# Scope & Sequence

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| Course Name: Printing and Imaging Technology II Lab**TSDS PEIMS Code:** 13009710 | **Course Credit:** 2.0**Course Requirements:** Recommended for Grades 10-12.**Prerequisites:** None.**Corequisite:** Printing and Imaging Technology II. |
| **Course Description:** Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the printing industry with a focus on digital prepress and desktop digital publishing. This course must be taken concurrently with Printing and Imaging Technology II 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 II 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 Periods7,875 Minutes131.25 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****130.97. (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 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 to evaluate and compare employment opportunities as well as research and discuss career portfolios, training, education, or certification opportunities, and technical 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 periods675 minutes | (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:(A) participate in training, education, or certification for employment; and(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable.(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 and update a portfolio to document information such as work experiences, licenses, certifications, and work samples; and(B) demonstrate skills in evaluating and comparing employment opportunities.(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 all steps of a professional meeting, including agendas, minutes, and 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 effective working relationships, constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions. Students will employ constructive mentoring and leadership skills as/when appropriate.  | 15 periods675 minutes | (3) The student applies professional communications strategies. The student is expected to:(C) interpret and communicate information, data, and observations;(D) deliver formal and informal presentations;(E) demonstrate active listening skills to obtain and clarify information; and(F) listen to and speak with diverse 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:(B) employ teamwork and conflict-management skills to achieve collective goals;(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and(F) employ mentoring skills to inspire and teach others. |
| **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, proper etiquette and knowledge of acceptable use policies, respect for intellectual property, and Creative Commons laws and licensing. 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 periods675 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;(C) model respect for intellectual property;(D) demonstrate proper etiquette and knowledge of acceptable use policies; and(E) understand 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 and discuss leadership skills, roles of leaders within organizations, effective leadership styles, and the benefits of participating in civic and community leadership and teamwork opportunities to enhance skills. Students will research leadership opportunities and other benefits offered by CTSO and/or other extracurricular student activities, and prepare and effectively present a brief oral and/or written report on a CTSO or other extracurricular organization they may be willing to join or are already participating in.  | 25 periods1,125 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.(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills. |
| **Unit 5: Printing Systems and Processes**Students will use appropriate technology and/or assigned materials to research printing systems, printing and ink processes required for the production of various printed products, the uses of papers, including weights and finishes used for various types of printing, and the cleanup and maintenance of equipment. After their research is completed, students will apply English language arts knowledge and skills to write and complete a research project presentation which describes and explains how to manage the printing process. Students will also explain ink processes used for various types of printing, identify ink types, and describe how properties of ink affect coverage, color, and color separation.  | 40 periods1,800 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; and(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 an advanced understanding of printing and imaging. The student is expected to:(A) understand printing systems and their uses;(B) demonstrate print process management;(C) prepare customer materials for printing;(D) demonstrate and apply a variety of printing processes;(E) demonstrate industry standard ink processes used for various types of printing, identify ink types, and describe how properties of ink affect coverage, color, and color separation;(F) demonstrate knowledge of papers, including weights and finishes used for various types of printing; and(G) perform cleanup and maintenance of equipment. |
| **Unit 6: Understanding Printing and Imaging**Students will identify and use the principles of design to discuss, analyze, critique, and write about visual aspects in print design, including their own designs as well as demonstrate knowledge of the principles of design in print design images with a focus on composition, color, design, shape, shadow, negative space, and background. Students will apply active listening skills as well as provide constructive praise and criticism, as they listen to and appropriately speak with diverse individuals and discuss, analyze, critique, and write about visual aspects in print design, including their own designs. | 40 periods1,800 minutes | (3) The student applies professional communications strategies. The student is expected to: (C) interpret and communicate information, data, and observations;(D) deliver formal and informal presentations;(E) demonstrate active listening skills to obtain and clarify information; and(F) listen to and speak with diverse individuals.(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:(B) employ teamwork and conflict-management skills to achieve collective goals; and(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions.(11) The student develops an advanced understanding of printing and imaging. The student is expected to:(H) identify and use the principles of design to discuss, analyze, critique, and write about visual aspects in print design, including the student's own designs; and(I) demonstrate knowledge of the principles of design in print design images with a focus on composition, color, design, shape, shadow, negative space, and background. |
| **Unit 7: Presentations and Course Culminating Activities** Students will exhibit public relations skills and use organized and professional communications strategies to present completed career portfolios, resumes, and cover letters 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, 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, identify appropriate training, education, or certification for employment, and identify skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills. Students will demonstrate an ability to interpret and communicate information, data, and observations with diverse individuals as well as effective communication skills. | 25 periods1,125 minutes | (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:(A) participate in training, education, or certification for employment; and(C) demonstrate skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills.(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) demonstrate active listening skills to obtain and clarify information;(F) listen to and speak with diverse individuals; and(G) demonstrate public relations skills to increase internal and external customer/client satisfaction.(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions.(9) The student develops career-building characteristics. The student is expected to:(A) maintain and update a portfolio to document information such as work experiences, licenses, certifications, and work samples; and(B) demonstrate skills in evaluating and comparing employment opportunities. |