INSTRUCTIONAL DESIGN & TECHNOLOGY

Weekly Activities and Readings

Feel free to download and use the following checklist to assist with completing all readings, discussions and course activities.

Module 1: Learning Evolution
- Readings & Multimedia:
    - Review Syllabus
    - Review Signature Assignment
    - Online course pedagogy and the constructivist learning model
      http://dx.doi.org/10.3998/jsais.11880084.0001.104
    - Learning design: Reflections upon the current landscape
      https://journal.alt.ac.uk/index.php/rlt/article/view/1364
    - Read at least 2 of the following
        - Learning Progressions: Road Maps for 21st-Century Students—and Teachers
          https://ssir.org/articles/entry/learning_progressions_road_maps_for_21st_century_studentsand_teachers
        - What a 21st-Century Education Looks Like
          http://www.teachhub.com/teaching-strategies-what-21st-century-educator-looks
        - Instructional Design & Learning Theory
          http://www.csudh.edu/dearhabermas/lrnthry01bk.htm

- Discussion
    - Discussion 1: Introduction and Personal Learning Philosophy

Module 2: ADDIE Design Model
- Readings & Multimedia:
    - ADDIE video overview
    - Designing for Engagement: Using the ADDIE Model to Integrate High-Impact Practices into an Online Information Literacy Course http://files.eric.ed.gov/fulltext/EJ1125456.pdf
    - The ADDIE Model
    https://opentextbc.ca/teachinginadigitalage/chapter/6-5-the-addie-model
    - Creating a Training Program Using the ADDIE Model
    http://connect.ala.org/files/45988/free_learning_handouts_pdf_99152.pdf
    - Instructional Design: ADDIE Model
    https://www.uwb.edu/learningtech/faculty-resources/instructional-design/addie

- Activity
    - Discussion 2: Personal ADDIE Model Mindmap

Module 3: Dick and Carey Design Model
- Readings & Multimedia:
    - Dick and Carey Video overview
    - Dick and Carey Design Model
    https://id-models.wikispaces.com/Dick+and+Carey+Design+Model
    - R*eview at least 2 of the following*
        - The Usage of E-Learning Model to Optimize Learning System In Higher Education by Using Dick and Carey Design Approach
        http://e-journal.unair.ac.id/index.php/JISEBI/article/view/1457
        - An Axiomatic Approach to Instructional System Design Based on Dick and Carey
        https://books.google.com/books?hl=en&lr=&id=6njqDQAAQBAJ&oi=fnd&pg=PA33&dq=dick+and+carey&ots=TTXte-0SKw&sig=NRijy2Srir__iv3Wn_qJ_-DrluI#v=onepage&q&f=false
        - Dick and Carey's Model
        http://www.personal.psu.edu/wxh139/Dick_Carey.htm
        - Learning Progressions: Road Maps for 21st-Century Students—and Teachers
        https://ssir.org/articles/entry/learning_progressions_road_maps_for_21st_century_studentsand_teachers
        - Instructional Design & Learning Theory
        http://www.csudh.edu/dearhabermas/lrnthry01bk.htm
- Activity
    - Dick and Carey Podcast

Module 4: Understanding by Design
- Readings & Multimedia:
    - Understanding by Design, Moodle, and Blended Learning: A Secondary School Case Study
    http://jolt.merlot.org/vol11no1/Florian_0315.pdf

    - Understanding by Design Framework
    http://www.ascd.org/ASCD/pdf/siteASCD/publications/UbD_WhitePaper0312.pdf

    - *Review at least 2 of the following*
        - Understanding by Design in a Nutshell
        https://swcarpentry.github.io/instructor-training/files/papers/wiggins-mctighe-ubd-nutshell.pdf
        - Overview of Understanding by Design and the Design Template
        http://www.grantwiggins.org/documents/UbDQuikvue1005.pdf
        - Understanding By Design: Complete Collection
        http://digitalcommons.trinity.edu/educ_understandings

        - Understanding By Design
        http://ecosensing.org/wp-content/uploads/2015/11/Understanding-by-Design-Expanded-2nd-Edition.pdf
- Activity
    - Complete Understanding by Design template

