COURSE TITLE: Integrating Artificial Intelligence (AI) into your classroom: A Hands-On Guide

WA CLOCK HRS: 50 OREGON PDUs: 50 PENNSYLVANIA ACT 48: 50

NO. OF CREDITS: 5 QUARTER CREDITS

[semester equivalent = 3.33 credits]

INSTRUCTOR: Michael Boll

michael@bollnet.com

COURSE DESCRIPTION:

Do you ever feel like you're living in a sci-fi movie? With artificial intelligence (AI) in education, you might as well be! But don't worry; I am here to help you navigate this brave new world and leverage AI's transformative magic.

In this practical, hands-on course, I'll show you how to harness the power of AI to engage your students and transform their learning experience. I'll introduce you to AI tools and techniques that help you teach everything from math to rap battles (yes, you read that right).

It does not stop there! Be ready to cover topics like how it all works, how to master communicating with AI, so it serves your needs, using AI in your teaching situation, and much, much more. So, what are you waiting for? Join us in this AI revolution, and let's make teaching and learning a little more...robotic.

This course is appropriate for teachers K-12.

LEARNING OUTCOMES: Upon completion of this course, participants will have:

- 1. Understand the basics of what AI is and how it works.
- 2. Set up your own Al account.
- 3. Learn to communicate with AI through prompts and parameters.
- 4. Build a model of ways to use AI in your classroom
- Develope a summary of the world of AI and its impact on the future of learning for teachers and students.

COURSE REQUIREMENTS:

Completion of all specified assignments is required for issuance of hours or credit. The Heritage Institute does not award partial credit.

HOURS EARNED:

Completing the basic assignments (Section A. Information Acquisition) for this course automatically earns participants their choice of CEUs (Continuing Education Units), Washington State Clock Hours, Oregon PDUs, or Pennsylvania ACT 48 Hours. The Heritage Institute offers CEUs and is an approved provider of Washington State Clock Hours, Oregon PDUs, and Pennsylvania ACT 48 Hours.

UNIVERSITY QUARTER CREDIT INFORMATION

REQUIREMENTS FOR UNIVERSITY QUARTER CREDIT

Continuing Education Quarter credits are awarded by Antioch University Seattle (AUS). AUS requires 75% or better for credit at the 400 level and 85% or better to issue credit at the 500 level. These criteria refer both to the amount and quality of work submitted.

- 1. Completion of Information Acquisition assignments 30%
- 2. Completion of Learning Application assignments 40%
- 3. Completion of Integration Paper assignment 30%

CREDIT/NO CREDIT (No Letter Grades or Numeric Equivalents on Transcripts)

Antioch University Seattle (AUS) Continuing Education Quarter credit is offered on a Credit/No Credit basis; neither letter grades nor numeric equivalents are on a transcript. 400 level credit is equal to a "C" or better, 500 level credit is equal to a "B" or better. This information is on the back of the transcript.

AUS Continuing Education quarter credits may or may not be accepted into degree programs. Prior to registering, determine with your district personnel, department head, or state education office the acceptability of these credits for your purpose.

ADDITIONAL COURSE INFORMATION

REQUIRED TEXT

None. All reading is online.

None. All reading is online.

MATERIALS FEE

A Chat GPT account from Open AI is free. A paid version is available too, but not required.

ASSIGNMENTS REQUIRED FOR HOURS OR UNIVERSITY QUARTER CREDIT

A. INFORMATION ACQUISITION

Assignments done in a course forum will show responses from all educators who have or are taking the course independently. Feel free to read and respond to others' comments.

Group participants can only view and respond to their group members in the Forum.

Assignment #1: Who Are You?

Getting to know each other better is an excellent way to start this course, and it helps us all to understand our individual situations and teaching expectations.

Take a few moments and kindly complete a 250+ word description about yourself.

Possible items to include:

- Where and what do you teach?
- What are you hoping to gain from this course? I especially enjoy reading your thoughts here as we don't really know where Artificial Intelligence is going, and there is a lot of fear and excitement around it.
- What do you think your future robot might look like and/or do for you?
- Any other personal details of interest that would be nice to share.

Resources

See what ChatGPT (AI) wrote about me when I asked it to "Write an introduction for Michael Boll." Much of it was not accurate, but it sure made me sound awesome!

Assignment #2: An Introduction to Artificial Intelligence Overview:

Oh my, what is this Artificial intelligence (AI), and how should we view it? Love it? Fear it? At this point, it reminds me of how we saw the Internet when it came online. I was excited that I could go to a website, input my preferred burrito ingredients, and have my personality issues fully diagnosed. I had no clue that one day I would be 33,000 feet in the air, working on a powerful laptop, typing up this paragraph for an online course. One that included video screencasts I shot and edited from the comfort of my own home.

