



### **To the Student:**

After your registration is complete and your proctor has been approved, you may take the Credit by Examination for DIMED 1A.

### **ABOUT THE EXAM**

The examination for Digital and Interactive Media (first semester) consists of 40 short-answer essay and multiple-choice questions. The exam is based on the Texas Essential Knowledge and Skills (TEKS) for this subject. The full list of TEKS is included in this document (it is also available online at the Texas Education Agency website, <http://www.tea.state.tx.us/>). The TEKS outline specific topics covered in the exam, as well as more general areas of knowledge and levels of critical thinking. Use the TEKS to focus your study in preparation for the exam.

The examination will take place under supervision, and the recommended time limit is three hours. You may not use any notes or books. A percentage score from the examination will be reported to the official at your school.

In preparation for the examination, review the TEKS for this subject. All TEKS are assessed. It is important to prepare adequately. Since questions are not taken from any one course, you can prepare by reviewing any of the state-adopted textbooks that are used at your school.

Good luck on your examination!

# Texas Essential Knowledge and Skills DIMED 1 – Digital and Interactive Media

## §130.278. Digital and Interactive Media (One-Half to One Credit).

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Information Technology.

(b) Introduction. Through the study of digital and interactive media and its application in information technology, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students enhance reading, writing, computing, communication, and critical thinking and apply them to the information technology environment.

(c) Knowledge and skills.

(1) The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:

(A) identify and demonstrate positive work behaviors that enhance employability and job advancement such as regular attendance, promptness, attention to proper attire, maintenance of a clean and safe work environment, appropriate voice, and pride in work;

(B) identify and demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, listening attentively to speakers, and willingness to learn new knowledge and skills;

(C) employ effective reading and writing skills;

(D) employ effective verbal and nonverbal communication skills;

(E) solve problems and think critically;

(F) demonstrate leadership skills and function effectively as a team member;

(G) identify and implement proper safety procedures;

(H) demonstrate an understanding of legal and ethical responsibilities in relation to the field of information technology; and

(I) demonstrate planning and time-management skills such as project management and storyboarding.

(2) The student identifies employment opportunities in the information technology field with a focus in the area of interactive media. The student is expected to:

(A) identify job opportunities and accompanying job duties and tasks;

(B) research careers of personal interest along with the education, job skills, and experience required to achieve personal career goals;

(C) examine the role of certifications, resumés, and portfolios in the information technology profession; and

(D) create a portfolio.

(3) The student uses emerging technologies to exchange and gather information and resources. The student is expected to:

(A) collaborate using various electronic technologies such as email, blogs, chat rooms, discussion threads, and wikis;

(B) use Internet resources for research purposes; and

(C) research technologies that have surfaced within the last three years in the area of interactive media.

(4) The student complies with standard practices and behaviors that meet legal and ethical responsibilities. The student is expected to:

(A) examine copyright and fair use guidelines in the digital media industry;

(B) model ethical and legal acquisition of digital information, including the correct citing of sources through the use of established methods; and

(C) demonstrate proper netiquette and acceptable use policies when using networks.

(5) The student analyzes and applies design and layout principles. The student is expected to:

(A) compare and contrast printed and digital communications products that demonstrate appropriate and inappropriate use of design and layout principles;

(B) identify and use perspective such as backgrounds, light, shades, shadows, and scale to capture a focal point and create depth;

(C) identify and use principles of proportion, balance, variety, emphasis, harmony, symmetry, unity, and repetition in type, color, size, line thickness, shape, and space;

(D) identify and use three-dimensional effects such as foreground, middle distance, and background images;

- (E) identify and use typography;
  - (F) identify and use color theory; and
  - (G) recreate and improve existing multimedia products by applying the appropriate design and layout principles.
- (6) The student designs and creates digital graphics. The student is expected to:
- (A) compare and contrast the characteristics of raster-based bitmap graphics and vector-based graphics;
  - (B) demonstrate appropriate file storage and file size management skills;
  - (C) recognize the various file extensions used in digital and interactive media such as compression, conversion, and use and modification;
  - (D) identify and choose appropriate software applications for specific digital media types such as photo, graphics, video, audio, and animation editing software; and
  - (E) differentiate between the color mode selections in determining product output.
- (7) The student demonstrates appropriate use of digital photography equipment and techniques. The student is expected to:
- (A) demonstrate proper use of safety procedures while using digital photography equipment;
  - (B) capture still shot images using digital photography equipment incorporating various photo composition techniques such as lighting, perspective, candid versus posed, rule of thirds, and level of horizon;
  - (C) transfer still shot images from equipment to the computer; and
  - (D) demonstrate photographic enhancement techniques such as feathering, layering, masking, and color enhancement using appropriate digital manipulation software.
- (8) The student demonstrates appropriate use of digital graphics. The student is expected to:
- (A) create and modify digital graphics using appropriate vector-based and raster-based software following standard design principles; and
  - (B) export and set graphics to be used in both print and digital formats.
- (9) The student demonstrates appropriate use of video equipment and techniques. The student is expected to:
- (A) demonstrate proper use of safety procedures while using digital video equipment;
  - (B) demonstrate proper use of terminology in relation to video technology;
  - (C) demonstrate proper use of digital video photography equipment to capture video images;
  - (D) transfer video images from equipment to the computer;
  - (E) demonstrate videographic enhancement and editing techniques such as panning, transitions, zooming, content editing, and synchronizing audio and video using appropriate digital manipulation software; and
  - (F) export video files in digital formats to be used in various delivery systems such as podcasting, downloadable media, and streaming.
- (10) The student demonstrates appropriate use of audio equipment and techniques. The student is expected to:
- (A) demonstrate proper use of safety procedures while using digital audio equipment;
  - (B) demonstrate proper use of terminology and concepts in relation to audio technology;
  - (C) demonstrate proper use of digital audio equipment to capture audio files;
  - (D) transfer audio files from equipment to the computer;
  - (E) demonstrate proper use of audio editing software such as adding effects, fading, volume control, and manipulation of waveforms using appropriate digital manipulation software; and
  - (F) export audio files to be used in digital formats in various delivery systems such as podcasting, downloadable files, and streaming.
- (11) The student demonstrates appropriate use of animation. The student is expected to:
- (A) use the principles of motion graphics such as frames and key frames, integration of audio into an animation, and user interactive controls;
  - (B) create and modify a linear and a nonlinear animation using appropriate software following standard design principles; and
  - (C) export and set animation to be used in various digital formats and on various video animation players.
- (12) The student demonstrates appropriate project management in the creation of digital media projects. The student is expected to:
- (A) develop a plan for a media project such as a storyboard, stage development, and identification of equipment and resources; and
  - (B) evaluate a project plan along its timeline and make suggested revisions until completion of the project.
- (13) The student deploys digital media into print, web-based, and video products. The student is expected to:
- (A) incorporate video, audio, text, graphics, and motion graphics into an existing web page;

- (B) incorporate various digital media into a printed document such as a newsletter, poster, or report;
- (C) develop an interactive medium such as a compact disk or digital video disk to display video, audio, and animation products; and
- (D) collect and organize student created products to build an individual portfolio.

*Source: The provisions of this §130.278 adopted to be effective August 23, 2010, 34 TexReg 5934.*