Getting Up to Speed with Cool Tech Tools

EDUO 9107   3 Semester Credits/Units June 2024 Revision

Partial Syllabus – For a full syllabus contact jherz@dominicancaonline.com

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Course Overview:

Allow technology to play a pivotal role in enhancing teaching and learning experiences. Embrace 21st-Century Learning by exploring a variety of empowering current and emerging educational tech tools and online resources. Explore, create, share and reflect on technologies that will engage and enhance classroom learning. Course tools and topics are aligned with ISTE Teacher and Student standards which bridge thoughtful and strategic integration of technology to improving teaching and learning outcomes. Current course topics include comprehensive dives into Artificial Intelligence SEL, Game Based Learning AR/VR and, Student-Centered Digital Learning Apps, Classroom Learning Environments, SEL and STEM.

The course has 6 Modules. The number of assignments and their requirements differ in each module.
There is also a Course Reflection Forum posting.

Assignments require you to review tools, assess their values, and may ask you to perform specific tasks such as posting work or completing simple projects. To complete some tasks, you may need to register at a tool's websites. Some assignments ask that you post work on specific websites. These websites may require that you set up a user account. If you are concerned with using your personal email to set up an account, I suggest creating an alternative account to use rather than your personal email account.

Completed assignment documents can either be shared with me via Google Drive OR as a word processing document placed in the corresponding assignment Dropbox in Moodle.

Google Drive Sharing:

- Gmail address to use: jherzdominicancourses@gmail.com
- Create a shared Drive folder. Name it with your first initial/last name and EDUO 9107. i.e. CStudent EDUO 9107
- Share each document separately and please give me editing rights. Just placing the document in will not generate a notification.
1. Share the folder and each assignment following these steps:
    Select the file you want to share.
2. Select **Share** or Share.
3. In the window "*Add people and groups*" manually enter (or copy/paste) the email address you want to share with*. (use my gmail).* Hit Enter on your keyboard*.*
4. Select the Down arrow where Viewer, Commenter, or Editor are listed. ***Select Editor***
5. **Check the box next to Notify people.**
6. Select **Send**.

Moodle Dropbox Sharing:

Do not save a Google Drive link in a dropbox, just word processing documents. Google Drive documents must be shared directly from Drive. The instructor will be notified when you have placed an assignment in a Moodle Dropbox. Other assignments may require you notify the instructor by email when tasks are completed.

IMPORTANT: Make sure your name and the assignment number are located at the top of each document submitted. The file name must also include your last name, assignment # and course # i.e. Brown, Assignment 1 EDUO 9107.

Course Modules / Assignments

Prologue to Assignments

Before starting assignments, spend time with the following links to gain perspectives on how technology continues to guide the future of education.

How technology is reinventing education
ChatGPT: How to Design Assignments to Reduce Cheating

Before you begin assignments keep in mind: The course goal is to show you tech tools that can be used to connect established and emerging technologies to student-centered learning, project-based curriculum and differentiated curriculum. Not all tools will be a good fit to your current educational position or ideas about tech use. Some tools may seem too complicated, or you may think "I can do that with traditional teaching methods". Challenge yourself though to move forward with your students and the times. Challenge your students to use tech tools wisely, responsibly and efficiently as you create personalized learning experiences to guide them into using technology to assist their current and future learning. Good tech tools combined with good curriculum will engage and excite students, will introduce and reinforce core concepts and will open the walls of non-tech or basic tech using classrooms.

Module 1 – Artificial Intelligence	
Objective	Engage in learning about and applying emerging AI teaching assistant and creativity tools. There are 6 parts to this assignment. Creating an account will be required for most. Submit all 6 parts at one time to the course LMS.
Assignment and Needed Materials	There is one comprehensive assignment consisting of **six parts. Number each part in your document**. **There is one product to submit in #4.** 1. Review the following set of AI teaching assistive apps. designed specifically to assist educators with lesson planning, daily classroom tasks and teacher responsibilities. There is no product to create in this assignment. **Use the Assignment Organization steps to report on these tools. Create a short paragraph for each tool in your review. Write a final reflective paragraph on them as one family of tools.** a. Khanmigo b. c. Canva AI / Magic Design d. 2. **There are 2 items to submit in this assignment, parts a. and b.** a. Review the following set of **AI Chat tools**, designed to inform, assist with creativity and organization.

Use at least two of the chat bots to create a document comparing the results when asking for the same information from both. The search prompt(s) must relate to an educational topic, one you would like help with such as researching a topic, writing a lesson, designing a presentation. Write the search prompt(s) used, list the chat used, and the reply. Compare and comment on the results returned.

b. **Use the Assignment Organization steps to report on these as a group. Mention each in your review but focus on them as one family of tools.**

- Microsoft's Copilot
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3. Review the following **AI creativity tools.** These are hands on tools that use AI to support ISTE's 1.5 Computational Thinker. **Use the Assignment Organization steps to report on these as a group.** Refer to each in your review but focus on them as one family of tools. If one or two stand out, give it a reflective boost.

