This course supports the assessments for TDT1. The course covers 1 competency and represents 2 competency units.

**Introduction**

**Overview**
This should be the first course that you take in the Technology Integration domain. It will give you an opportunity to learn and apply various technology skills.

The content in this domain will prepare you with the technology skills that are most relevant in education today. Effective instruction today requires the following: careful attention to the problem or need being addressed and the characteristics of the target population, the use of technology to support learning, and the design of effective research-based instructional strategies. This component of your work at WGU is designed to help you to gain a broad overview of the field of technology integration with a fundamental understanding of some key concepts and principles. Most importantly, this course will enhance your technology skills and enable you to produce exportable instructional and professional products using various integrated application programs.

**Getting Started**
In the TDT1 course, you will create a website over the course of four performance tasks. In the first task you will set up your basic website. In the subsequent tasks you will begin to fill your website with content. It is important to remember your principles of basic instructional design as you work through the course as you want your end product to be a website that is cohesive, easy-to-navigate, and attractive. This course uses a variety of learning resources to help you master the course content. You will use VitalSource E-texts, ASCD modules, tutorials from Lynda.com, readings from Books 24/7, and readings from external websites to help you create your website components. These resources are linked directly from the course content and you are automatically enrolled in the E-texts and ASCD modules so there is nothing you need to do in order to prepare to use the materials for the course.

Watch the following video for an introduction to this course:

*Note: To download this video, right-click the following link and choose "Save as...": [download video]*

**Competencies**
This course provides guidance to help you demonstrate the following 1 competency:

- **Competency 507.2.3: Integrated Technology Development**
  The graduate produces exportable instructional and professional products using various integrated application programs.
Teaching Dispositions Statement
Please review the Statement of Teaching Dispositions.

Course Instructor Assistance
As you prepare to demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don't work out on your first try, course instructors act as a support system to guide you through the revision process. You should expect to work with course instructors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course instructors are fully committed to your success!

Preparing for Success

The information in this section is provided to detail the resources available for you to use as you complete this course.

Learning Resources

The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

Automatically Enrolled Resources

You can access the learning resources listed in this section by clicking on the links provided throughout the course. You may be prompted to log in to the WGU student portal to access the resources.

VitalSourceE-Texts

The following textbooks are available to you as e-texts within this course of study. You will be directly linked to the specific readings required within the activities that follow.

Note: These e-texts are available to you as part of your program tuition and fees, but you may purchase hard copies at your own expense through a retailer of your choice. If you choose to do so, please use the ISBN listed to ensure that you receive the correct edition.

ASCD
You will access ASCD materials at the activity level within this course of study. These courses are an online independent study learning resource provided by the Association for Supervision and Curriculum Development (ASCD).

Lynda.com
Lynda.com is an online subscription library that teaches the latest software tools and skills through high-quality instructional videos taught by recognized industry experts. It offers more than 1,400 training videos on a broad range of subjects, including business skills, photography, design, music and video, home computing, animation, and web design and development. You will be linked to Lynda.com in the activities within this course.

Books 24/7


Pacing Guide
The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.

Week 1
- Introduction
- Developing a Website
- Graphics

Week 2
- Audio and Video
- Multimedia Authoring

Week 3
Week 4

- Presentations
- Databases
- Assembling an EPortfolio

Note: This pacing guide does not replace the course. Please continue to refer to the course for a comprehensive list of the resources and activities.

Website Development

Websites are a common education delivery tool. As you progress in this course, you will explore specific tools in more detail in order to prepare an e-portfolio or instructional website.

You will begin the process of acquiring and demonstrating competence in technology. You can accelerate your progress through the areas where your previous education, training, or experience has yielded the required competence. For the next several sections, you will focus on a discrete set of technology skills. There are numerous ways to develop a website. This subject will provide you with several alternatives to aid you in the creation of your web pages. Web editing is no longer a skill reserved for technology specialists. With practice, all educators can design an effective website to aid in the delivery of instructional content.

Watch the following video for more information on creating your website:

Note: To download this video, right-click the following link and choose “Save as...”: download video.

Developing a Website

By the end of this section, you should be able to describe the general steps for creating web-based instructional materials, develop a professional quality website that communicates information to multiple audiences, and reflect on the design process used to create instructional materials with productivity software.

Visual Design Readings

Read and study the following chapter of *Instructional Technology and Media for Learning (11th Edition)*:

- chapter 3 (“Integrating Technology and Media into Instruction: The ASSURE Model”)

Web Development Readings
Read and study the following chapters of *Integrating Educational Technology into Teaching*.

