Knowledge Framework

- **Lecture1**
  - Education
    - Education 1.0 — Lectures, rote learning, memorization
    - Education 2.0 — Internet-enabled learning
    - Education 3.0 — Knowledge-based education
    - Education 4.0 — Innovation-based education
  - Asynchronous Learning
    - Time flexibility
    - Self-paced
    - Freedom
  - Digital escape rooms — engagement, motivation, and satisfaction
  - ♥Arena Blended Connected Learning Design
    - Acquisition
    - Investigation
    - Collaboration
    - Discussion
    - Practice
    - Production
- **Instructional Design**
  - Why Design Matters?
    - ♥LMS
      - Moodle
      - VLE — virtual learning environment
    - ♥Learning Analytics — Data+Analysis+Action
  - Design for how people learn
    - ♥VARK Learning Styles
      - Visual — PPT, Excel, Visme, Prezi, Canva, Venngage, Beautiful.ai, Slidebean, Infogram, Mindly, Coggle
      - Auditory — Camtasia, Adobe Spark, iMovie, Canva, Alitu, PodBean, Spreaker Studio, Anchor, Descript
      - Reading/Writing — OpenLearn, OASIS, MERLOT , OER Commons, OpenStax College, QUBES, Open SUNY Textbooks, Lumen Learning, LibriVox,Project Gutenburg, Critical Commons
      - Kinesthetics — Mentimeter, Wooclap, Quizlet, Kahoot, Padlet, Cornell PhET Science Simulations Mission ISS, National Geographic Explore VR, Ecosphere, The Body VR, Titans of Space PLUS
    - ♥♥Michael Day — Design technology is about people first and foremost
- **Digital Curriculum Plan**
  - Digital Curriculum Plan: key factors for consideration
    - ♥Technology Acceptance Model — The theory is something like "use and satisfy"
    - Hofstede's Cultural Dimensions
      - Power Distance
      - Femininity-Masculinity
      - Short-term and Long-term Orientation
      - Uncertainty Avoidance
      - Collectivism-Individualism
      - Restraint-Indulgence
  - Digital Curriculum Plan evaluation and reflection
    - Instructional Design
      - Course opening — Assessment of learning — Interaction and community
      - Instructional resources for teaching and learning — Learner support — Technology design
      - Course evaluation — Course closing — Instructional design cycle
    - Reflection Model: Action Learning — Learning = Programme + Questioning
  - Digital Curriculum Plan: Feedforward — Future — No judgement
- **Different Types of Education**
  - Alternative Models of Curriculum and Accreditation
    - ♥Microcredentials — obtaining non-degree certification or competency in a specific area of skill or knowledge, often in smaller and shorter segments than the typical college degree—is certainly nothing new or groundbreaking.
    - DIGITAL CREDENTIAL — Credential issued and hosted digitally. Includes online diplomas, degrees, certifications, or licenses.
    - ♥DIGITAL BADGE
      - Type of digital credential.Represents achievementsof learning, skills, and/ orcompetencies. — Digital badges can provide focused goals, challenging tasks, clear standards, affirmation of performance, novelty, choice, and authenticity.
      - Achievement Goal Theory
  - Game-based Learning Design
    - Serious Game — educational game — Learner-centred
      - Vygotsky Social constructivism
      - Humanistic Approach: Abraham Maslow
    - Curriculum Design: Clothesline Method
      - Where they are/ Where they will be
      - Freedom to move the ideas
- **Digital Technology**
  - Digital entrepreneurship
    - Gartner Top Strategic Technology Trends 2023
      - Digital Immune System
      - Metaverse
      - Superapps
      - Adaptive AI
      - Applied Observability
      - Trust, Risk and Security Management
      - Industry Cloud Platforms
      - Platform Engineering
      - Wireless Value Realization
      - Sustainable technology
    - ♥Educator's digital competence
      - Professional engagement
      - Digital resources
      - Teaching and learning
      - Assessment
      - Empowering learners
      - Facilitating learners' digital competence
  - Immersive Learning Design
    - ♥Immersive Learning — VS Experiential Learning
    - immersive technology
      - Augmented Reality (AR)
      - Virtual Reality (VR)
      - Extended Reality (XR)
      - Hologram
  - Instructional design and basic programming
    - Digital Game-Based Learning(DGBL)
    - Moodle
      - HTML5 — Hyper Text Markup Language
      - PHP — Hypertext PreProcessor
      - MySQL
- **Project-based Learning Design**
  - XJTLU LMO
  - PBL — Student as Partner
  - Project orientation