There is no product required to submit but feel free to share a few of your examples!

- Word Draw - A fun AI (machine learning) example
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- Microsoft's Image Creator (requires a Microsoft account)
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- Craiyon (free art design with optional membership)
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- Assemblr EDU, an immersive education platform to help teachers and parents make a fun & memorable learning experience—all with 3D/AR visualizations.

4. Review the following **AI Image Creators**. Create an image to engage students or one that will enhance an assignment. **Use the Assignment Organization steps to report on these as a group.** Mention each in your review but focus on them as one family of tools. **Submit a screenshot or photo of one final creation**. Check with the instructor if you need help with submitting an image.

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- Microsoft Image Creator - Canva AI Image Generator
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5. Review the following **AI Coding / Game-Based Learning** tools. **Use the Assignment Organization steps to report on these as a group.** Mention several in your review but keep the main focus on them as one family of tools. There are products to submit in this section.

- Pencil Code   - Scratch -
- Kodable   - Hour of Code

6. Applying AI to Teaching and Learning

After completing review of items 1 through 6, what comes next? How will you apply AI to how you teach and how students learn? How will you use it to help you manage and plan your teaching? What are some possible lessons you could create? There is no shortage of online resources describing AI tools and what they can provide. Time to plan for how you will use it.

Create an AI narrative plan in a 2-3 page double-spaced document or set of -10 slides.

Here are some resources. Use an AI tool to get some ideas. Cite your use of AI, avoid submitting work that reads like AI writing. Paraphrase to align with your teaching.

	Next Steps, Applying AI K-12 • 43 Examples of Artificial Intelligence in Education • AI Elective Educator Guides (found in the course LMS) • • ChatGPT Prompt eBook (found in the course LMS) • • Prompt Writing for Video • Additional AI Resources: **Audio** - Generative Voice AI text to speech - - **Video** - Colossyan - - **ChatGPT** Prompt eBook • Chatbots in Education – Chatbots are AI driven resources most of us have used for research and assistance when online. Look deeper at their use in K-12 education, Role of Chatbots in Education • Free and Fun artificial intelligence (AI) items **Math** - Photomath - *Submit Assignment to the course LMS or via Google Drive; jherzdominicancourses@gmail.com*
Assessment	Assignments will be assessed using the course rubric

Module 2 – Classroom Learning Environment	
Objective	ISTE 2.6.b Foster Classroom Management of Tech Review, Research, Create and Discuss strategies, tools and apps to manage the use of technology and student learning strategies in digital platforms, virtual environments, classroom space management.
Assignment and Needed Materials	**There is one comprehensive assignment to complete in this Module. No products to create and submit.** Review the following classroom learning environment-related topics and tools, a. through e. These topics and tools support re-imaging the teaching and learning environment using technology as the core for student-centered instruction in the digitally active classroom. Use the Assignment Organization steps to report on each item as directed. a. **SEL:** - a strengths-based, developmental process that begins at birth and evolves across the lifespan (Weissberg et al., 2015) 10 tips for teachers to practice social emotional learning in the classroom b. **AR and VR**: Let's start with a couple of AR/VR overview: How VR And AR Are Revolutionizing eLearning For Learners Of All Ages eSchool News: https://www.eschoolnews.com/digital-learning/2024/05/31/friday-5-ar-and-vr/

	c. Next - Take a look at some amazing AR/VR tools and sites. AR uses requires some digital tools – headsets and perhaps controllers or app purchases Let review some educational applications that utilize AR/VR:
	
	1. Eduverse (Avantis World) – uses the keyboard to sample some VR activity.
	2.
	3. Class VR: The All-in-one Virtual Reality Technology for Schools & Districts :
	4. NearpodVR (Information only. School Nearpod account add on)
	5.
	6. QuiverVision
	
	Other Resources: *Commercial VR products to view as a look into the future of classrooms*
	Meta
	CoSpaces: Students build their own interactive digital content
	Foton VR Virtual Classroom is now reality
	
	d. **Hyperdocs** – *A true HyperDoc is much more than some links on a document.*
	Nor is it a Choice Sheet.
	Hyperdocs use a consistent 5-7 step learning cycle: Engage, Explore, Explain, Apply, Share, Reflect and Extend.
	The site below will get you up to speed on HyperDocs:
	-
	IN ADDITION: Locate an existing Hyperdoc that uses the 5-7 step sequence, from #1 or #2 below that you would consider using as is or with some revisions to make it more acceptable for your needs.
	