- chapter 7 ("Distance Teaching and Learning and the Role of the Internet")
- chapter 8 ("Developing and Using Web-Based Learning Activities")

*Note: The ideas expressed in the above readings are very important for you to know and incorporate into your website. Your site will be evaluated based on your use of message-design principles.*

**Learning and the Internet Readings**

For this section, you have a choice of readings based on your interests and background.

**Education-focused Readings:**

**ASCD Modules 1 and 2**

Complete the following modules in the ASCD course *Technology in Schools: A Balanced Perspective*:

- Module 1: How Technology Is Changing Education-and Students
- Module 2: Bridging the Digital Divide

**Business-focused Readings:**

**Books 24/7**

Read parts III and IV-B in Instructional Systems Design Revisited: A Compendium of Performance Improvement Articles:

- Part III: Analysis
- Part IV-B: A Hard Look at Multimedia

**Lynda.com: Web-Design Software**

The following tutorials on web-design software are available at the [Lynda.com](https://www.lynda.com) website to assist you:

- Google Sites
- WordPress
- Adobe Dreamweaver (for Mac and PC)
- iWeb (for Mac)

**Internet Resources**
It is nearly time to develop your website. There are a number of free programs available to aid you in developing, editing, and hosting websites. If you want to use web-design software such as Dreamweaver or iWeb, you will need to have a way of publishing your website for grading (purchase of a hosting service or uploading to a domain you already own). If you have another program that you would like to use and you are unsure if it is acceptable, consult with your course instructor. The following web-design software applications have online tutorials and support (available at the corresponding websites listed above):

- Google Sites
- WordPress
- TeacherWeb
- Weebly
- WIX
- Jigsy
- Moonfruit

Study tip: When creating your products in the Technology Integration domain, use design elements that contribute to the purpose and visual appeal of the product. Design elements include but are not limited to consistent, appealing, and appropriate use of font, emphasis, color, layout, and images.

**Web Site Development Performance Task**

Complete the following task in Taskstream:

- Technology Design Portfolio : Website Development
- When you submit your instructional product, you will be submitting a link to your website and a PDF version of your website. For directions on how to save your website as a PDF document, click here.

For details about this performance assessment, see the "Assessment" tab in this course.

**Graphics**

You may already recognize how graphics can either greatly enhance a learning experience or be distracting and irrelevant. Indeed, gratuitous use of graphics without a purpose violates the principles of good design.

Watch the following video for an introduction on what you will be expected to do with graphics:

*Note: To download this video, right-click the following link and choose "Save as...": [download video]*
Graphics

By the end of this section, you should be able to reflect on the design process used to create instructional materials with productivity software and to use specified hardware tools with associated software to produce professional-quality graphical materials.

Lynda.com Library: Graphics

Begin one of the following software tutorials available at Lynda.com on graphics:

- Microsoft Paint
- Adobe Photoshop
- Adobe Illustrator
- iPhoto
- Other appropriate software tools

*Note: You might also choose to use a free version of PhotoPlus.*

Graphics Performance Task

Complete the following task in Taskstream:

- Technology Design Portfolio: Graphics
- When you submit your instructional product, you will be submitting a link to your website and a PDF version of your website. For directions on how to save your website as a PDF document, click here.

For details about this performance assessment, see the "Assessment" tab in this course.

Multimedia I

Multimedia covers a broad range of technologies and applications. The powerful effect of using multimedia to teach and engage students is undeniable.

Watch the following video for more information on the multimedia expectations for this course:

*Note: To download this video, right-click the following link and choose "Save as...":* download video

Audio and Video
By the end of this section, you should be able to reflect on the development technique used to create a professional-quality audio/video product, and use computer-based technologies to design professional-quality audio/video materials, thereby significantly expanding upon and demonstrating your competence in the use of technology.

Multimedia Readings

Read the following chapters in *Instructional Technology and Media for Learning*:

- chapter 8 ("Enhancing Learning With Audio and Video")
- chapter 9 ("Enhancing Learning with Text and Visuals")
- chapter 10 ("Preparing for Tomorrow's Challenges")

Lynda.com: Audio/Video

Begin one of the software tutorials available at [Lynda.com](https://www.lynda.com/) on audio/video:

- Windows Movie Maker (Video, for PC)
- Audacity (Audio, for PC or Mac)
- iMovie (Video, for Mac)
- GarageBand (Audio, for Mac)

Reflection: Hypermedia

Reflect on the following questions and write down your thoughts in your personal study journal for future reference:

- How is the students' use of hypermedia for learning an example of constructivism?
- Give one example of how you would use hypermedia in a lesson to develop proficiency in learning new knowledge.