As educators, we must prepare for the potential impact of AI on our classrooms and students. There are already apps available that use AI to enhance one's appearance with the simple touch of a button. (Yikes!) The possibilities are endless, and it's vital that we stay ahead of the curve to ensure that our students are prepared for a future that includes AI technology.

Assignment

Watch my video: An Introduction to Artificial Intelligence

https://www.youtube.com/embed/_fH6V6Ttn30

Write a 250-word or more response to a minimum of three + prompts below.

- a. How are you feeling?
- b. Is Al already part of your school life?
- How is your school handling AI? Giving any guidance? Shutting it down? (That won't work, by the way).
- d. How will this change education for teachers? How about for students?
- e. When you talk to other teachers, how do they view it? Are they some combination of unaware, fearful, or excited?
- f. Where do you hope/think you will be on the AI wave? Riding it in and enjoying the positive aspects of it and understanding the negative? Or on the receiving end as the AI wave smashes down.
- g. What are the downsides of Al? Our students are already stressed out enough. Will Al compound it? Or will it serve as a good friend for emotional regulation?

Resources

Checkout this video demonstrating the power of Google's Gemni Al system

https://www.youtube.com/embed/UIZAiXYceBI?si=SxTsICCERH2MgUcF

- If you have time, watch the movie Her. It is about an AI robot that develops a relationship with a lonely man who lost his wife so applicable today.
- Chat GPT and the End of Writing with David Pogue (Audio Podcast). I loved this podcast when I was beginning to learn about AI. So good!
- The Future of AI with Preet (Audio Podcast)
- · Course Flipboard

Assignment #3: Set Up Your Al Account Overview

Here we go! If you have not already, time to sign up for your account! This is where the fun, and I do mean fun, begins. I currently recommend ChatGPT for your AI needs. Most services use ChatGPT as their source for AI. This includes Bing, Microsoft's search engine. However, if you have a preferred AI provider, no worries, use that one.

Other services include Google Bard and Claude AI. They are quickly becoming very strong. So maybe have multiple accounts and test your prompts on a few of them.

Now since this is not my first time at the rodeo, I know that now, if you have not already, you might be using AI to "help" you with the writing prompts in this course. I actually encourage that! I used AI to help me with a ton of this course. Since I was raised without AI, I still know how to write, but I find AI super helpful in giving me suggestions. We will learn more about this in upcoming lessons.

Assignment

- Watch my video: Setting Up Your Chat GPT Account. https://www.youtube.com/embed/temHiQiobnc
- 2. Head over to chat.openai.com and/or other services and set up your account. There is a paid version as well. So far, I am happy with the free version. It is a little slower, and I will likely be last in line for the upgrades that come along.
- 3. Play! Have a blast. Need some ideas? Check out this list.
- 4. In 250 words or more, respond to a minimum of three (3) of the prompts below:
- a. Explain your initial thoughts out of the gate. Easy to use? Confusing? A feeling of "How am I supposed to use this thing?
- b. How did you use AI? Where do you find it helpful? Where is it lacking?
- c. After using AI, how would you describe it to someone you know, such as a colleague, a friend, or a family member?
- d. Any other thoughts or ideas? Please share them.
- 5. Take your writing and drop it into your Al platform with this prompt: Improve this writing: (Then paste in your writing).

- 6. Modify your written work to add some or all of the suggestions.
- 7. Lastly, using your final draft, use this prompt: Come up with ten funny titles for this writing: (Paste in your writing)
- 8. Add your favorite title to the top of what you wrote and submit.

Resources

- List of 100 plus ways to use AI (Same as above)
- Alfinder.info
- Course Flipboard

Assignment #4: A Guide to Creating Effective Prompts & Parameters, Pt 1 Overview

We now have an AI account; maybe we have done a few tricks, but after the initial excitement is over, what do we do with it? Well, we need to learn to communicate with AI, and to do that, we have to understand how to craft effective prompts.

Prompts are basically questions or orders we write or say to our Al system. Prompts often contain parameters as well, and parameters add rules to the prompt. For example, in the real world, you might tell someone (prompt) to go inside the house and grab your shoes. You might add some details (parameters) by telling them to grab the small pair of shoes next to the fireplace.

This exercise introduces us to the basics of prompts and parameters, and we will get more detailed in the next lesson.