	   1. View the list of HyperDocs that use the SAMR Model:
	   https://docs.google.com/document/d/1oCi_v8wtt_5MHBoWz6ejGZKRpc9kUE69q5ju-XPANek/edit
	   2.
	   e. **Classroom Learning Environment**
	STEM Freebies
	Learning methodologies –
	Adventure Academy – Reading, Math, Science
	
	Submit Assignment to the Module 4 Dropbox

Assessment	Assignments will be assessed using the course rubric

Module 3 Curriculum Productivity Tools	
Objective	Discover / Revisit commonly used digital tools to engage students ISTE Teachers 2.5 Designer, ISTE Student 1.3 Knowledge Constructor and 1.7 Global Collaborator

Assignment and Needed Materials	**There is one assignment and** two products **to complete in this Module**.
	Review the following Curriculum Productivity tools. They range from currently popular tools used K-12. There are two products to create in this assignment.
	1. Use the Assignment Organization steps to:
	   a. Report on 10 of these tools. Create a short paragraph for each tool in your review.
	   b. Write a final reflective paragraph on them as one family of tools.

	c. **Create 2 products** using any 2 of the Curriculum Productivity tools below. Include the products in your submitted work or a link to the products if they are online

Webquests	Imagistory	Flip	WeVideo
	Animoto		SimpleShow
Nearpod		Pixton	Formative
	Voki		Gimkit
Razkids		Padlet (8 NEW Padlet Features)	
Thinglink (resources ---			

Submit Assignment to the Module 3 Dropbox

Assessment	Assignments will be assessed using the course rubric

Module 4 Gaming-Based Learning (GBL)
Objective	Learn the value of Game-based learning in education*. Game-based learning (GBL) is an educational approach that incorporates game principles, mechanics, and design into the learning process to engage students, motivate learning, and enhance their educational experience. It leverages the fun and interactive elements of games to foster a deeper understanding of subjects and promote critical thinking, problem-solving, collaboration, and other skills.* Source GPT chat*.*
Assignment and Needed Materials	**There is one assignment with 3 parts to complete in this module.**

1. Review the following classroom game-based learning resources and tools. Use the Assignment Organization steps to report on parts a and b and, select 5 item from c. There are no products to submit for this Module.

2. . Game-based Learning – A video interview on GBL's values to learning and its differentiation from gamification.
(supplement: Game-Based Learning Prepares K–12 Students for a Digital Future
3. **General**
Kahoot!: Kahoot! is a popular platform where teachers can create quizzes and interactive games. Students can join these games using a code and participate in real-time, making learning competitive and fun.
Quizlet: Quizlet offers various study tools, including flashcards and interactive games.
Quizalize   Funbrain

(Coding tools such as Scratch are also considered GBL tools. Scratch was covered in Module 1 but not include in this Module)
By Management and Subjects:
----X---- Turns the classroom experience into a role-playing game where students earn points for positive behavior, completing assignments, and collaborating with peers. The basic version is free.
Coding:
Scratch: Create stories, games, and animations. Share with others around the world
English; Prodigy
Foreign Language: Duolingo
ELL: -- |

	Math: 5 Rich Math Activities That Elementary School Teachers Can Use Anytime Coolmath Games **Social Studies:** Explore the World **Music:** Yousician: (Limited Free) interactive music learning app that helps users learn to play various instruments, including guitar, piano, bass, ukulele, and singing. Flowkey: Designed to help learners of all levels, from beginners to advanced players, improve their piano skills. **PE:** **GoNoodle: V**ariety of movement and mindfulness videos designed to get kids moving. Adventure to Fitness: Combines physical activity with educational adventures. *Submit Assignment parts 1, 2 and 3 to the Module 4 Dropbox*
Assessment	Assignments will be assessed using the course rubric

Module 5 – Cools Tools in Action PD Presentation	
Objective	Prepare a presentation on the topics and tools learned in Modules 1, 2, 3 and 4. ISTE Standards for Instructional Technology Coaches.
Assignment and Needed Materials	**There is one assignment to complete in this module.** **Assignment**: Advocate and encourage teachers at a district-wide PD session, to look at tools and topics for their use to create a learner-driven environment. Emphasize the benefits to teaching and student learning. Give some examples. Reference in your presentation, tools selected from those covered in the course. Perhaps provide some product examples. No specific # of slides are required. Use your professional expertise and creativity to create an engaging, personalized (your figurative voice) pitch. What values can technology add to their job? Make providing an answer the goal of the presentation. A couple of guidelines: - Avoid using lengthy video clips. No more than 2 short videos. Explain their purpose. This is your moment to shine and engage not random voices that are not familiar to the group. - Use of AI sources should be pointed out since the session will cover AI. Cite and explain what it provided. - Point out the goal of the project, topics that will be covered and summarize on the last slide(s). - Insert media….. *Submit Assignment to the Module 5 Dropbox if the presentation can be saved as a file to share. If a Drive/Slides project, share/notify me, giving with editing right. jherzdominincancoures@gmail.com Use the same gmail to send other links to presentation created with other tools or apps.*
Assessment	Assignments will be assessed using the course rubric

Assignment Organization:

Use the 6 Assignment Response Topics below when responding to each assignment unless otherwise indicated. Please organize your reply by the Response Topic Number (1, 2, etc.)