Lynda.com: Video Storytelling

View one way to use videos in instruction with "video storytelling" at the following website:

- [Video Storytelling Guide](https://www.lynda.com/)

The video storytelling guide will teach you solid production techniques that can greatly improve the quality and effectiveness of your video stories. The guide includes links to term definitions and to video examples that illustrate the major concepts presented.

You may want to look for tutorials on Storyboard Pro or other storyboarding programs on [Lynda.com](https://www.lynda.com/). Simply type in the word "storyboard" and begin your review of the resources.
Multimedia II

Professionals in multimedia are usually skilled in one or more authoring systems that combine audio, video, graphics, and text in meaningful and interactive ways.

Multimedia Authoring

By the end of this section, you should be able to describe the process for creating a multimedia application, discuss how specified conceptual frameworks or tools can facilitate the creation of multimedia materials, and use an authoring tool to create professional-quality hypermedia/multimedia instructional materials.

Storyboards

Review the following websites to learn more about and see examples of storyboards. You will be using this skill in the multimedia task in the performance assessment.

- Storyboards
- How to Make a Storyboard

For your Multimedia task, you will be creating a storyboard for your short video. Be sure to check out some digital storyboarding programs you can use for this part of your assignment. Below are some examples you may want to explore:

- StoryboardThat
- mxGraph

Multimedia II Readings

For this section, you have a choice of readings based on your interests and background.

Education-focused Readings:

ASCD Module 6

Complete the following module in the ASCD course Technology in Schools: A Balanced Perspective:

- Module 6: Teaching Balanced Use of Technology

Business-focused Readings:

Books 24/7
Read Chapter 11 in Maximum performance: A practical guide to leading and managing people at work.

- chapter 11 ("Leadership and People Management in High-Tech, Networked and Virtual Organizations")

Lynda.com: Multimedia

Begin one of the software tutorials available at Lynda.com on multimedia tools:

- Podcasting and Vodcasting Workshop
- Photostory
- Other tutorials on multimedia

Multimedia Performance Task

Complete the following task in Taskstream:

- Technology Design Portfolio : Multimedia
- When you submit your instructional product, you will be submitting a link to your website and a PDF version of your website. For directions on how to save your website as a PDF document, click here.

For details about this performance assessment, see the "Assessment" tab in this course.

Desktop Publishing

Few students will remember mimeographed handouts. The availability of desktop publishing has greatly enhanced the ability to create attractive and useful handouts and other study materials. Desktop publishing is so commonplace in education that it is often taken for granted. Still, it is estimated that most people use only a fraction of the software's capability.

Desktop Publishing

By the end of this section, you should be able to use a desktop publishing application to produce professional-quality print communications that combine text and graphics. It is important to note that a desktop publishing file contains both text and graphics and not just text. A file with just text would be referred to as a word processing file or text file. Examples of desktop publishing files would be flyers, brochures, newsletters, or greeting cards.

Desktop Publishing Readings

Read the following chapter in Integrating Educational Technology into Teaching.
• chapter 4 ("Technology Tools for 21st Century Teaching: The Basic Suite")

Pay particular attention to the impact of word processing programs in education and how they can be used for productivity and teaching strategies.

Also read the following chapter in Integrating Educational Technology into Teaching.

• chapter 5 ("Technology Tools for 21st Century Teaching: Beyond the Basics")

This chapter extends the discussion of basic desktop publishing tools, and in it you can get ideas on how to use databases to gather, analyze, and report data.

Lynda.com: Desktop Publishing Software

The following tutorials available at Lynda.com may be helpful:

• Microsoft Word
• Microsoft Publisher
• Adobe InDesign (PC and Mac)
• QuarkXPress (PC and Mac)
• Other appropriate software tools

Preparing for Your E-Portfolio Task

This course concludes with the creation of an e-portfolio. One of the elements you will be asked to contribute to the portfolio is a desktop-publishing document that you have created personally. Your course instructor will review your document and provide feedback, if necessary. E-mail the course instructor for details.

Spreadsheets

Spreadsheets are not just for mathematicians. Practically everyone can find a use for a handy spreadsheet. This might be as mundane and common as tracking attendance and grades or as sophisticated as data analysis that can improve your practice.

Spreadsheets in Education

By the end of this section, you should be able to create a professional-quality spreadsheet that incorporates advanced functions, formatting, formulas, charts, and graphs.

Spreadsheet Readings

Read and study the following chapter in Integrating Educational Technology into Teaching.

• chapter 4 ("Technology Tools for 21st Century Teaching: The Basic Suite")
Pay attention to the impact of spreadsheets in teaching, and to the productivity and teaching strategies for spreadsheets.