Assignment

- Watch my video: Creating Effective Prompts, Part one. https://www.youtube.com/embed/JKTwsAV7kZs
- 2. Write up a few of your own prompts. Be sure to try a few that kick out long responses. For example, "Write a 500-word explanation of why Martians are unlikely to invade the earth soon."
- 3. Use the "As a" prompt to change the tone of the response. For example, "Write it as Dr. Suess."
- 4. Add a parameter to the same or different response to change the explanation's depth. For example, "Explain it for a grade three student."
- 5. In 250 words or more, respond to the following:
- a. What prompts did you try?
- b. What "As a" ideas did you try?
- c. What additional parameters did you add to help change the depth of the information?
- d. How would you use prompts and parameters in your work? Just a few ideas are fine, as more ideas will drop into your brain later on in the course.

Resources

- List of 100 plus ways to use AI
- Course Flipboard

Assignment #5: A Guide to Creating Effective Prompts & Parameters, Pt 2 Overview

Artificial intelligence (AI) is not limited to one-way conversations that rely on super-detailed prompts loaded with parameters. In fact, AI can engage in two-way conversations, which opens up exciting possibilities for classroom activities.

Imagine having a rap battle with an AI or asking it to quiz your students on a topic they're studying. Even better, what if AI asked your students questions, prompting them to think creatively and outside the box? The possibilities are endless.

For instance, you could ask AI to generate questions about a student, teacher, or even the entire class. Then, you could challenge your students to write a story based on the answers. This not only makes learning fun and engaging but also encourages critical thinking and creativity.

Assignment

- Watch my video: Creating Effective Prompts, Part Two. https://www.youtube.com/embed/fXORb9qtRAo
- 2. Pick one of the following:
- a. Write a prompt for your AI platform and add a very specific and detailed list

- of parameters. Something similar to the college essay example in the video.
- b. Set up a two-way prompt where AI asks you questions and writes a story. Something similar to my example in the video.
 - i. Sample prompt for help: "Ask five questions about me. Make sure the first question is my name. Ask me one at a time, and wait for me to answer each one. After I have responded to all questions, write a 400-word story based on my answers. Make the story a little silly."
 - ii. Modify this prompt as needed, or come up with your own great idea.
- 3. In 250 words or more, respond to the prompts below:
 - a. What did you decide to ask your AI platform? Long detailed prompt with parameters or a two-way conversation?
 - b. How did it go? Was it accurate and interesting? Or did it make mistakes?
 - c. Feel free to paste in your prompt(s) and the result. I enjoy reading it.

Resources

- · List of 100 plus ways to use AI
- Course Flipboard

Assignment #6: Al As A Teaching Resource

Overview

Alright, folks. You're officially Al experts! Or at least, you're above average. Congrats! Now, it's time to put that knowledge to good use.

I get it - at first, Al can seem intimidating. It's like the cool kid in school who's smart and popular, but you're not sure how to approach them. But don't worry; we've got you covered.

In this lesson, we're going to brainstorm some awesome ideas for using AI in your teaching practice. Whether you're a math teacher, a history buff, or a science nerd, there's something here for everyone.

So, put on your thinking caps, grab a cup of coffee (or tea, if that's your thing), and let's get to work. By the end of this lesson, you'll have a model that's tailored to your specific situation. And who knows, you might just revolutionize the way we teach with Al.

Full Disclosure: The above overview is a complete copy and paste of an improved version of my first draft using AI. I like the humor and voice in it!

Assignment

- 1. Watch my video: Al as a Teaching Resource. It will explain how to build your own model of resources. https://www.youtube.com/embed/kiXza8MsfbY
- 2. Open the model of resources spreadsheet and begin to build your own model. A Google Account is required, let me know (michael@bollnet.com) if that causes any difficulties for you, and I can send an alternative.
- 3. Add at least five ways you can use AI as a resource.
- 4. In 250 words or more, reflect on the five ideas you included.
 - a. How will it help you with your teaching situation, and what additional areas or ideas might you explore?

Resources

- · List of 100 plus ways to use AI
- Course Flipboard

Assignment #7: Explore Resources About Al

Overview

The world of Artificial Intelligence is super fluid and changing all the time. To keep up, I have a set of resources to help me to help you find some interesting articles and other resources.

