Educator’s multimedia studio

Matthew X. Curinga

Aaron Chia Yuan Hung

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**Learning Analytics 0850-723, Fall 2020**

**Keywords:** learning analytics, data science, educational data mining, edm, tableau software, data visualization

**Description:** In this course we study approaches to understanding data generated by and from learners, and methods for using this data to improve learning experiences and outcomes. We learn how to gather and mine educational data as well as tools and techniques for analyzing and visualizing this data.

Learning analytics is the measurement, collection, analysis, and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs.  
*— 1st International Conference on Learning Analytics*

# Course Information

* **Course Website**: <https://moodle.adelphi.edu/course/view.php?id=114510>
* **Instructors**
  + Matt Curinga <mcuringa@adelphi.edu
  + Aaron Hung [hung@adelphi.edu](mailto:hung@adelphi.edu)
* **Class meetings:**: Online (Tuesday - Tuesday)
* **Office hours:**: *office hours by appointment*

# Course Communications

This is a *fully online course*. There is no set class time for video chat or live lectures. However, we will be following a weekly format. You are welcome to read and work ahead, but we are a learning community and will be discussing the course materials both formally (on Moodle) and informally each week. This course begins on Tuesday, May 28 and ends on Sunday, August 11. The course is organized into weekly modules that will run on a Tuesday-to-Monday schedule.

Participants in this course must actively participate in our suite of online communications tools, including Slack (<https://auedtech.slack.com>), Adelphi email, and the course website.

You *must* check your Adelphi email and the #learninganalytics channel on Slack **at least once a day**. It is highly recommended that you install the Slack mobile client and an email client on your mobile phone so that you receive “push notifications” of course announcements.

The best place to post general course questions and any content-related questions is the `#learninganalytics Slack channel. The instructor and course assistant, as well as other students and alums monitor this channel and often provide immediate support. You are encouraged to contact the instructors at any time via email or direct message on Slack.

**Online tools:**

* *Moodle:* will be used to post the syllabus and links to weekly readings, videos, and discussions.
* *Slack:* will be our main channel for online communications. Please Join our Slack team with your Adelphi email. If you run into trouble or have a question, post it here to our channel, `#learninganalytics, or send a message to @mxc or @aaronhung. During the weeks of the class, we recommend running the Slack app for you phone.
* *mail.adelphi.edu email:* we will use your official adelphi student email for class email communications as well as the associated google account for video/audio chats and calendar events. Please check this email regularly.

# Course Goals

Students will be able to: - explain the purpose, usage and limitations of learning analytics - explain the ethical implications of using learning analytics - explain different formats of raw data - prepare raw data for analysis - use data mining and business intelligent techniques to spot trends in data and implement continuous improvement - use digital tools for visualizing and reporting numerical information

# Required Texts, Materials, and Expenses

All course readings and videos will be made available on Moodle or are openly available online. We will be using a free academic version of Tableau software. There are no expected costs associated with this course.

# Online Resources

There are many online resources for data analytics and working with Tableau Specifically. If you get stuck or want to dig deeper, you might want to start here.

* [Cleaning, Transforming and Prepping Your Data With Tableau Prep](https://www.lynda.com/Tableau-tutorials/Cleaning-Transforming-Prepping-Your-Data-Tableau-Prep/772331-2.html) Lynda.com course, 2h 28m
* [Tableau Learning Tableau’s](https://www.tableau.com/learn) free online courses and videos