**Lynda.com: Spreadsheets**

The following software tutorials on spreadsheets available at [Lynda.com](https://www.lynda.com) may be helpful:

- Microsoft Excel
- Microsoft Works
- Apple Numbers
- Other appropriate software tools

**Preparing for Your E-Portfolio Task**

This course concludes with the creation of an e-portfolio. One of the elements you will be asked to contribute to the portfolio is a spreadsheet. Examples of appropriate spreadsheets might be a grade book, class attendance, or a contact list. Your course instructor will review your document and provide feedback. E-mail the course instructor for details.

**Presentations**

Nearly everyone has experienced a multimedia presentation (e.g., PowerPoint). Some are engaging and interesting, while others are simply electronic page turners. What makes for an effective presentation?

**Presentations**

By the end of this section you should be able to use a presentation software application to produce a professional-quality presentation with supplementary materials.

**Presentation Readings**

Read and study the following section in *Integrating Educational Technology into Teaching*.

- pages 128-134 of [chapter 4](#) ("Technology Tools for 21st Century Teaching: The Basic Suite")

These pages discuss integration strategies for presentation software. Pay particular attention to Tips for Effective Presentations.

**Lynda.com: Presentations**

The following software tutorials on presentations available at [Lynda.com](https://www.lynda.com) may be helpful:

- Microsoft PowerPoint
- Apple Keynote
Preparing for Your E-Portfolio Task

This course concludes with the creation of an e-portfolio. One of the elements you will be asked to contribute to the portfolio is a multimedia presentation. An example of an appropriate presentation might be a simple lesson you have delivered or any professional presentation. Your course instructor will review your document and provide feedback. E-mail the course instructor for details.

Databases

Databases are likely one of the applications least used by educators. Some people do not understand how to use databases or think databases are too difficult to create. Knowing how to create effective databases can help you keep organized and save time. You might use databases for something as routine as maintaining a mailing list to parents and tracking the literature you review for research, for document management, or for even more substantial management of data.

Databases

By the end of this section, you should be able to create a professional-quality database to store information relevant to specified instructional areas and reflect on the design process used to create instructional materials with productivity software.

Database Readings

For this section, you have a choice of readings based on your interests and background.

Education-focused Readings:

**ASCD Modules 4 and 5**

Complete the following modules in the ASCD course *Technology in Schools: A Balanced Perspective*

- Module 4: Using Technology to Differentiate Instruction, Enhance Understanding
- Module 5: Technology As a Collaborative and Motivational Tool

Business-focused Readings:

**Books 24/7**

Read Chapter 11 in ASTD handbook for workplace learning professionals.

- *chapter 11 ("The Learner - What We Need to Know")*

Use the following software tutorials on databases available in *Lynda.com* to assist you:
• Microsoft Access (for PC)
• OpenOffice.org 2 Base (for Mac and PC)
• Microsoft Works (for PC)
• Filemaker (for Mac and PC)
• InspireData (for Mac and PC)

There are also many free database programs available for you to use for this task. You may want to use one of the following:

• SodaDB
• Grubba
• FileAmigo

Preparing for Your E-Portfolio Task

This course concludes with the creation of an e-portfolio. One of the elements you will be asked to contribute to the portfolio is a database. Examples of the type of database you might include could be a mailing list, data on research books, or student academic performance. Your course instructor will review your document and provide feedback. E-mail the course instructor for details.

E-Portfolio

An electronic portfolio (e-portfolio) is increasingly viewed as a necessity in the field of education. Fortunately, an e-portfolio is not difficult to produce, and you have already created all the necessary components.

Watch the following video to see your expectations for your final e-portfolio:

Note: To download this video, right-click the following link and choose "Save as...": download video.

Assembling an E-Portfolio

By the end of this section, you should be able to modify an existing website that communicates information to multiple audiences and reflect on the design process used to create instructional materials with productivity software.

E-Portfolio Readings

Go to the following website listed and read the following article:

• ePortfolios
This is a rich source of materials and resources on e-portfolios. In reviewing the website, consider how you might transfer ideas to your own e-portfolio.

**E-Portfolio Performance Task**

Complete the following task in Taskstream:

- Technology Design Portfolio : E-Portfolio
- When you submit your instructional product, you will be submitting a link to your website **and** a PDF version of your website. For directions on how to save your website as a PDF document, click here.

For details about this performance assessment, see the "Assessment" tab in this course.

**Final Steps**

Congratulations on completing the activities in this course! This course has prepared you to complete the assessments associated with this course. If you have not already been directed to complete the assessments, schedule and complete your assessments now.