- 1. Canva is, at least in my opinion, the most awesome graphic-building program out there for teachers, and it now has Al built into it!
 - 1. Explore the AI options here. Canva calls it "Magic" instead of AI.
 - 2. If you are new to Canva, check out my HOL Canva course. You can access all the resources for free by clicking on the Syllabus tab.
- 2. Al Finder (AlFinder.info) is a great resource with over 1000 specific apps that use Al to help generate videos, writing sessions,

- images, and a lot more. These sites use an API (remember that?) where they tap into a giant AI model such as OpenAI. They then use that power to help you with very specific needs. One day there will be one for lesson planning and more!
- 3. Consider using Perplexity AI as your default search engine. Perplexity uses AI to summarize your "Google" search and then shows the links where it found the information. Very cool!
- 4. 100-plus ways to use Artificial Intelligence in your classroom. This is a Google Sheet brain dump of ideas I have as well as ones I find in my research. Maybe one day it will hit 1000 plus!
- 5. Curated Flipboard of interesting Al articles. If you are not familiar with Flipboard, it is a nice visual way to share articles.

Assignment

- Review the resources above. Try out a few more ideas from the 100-plus list, read a ton of articles on Flipboard, and explore some apps found at Al Finder.
- 2. In 250 words or more, focus on a couple of the things you found in your exploration of the resources.
 - a. What stood out for you?
 - b. What seemed rather pointless?
 - c. What informed your understanding of AI the best?

Resources

• Want a quick reminder of what an API is? Watch a few minutes of this video.

Assignment #8: Using AI in Your Own Life Overview

Like the Internet, AI is and will become a regular part of our personal life. As systems like Siri and Alexa improve and add AI, we will be able to verbally prompt them to plan vacations, menus, shopping lists, etc. Rather than search the web, these devices, and others, will use their large language models to provide helpful (most of the time) guidance.

Assignment

- 1. Listen to the Hardfork Podcast in the resource section below. It is set about halfway in, where listeners share their interesting use cases for AI.
- 2. In 250 words or more, reflect on how you are or plan to use AI in your own life.
 - a. Are you using it now?
 - b. How do you hope to use it?
 - c. How will it change your world? For example, will you have more free time? Or will it be a case of, oh, now I have more free time to work?

Resources

· Hardfork Podcast starting at 21:54

Assignment #9: Share with the Community Overview

With AI and education changing so quickly, sharing your learnings, experiences, and successes with others in this community is super helpful. As this course matures, we will end up with a nice set of shared ideas and experiences. Thank you!

Assignment

- Brainstorm the best uses of Al you have come up with so far and/or hope to use in your situation soon.
- 2. Build a list of the prompts and parameters you found successful.
- 3. Complete this online form. This will be shared as a resource in the course for others. In fact, find it here!

ADDITIONAL ASSIGNMENTS REQUIRED FOR UNIVERSITY QUARTER CREDIT

B. LEARNING APPLICATION

In this section, you will apply your learning to your professional situation. This course assumes that most participants are classroom teachers who have access to students. If you do not have a classroom available to you, please contact the instructor for course modifications. Assignments done in a course forum will show responses from all educators who have or are taking the course



independently. ?Feel free to read and respond to others' comments. Group participants can only view and respond to their group

Assignment #10: From Theory to Practice: Using AI to Enhance Your Teaching Workflow Overview

As the title suggests, this assignment asks you to bring AI into your daily workflow. There are so many ways to do this, and new ones are being added all the time. You now understand how to use AI, have built a model of ways it interests you, and have browsed a variety of resources.

The key is to find AI ideas that fit your work interests and goals. So let's mix things up and embrace the AI revolution! Who knows, maybe someday we'll be taking coffee breaks with our robot friends. (Full disclosure: AI-assisted in the writing of this last paragraph)

Assignment

- 1. Review your resource model from assignment six.
- 2. Decide on at least five ways to use AI in your work situation.
 - a. Document them in your resource model
 - b. Use the domains and ideas from the 100-plus ways spreadsheet.
- 3. In 750 words or more, reflect on the experience
 - a. What five or more ways did you pick?
 - b. How do you anticipate this will help you in your work?
 - c. How much extra work will it take in the beginning before you have a sustainable system?
 - d. What initial thoughts do you have on the future of education and the changes AI may bring?

Assignment #11: Al & The Future of Education: Robots are Coming to Save (or Take Over) Your Job! Overview

Satya Nadella, CEO of Microsoft, once said, "The most exciting thing about AI is not its ability to perform tasks, but its ability to help humans think better." While this is certainly a positive viewpoint, it's important to consider both the potential benefits and downsides of AI in education.

One important question to ask is how students will use AI in their learning. Will schools embrace it or ban it? And how might AI impact students' abilities to learn from helpful adults, both in and outside the classroom? As we continue to explore the role of AI in education, it's important to approach the technology with an open mind and consider all of its potential implications.

