Required Texts
- Digital Lighting & Rendering (2nd Ed.) Jeremy Birn
- Texturing: Concepts and Techniques (Graphics Series) Dennis Summers

Weekly Lecture, Lab, & Assigned Readings
Week 1
- Lecture: Intro; ZBrush Tools
- Lab: ZBrush Tools
- Readings: none

Week 2
- Lecture: Intro; ZBrush Tools
- Lab: ZBrush Tools
- Readings: none

Week 3
- Lecture: ZBrush Project – Rucksack (Mesh)
- Lab: ZBrush Rucksack (Mesh)
- Readings:
  o Summers Ch. 1: Visual Communication, Good Design and Aesthetics
  o Summers Ch. 2: Realism, Photorealism and When Being Convincing is Best

Week 4
- Lecture: none
- Lab: ZBrush Rucksack (Mesh)
- Readings:
  o Birn Ch. 8: The Art and Science of Color
  o Birn Ch. 10: Designing & Assigning Textures
  o Summers Ch. 3: Technical Issues: The Digital Environment and Delivery Media

Week 5
- Quiz: ZBrush
- Lecture: ZBrush Review; Color Theory for Game Artists
- Lab: Color Theory for Game Artists
- Readings
  o Birn Ch. 1: Fundamentals of Lighting Design
  o Birn Ch. 2: Lighting Basics and Good Practices
  o Summers Ch. 4: Materials: Technology and Use
  o Summers Ch. 7: Image Maps and Procedural Maps

Week 6
- Lecture: none
- Lab: Color Theory for Game Artists
- HOLIDAY: FOURTH OF JULY
- Readings:
  o Birn Ch. 3: Shadows and Occlusion
  o Birn Ch. 4: Environments & Architecture
  o Summers: Chapter 11 Mapping & Unwrapping

Week 7
- Lab: (Texture Maps: D,S, Gloss, N, O, L)
- Readings:
  o Birn Ch. 5: Lighting Creatures, Characters, and Animation
- Week 8
  - Lecture: none
  - Lab: (Texture Maps: D,S, Gloss, N, O, L)
  - Readings:
    o Birn Ch. 6: Cameras and Exposure
    o Birn Ch. 9: Shaders & Rendering Algorithms
    o Summers Ch. 8: Pulling It Together: Initial Tutorial
    o Summers Ch. 9: Light & Surfaces

Week 9
- Quiz: Unwrap + Photoshop (Texture Maps)
- Lecture: Unwrap + Photoshop (Texture Maps) Review; In-Game Lighting + Shaders
- Lab: none
- Readings:
  o Birn Ch. 11: Rendering Passes and Compositing
  o Birn Ch. 12: Production Pipelines and Professional Practices
  o Summers Ch. 10: Complex Materials
  o Summers Ch. 12: Rendering

Week 10
- Lecture: none
- Lab: In-Game Lighting + Shaders
- Readings:
  o none

Week 11
- Quiz: In-Game Lighting + Shaders
- Lecture: Final Exam Review
- Final Exam
- Lab: none
- Readings:
  o none