If you are wondering how much you need to write in order to successfully fulfill the assignment, my answer is, "Write enough but not too much." There's a middle ground that's impossible to put into measurable outcomes. If more is needed, I'll let you know. Don't be frugal though!

Assignment Response Topics:

1. Summarize the tool / topic in your own words. A short, 4-5 sentence paragraph. What does the tool offer education currently?
2. Give an example of its relevance and benefit to your teaching methods and to the management of your classroom environment. Blending this response into #3 below would allow a more comprehensive reply. Number the response 2 and 3.
3. Give a specific example of how it can be used to differentiate curriculum and benefit student learning. Consider usage to personalize, adapt to PBL, SEL, various teaching methodologies such as Blended, Student Centered, Flipped, Scenario, Visual, Collaborative, Inquiry, Literacy and Language, etc.
4. Use the tool to post a product example online (if one is assigned)
5. Tell how this tool could be specifically used with your students. If the tool just doesn't fit the needs of your students, what grade, subject or group of students might it fit?
6. Develop a conclusion on its overall value in education based on 1-5 above.

Course Reflection Forum Posting

1. As a final step in the course, you will submit (post) the equivalent of a single document to the **Course Reflection Forum**. The reflective assignment must be equivalent to at least one full page (1/2 or less margins/ single spaced paragraphs) in length.

   The Course Reflection posting should cover the following points:

   o The impact of learning about tools and techniques covered in this course have on your current educational job or possibly your future? Consider:
      - Your role as an educator
      - Curriculum delivery and online resources
      - Student centered learning – giving students voices and collaborative projects
      - How students display knowledge - What tools, software and apps can your students access? Include their personal and family tools and if you are taking advantage of their ability to use them.

   o Reflect on a few tools you've learned about or relearned that can be useful to you, students and peers. Don't cover the use of teacher management tools such as grading and assessment but only the tools that are used directly with or by students such as covered in this course.

   o Are you aware of ISTE Standards for teachers and students? If not, take a look and give some feedback on how the standards could help guide your use of technology.

   o Final thoughts

2. Post a response to another student's Course Reflection posting.

END OF COURSE ASSIGNMENTS!

- Choose the method to complete the assignment. Select from word processing (Shared Drive or attached Word); presentation links to, or attached when possible (PP, Slides, Powtoon, Prezi, Canva, etc); audio,(Podcast), video (i.e. We Video, Canva), Screencasts; Blog (Blogger); infographics. No IA generated work.

- *Drive Use:* Share and give commenting rights to jherzdominicancourses@gmail.com

- *Online Presentations:* Share links to online presentations to jherzdominicancourses@gmail.com

Course Assessment Rubric:

EXCELLENT Meets or Exceeds Course Objectives: A to A-	ACCEPTABLE Majority of Work Meets Course Objectives; B+ to B-	NOT ACCEPTABLE Needs Considerable Improvement: Resubmit Work Suggested: C or below
All work submitted reflects in-depth understanding of course objectives.	Most work submitted reflects in-depth understanding of course objectives.	Work shows little or no in-depth understanding of course objectives.
Assignment responses show evidence of new knowledge evidenced by thoughtful, detailed and accurate assignment responses.	Most assignment responses show evidence of new knowledge evidenced by thoughtful, detailed and accurate assignment responses.	Responses show little to no evidence of new knowledge as evidenced by lack of thoughtful, detailed and accurate assignment responses.
Work submitted was organized and clearly articulated. The student carefully followed all assignment instructions. The instructor did not have to provide continual assignment clarification or request revisions.	Most work submitted was organized and clearly articulated. The student carefully followed all assignment instructions. The instructor had to provide continual assignment clarification or ask for revisions.	Work submitted was not organized or not clearly articulated. The instructor had to provide constant clarification and ask for continued revisions.
Assignment content and required projects were original.	Assignment content and required projects were original.	Evidence that not all assignment content and required projects were original.
Work is free of spelling and/or grammatical errors.	Work has few spelling and/or grammatical errors.	Work has numerous spelling and/or grammatical errors.