Below is Al's version of my writing above. I did not tell it to be funny or sarcastic; it just did that. Oops!

Let's talk about Al, baby! Satya Nadella, the big boss over at Microsoft, once said that Al's most exciting aspect isn't its ability to perform tasks but rather its potential to enhance human thinking. And while that's certainly an optimistic view, we can't ignore the potential downsides of Al in education.

One question we need to consider is how students will use AI in their learning. Will it be widely adopted or strictly prohibited? And what impact might AI have on students' interactions with their teachers and mentors? As we dive deeper into the role of AI in education, we need to approach the technology with both excitement and caution and consider all of its potential implications.

So, buckle up, buttercup. We're about to take a wild ride through the world of AI and education. Get ready to explore the possibilities, and remember to keep an open mind.

Assignment

Watch my video: The Future of Artificial Intelligence.

https://www.youtube.com/embed/JafUu0eGni8

In 750 words or more, reflect on AI and its potential impact on the future of education.

Choose only two (2) of the options below.

Option A)

How will Al impact students and their learning?

- i. Will they benefit from an incredible source of help and personalized learning?
- ii. Will Al remove the incentive to learn to read and write well? Goodbye to critical thinking skills?

AND/OR

Option B)

How will Al impact the career and day-to-day teaching experience for teachers?

- i. Will teachers be expected to change how they teach? How will they present information, and how will a typical school day be conducted?
- ii. Will the education establishment drag its feet with the changes and focus more on banning AI than embracing it?
- iii. Will the need for connection still make the role of a teacher as relevant as ever?

AND/OR

Option C)

How will Al impact both teachers and students?

1. Combine some of the prompts from options A and B.

Be sure to run your response through AI and ask for suggestions to improve your writing. Add as many parameters as needed.

Resources

Use your AI platform (Chat GPT, Bing, Etc.) to help you find resources. For example, I used the prompt "Find helpful articles on AI and the future of education."

Assignment #12: (500 Level ONLY)

Applying Your Learning to Professional Development or Student Education (500 Level) Overview

We have talked extensively about the impact artificial intelligence will have on education and society. Your students and colleagues may not be as aware as you are now of the details of AI and its trajectory.

This is your chance to help them.

Assignment

Complete two (2) of the following options.

Option A)

Create a 30-minute or longer professional development presentation. Something worthy of presenting in a professional setting such as a workshop, team, or school meeting.

It should relate to some (not all) of the themes discussed in this course, such as:

- A relatable explanation of Al and how it works.
- Communicating with AI through the use of prompts and parameters.
- Using AI as a teaching resource.
- Al and the future of education (and life).
- The morality of using Al. For example, if Al responds to my emails, is that ok?
- Al and special education.
- Any other topic of personal interest to you.

AND/OR

Option B)

Create a 30-minute or longer presentation aimed at a student audience.

It should relate to some (not all) of the themes discussed in this course such as:

- · A relatable explanation of AI and how it works
- Communicating with Al through the use of prompts and parameters
- · Al and the future of education for students
- If a student uses AI with their homework, is it cheating?
- The use of AI in social media.

Resource: Washington Post article "Snapchat tried to make a safe AI. It chats with me about booze and sex."

AND/OR

Option C)

Create another assignment of your own design with the instructor's prior approval.

C. INTEGRATION PAPER

Assignment #13: (Required for 400 and 500 Level)

SELF REFLECTION & INTEGRATION PAPER

(Please do not write this paper until you've completed all of your other assignments)

Write a 400-500 word Integration Paper answering these 5 questions:

- 1. What did you learn vs. what you expected to learn from this course?
- 2. What aspects of the course were most helpful and why?
- 3. What further knowledge and skills in this general area do you feel you need?
- 4. How, when and where will you use what you have learned?
- 5. How and with what other school or community members might you share what you learned?

INSTRUCTOR COMMENTS ON YOUR WORK:

Instructors will comment on each assignment. If you do not hear from the instructor within a few days of posting your assignment, please get in touch with them immediately.

QUALIFICATIONS FOR TEACHING THIS COURSE:

Michael Boll is an Apple Distinguished Educator and former Technology Coach at international schools in China and Thailand.

Now based in the United States, Michael is an enthusiastic instructional designer and presenter. He works to make his courses and presentations information-packed, slightly provocative, and fun.

Michael has an adult son with profound autism and is keenly interested in the special needs community and its population of diverse learners.

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