Module 5: Rapid eLearning Design
- Readings & Multimedia:
    - Rapid eLearning Advantages video
    - Rapid eLearning Disadvantages video
    - Interactive materials development using the rapid e-learning method
    http://oasis.col.org/handle/11599/2616
    - *Review at least 2 of the following*
        - How Rapid eLearning Development Provides Additional Value to an eLearning Project
        https://elearningindustry.com/how-rapid-elearning-development-provides-additional-value-to-an-elearning-project
        - Rapid E-Learning and Desktop Virtualization In Education
        http://www.academia.edu/9724436/Rapid_E-Learning_And_Desktop_Virtualization_In_Education
        - Becoming a Rapid E-Learning Pro
        edu.net.vn/media/p/435025/download.aspx

- Activity
    - Rapid Resolution document

Module 6: Instructional Systems Development

- Readings & Multimedia:
    - ISD podcast
    - Instructional Design in Higher Education
      http://intentionalfutures.com/reports/instructional_design/files/Instructional%20Design%20in%20Higher%20Education%20Report.pdf
    - *Review at least 2 of the following*
        - What is ISD?
          http://www.hpsi.bz/HPSI_ISD_article.html
        - ISD -- A Systems Approach to Training
          https://www.lions.odu.edu/~dnethert/Courses/oted400/isd.pdf

        - Designing Instructional Systems
          https://isd-resource-space.wikispaces.com/file/view/Designing+Instructional+Systems.pdf
- Activity
    - Career Industry Inventory Survey

Module 7: Learning Objectives

- Readings & Multimedia:
    - Blooms Taxonomy video
    - Understanding Learning Objectives video
    - *Review at least 2 of the following*
        - Writing Learning Objectives
          http://tlc.zmml.uni-bremen.de/resource_files/resources/191/Writing_Learning_Objectives.pdf
        - Bloom's Taxonomy
          http://iacbe.org/pdf/blooms-taxonomy.pdf
        - Guidelines for Writing Learning Objectives
          http://www.aafp.org/dam/AAFP/documents/cme/faculty_development/LearningObjectivesGuidelines.pdf
        - Setting Meaningful and Measurable Learning Objectives: The importance of goals
          https://www.efrontlearning.com/blog/2017/05/how-set-measurable-learning-objectives-goals.html

- Activity
    - Write appropriate goals and learning objectives

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Module 8: Adaptive Learning
- Readings & Multimedia:
  - How can artificial intelligence be applied to learning? video
  - What is adaptive learning? video
  - Adaptive learning scales one-to-one mastery learning video
  - Learning science drives MHE adaptive video
  - Mastery meets personalization and scale video
  - What are the learning science theories embedded in the algorithms? video
  - Watch: "What is the Theory of Deliberate Practice?" Part A video
  - Watch: "What is the Theory of Deliberate Practice?" Part B video
  - What is the Ebbinghaus Forgetting Curve? Video
  - How does adaptive learning benefit different stakeholders across the education lifecycle? Video
  - What are the benefits of adaptive for corporate learning? video
  - Applying the Science of Learning to Adaptive Technology video
  - Read "What is Adaptive Learning Anyway?
  - Read: Learning to Adapt 2.0: The Evolution of Adaptive Learning in Higher Education (Tyton)
  - Read: "Predictive Analytics Primer" (HBR)
  - Read: "Promise and Peril of Predictive Analytics in Higher Education"
  - Read: Adaptive Learning Technology Insights (McGraw-Hill Education)Read: Adaptive Learning: The Best Approaches We've Seen So Far
  - Read: What is the Difference Between Artificial Intelligence and Machine Learning
  - Read: Adaptive Learning Software is Replacing Textbooks and Upending Education

- Discussion
  - Power of Adaptive Learning
- Supplemental Readings *(not required)*
  - 7 Things You Should Know About Adaptive Learning
    https://library.educause.edu/resources/2017/1/7-things-you-should-know-about-adaptive-learning
  - White Paper: Adaptive Learning Systems
    https://pdfs.semanticscholar.org/4e57/2108fa1591d21d980a6efe78673edc48c652.pdf
  - The Future of Learning: Personalized, Adaptive, and Competency-Based
    http://www.gettingsmart.com/wp-content/uploads/2011/08/D1-white-paper-the-future-of-learning-personalized-adaptive-and-competency-based.pdf
  - Elements of an Adaptive Learning System
    http://apasseducation.com/wp-content/uploads/2017/06/Elements_of_an_Adaptive_Learning_System-1.pdf

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