequence for the course content. This content will work with any textbook or instructional materials. If locally adapted, make sure all TEKS are covered. | | | |
| **Total Number of Periods**  **Total Number of Minutes**  **Total Number of Hours** | 175 Periods  7,875 Minutes  131.25 Hours\* | \*Schedule calculations based on 175/180 calendar days. For 0.5 credit courses, schedule is calculated out of 88/90 days. Scope and sequence allows additional time for guest speakers, student presentations, field trips, remediation, extended learning activities, etc. | |
| **Unit Number, Title, and Brief Description** | **# of Class Periods\***  (assumes 45-minute periods)  Total minutes per unit | **TEKS Covered**  **130.95. (c) Knowledge and skills.** | |
| **Unit 1: Professional Standards and Employability Skills**  Students will begin the course by discussing professional standards and employability skills, including identifying and participating appropriate training, education, or certification for printing and imaging technology employment, effective critical thinking and problem-solving strategies, interpersonal skills, positive work behaviors, and time-management skills. Students will further develop and demonstrate these skills and attributes throughout the course. In small groups and/or in other classroom activities, students will use appropriate technology and critical-thinking skills to evaluate and compare employment opportunities as well as research and discuss career portfolios, entrepreneurship, training, education, or certification opportunities, and interpersonal skills necessary for a successful career in a printing and imaging technology field. As a culminating activity for the unit, students will review exemplary examples of career portfolios and employ time-management strategies to plan task completion for the course portfolio requirements. | 15 periods  675 minutes | (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:  (A) identify and participate in training, education, or certification for printing and imaging technology employment;  (B) demonstrate positive work behaviors and personal qualities needed to be employable; and  (C) demonstrate skills related to seeking, applying for, and obtaining a desired job.  (4) The student understands and examines problem-solving methods. The student is expected to:  (A) employ critical-thinking skills independently and in groups; and  (B) employ interpersonal skills in groups to solve problems.  (9) The student develops career-building characteristics. The student is expected to:  (A) maintain a portfolio to document information such as work experiences, licenses, certifications, and work samples;  (B) demonstrate skills in evaluating and comparing employment opportunities; and  (C) examine employment opportunities in entrepreneurship.  (10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks. | |
| **Unit 2: Communication Skills and Safety**  Students will use appropriate technology and/or assigned materials to learn and/or review relevant personal and workplace safety rules and regulations and emergency procedures. Students will also learn and/or review parliamentary procedure, and conduct and participate in a class meeting regarding how to employ teamwork and conflict-management skills, leadership skills, and professional communications strategies as well as how to implement personal and workplace safety rules and regulations and follow emergency procedures. In small groups and/or in other classroom activities, students will then work together to learn, observe, explain, and demonstrate relevant safety and emergency procedures. Students will employ constructive mentoring and leadership skills as/when appropriate. | 15 periods  675 minutes | (3) The student applies professional communications strategies. The student is expected to:  (C) interpret and communicate information, data, and observations;  (E) apply active listening skills; and  (F) listen to and speak with diverse groups of individuals.  (6) The student applies safety regulations. The student is expected to:  (A) implement personal and workplace safety rules and regulations; and  (B) follow emergency procedures.  (7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:  (A) employ communication skills;  (B) employ teamwork and conflict-management skills; and  (C) conduct and participate in meetings; and  (D) employ mentoring skills. | |
| **Unit 3: Ethical Conduct and Critical-Thinking Skills**  Students will explore, identify, and explain ethical decision making and laws regarding use of technology in printing, including copyright laws relevant to fair use and acquisition and Creative Commons laws and licensing, respect for intellectual property, and proper etiquette and knowledge of acceptable use policies. Students will employ critical-thinking skills and demonstrate their understanding of business and personal ethics, relevant laws, and ethical responsibilities in classroom activities and/or decision-making scenarios/occupational tasks. | 15 periods  675 minutes | (4) The student understands and examines problem-solving methods. The student is expected to:  (A) employ critical-thinking skills independently and in groups.  (8) The student applies ethical decision making and understands and complies with laws regarding use of technology in printing. The student is expected to:  (A) demonstrate an understanding of ethical conduct;  (B) apply copyright laws in relation to fair use and duplication of materials;  (C) model respect for intellectual property;  (D) demonstrate proper etiquette and knowledge of acceptable use policies; and  (E) demonstrate an understanding of Creative Commons laws, including all licensing. | |
| **Unit 4: Academic and Technical Skills**  Students will explore, discuss, and demonstrate mathematics and language arts knowledge as well as technical skills required for a successful career in a printing and imaging field. Students will be given multiple opportunities to learn, demonstrate and apply relevant technical and academic skills in-context as they demonstrate occupational tasks, participate in course activities, and complete their assignments. In this unit, students will use appropriate technology to research training, education, or certification requirements for printing and imaging technology employment. Students will demonstrate/apply appropriate academic and technical skills to present their findings using writing, publishing, and presentation technology applications. | 25 periods  1,125 minutes | (2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:  (A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and  (B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.  (5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects. | |
| **Unit 5: Printing Systems and Processes**  Students will use appropriate technology and/or assigned materials to research printing systems and their uses, the processes required to produce various printed products, and print process management, including customer service and sales, scheduling, and quality control. Students will also discuss and demonstrate how to evaluate customer needs and materials and print process management in brief presentations, classroom activities, and/or occupational task/workplace scenarios. As a unit culminating activity, students will apply English language arts knowledge and skills and appropriate technology to write and complete a research project presentation which describes and explains printing system uses, processes, and quality control. | 40 periods  1,800 minutes | (2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:  (A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents.  (3) The student applies professional communications strategies. The student is expected to:  (B) organize oral and written information;  (C) interpret and communicate information, data, and observations; and  (D) deliver formal and informal presentations.  (11) The student develops a basic understanding of printing and imaging. The student is expected to:  (A) understand printing systems and their uses;  (B) employ processes required to produce various printed products;  (C) demonstrate print process management, including customer service and sales, scheduling, and quality control; and  (D) evaluate customer needs and materials. | |
| **Unit 6: Understanding Printing and Imaging**  Students will use appropriate technology, examples, and/or assigned materials to learn and discuss how to acquire information in a variety of formats, how to evaluate information for accuracy, validity, and usability, how to develop technical documentation and how to edit and evaluate products. In small groups and/or in other classroom activities, students will work together to apply digital publishing techniques to create products by using word processing, graphics, or drawing programs, apply design and typography elements, color theory, and graphic design concepts, and deliver products in a variety of media. Students will apply active listening skills as they listen to and appropriately speak with diverse individuals and model and demonstrate an understanding of appropriate use of hardware components, software programs, and storage devices and file and cross-platform compatibility. | 40 periods  1,800 minutes | (3) The student applies professional communications strategies. The student is expected to:  (E) apply active listening skills; and  (F) listen to and speak with diverse groups of individuals.  (11) The student develops a basic understanding of printing and imaging. The student is expected to:  (E) acquire information in a variety of formats;  (F) evaluate information for accuracy, validity, and usability;  (G) apply digital publishing techniques to create products by using word processing, graphics, or drawing programs;  (H) apply design elements such as text, graphics, headlines, and white space;  (I) apply typography concepts, including font size and style;  (J) apply color theory;  (K) apply graphic design concepts such as contrast, alignment, repetition, and proximity;  (L) edit and evaluate products;  (M) develop technical documentation;  (N) demonstrate knowledge and appropriate use of hardware components, software programs, and storage devices;  (O) demonstrate knowledge of file and cross-platform compatibility; and  (P) deliver products in a variety of media. | |
| **Unit 7: Presentations and Course Culminating Activities**  Students will use organized and professional communications strategies to present completed career portfolios in formal and informal presentations. Students will exhibit public relations skills as participate in mock interviews both as job applicants and as potential employers, as well as create and/or participate in various scenarios and activities that demonstrate skills related to seeking and applying for employment, entrepreneurship opportunities, appropriate workplace conduct, and personal application of workplace ethics. As part of these mock interviews and potential workplace scenarios, students will evaluate and compare employment opportunities as well as demonstrate an ability to communicate with diverse individuals as well as active listening and effective communication skills. As a culminating activity for the course, students will research and briefly discuss mentoring and leadership opportunities and other benefits offered via participation in CTSO and/or other extracurricular student activities. | 25 periods  1,125 minutes | (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:  (A) identify and participate in training, education, or certification for printing and imaging technology employment;  (B) demonstrate positive work behaviors and personal qualities needed to be employable; and  (C) demonstrate skills related to seeking, applying for, and obtaining a desired job.  (3) The student applies professional communications strategies. The student is expected to:  (A) adapt language for audience, purpose, situation, and intent;  (B) organize oral and written information;  (C) interpret and communicate information, data, and observations;  (D) deliver formal and informal presentations;  (E) apply active listening skills;  (F) listen to and speak with diverse individuals; and  (G) exhibit public relations skills.  (9) The student develops career-building characteristics. The student is expected to:  (A) maintain a portfolio to document information such as work experiences, licenses, certifications, and work samples;  (B) demonstrate skills in evaluating and comparing employment opportunities; and  (C) examine employment opportunities in entrepreneurship. | |