

## AN3D 3330 - 3D CHARACTER + PRODUCTION DESIGN

Credits: 3

In this junior-level studio course, students explore methods of developing character assets. The relationship between topology, edge-flow, anatomical structure, and mesh deformation will be explored. Upon successful completion of this course, students will have the practical knowledge to produce a character of high visual quality and technical functionality.

Prerequisites: AN3D 2320 - 3D Computer Lighting + Materials.

Course Learning Outcomes:	Exceeding	Meeting	Developing	Not meeting	Program Outcomes	New Institutional Outcomes
Design characters, clothing, and props with strong narrative impact.	Character, clothing, prop, and any additional modeling fits a single coherent clearly defined common theme and narrative.	Character, clothing, props, and any additional modeling work cohesively.	Character, clothing, props, and any additional models follow very little cohesive theme and narrative.	Character, clothing, props, and any additional models lack a sense of theme and narrative.	AN3D-2, AN3D-3, AN3D-5, AN3D-8	Critical Thinking, Design Competence, Communication Competence
Utilize color, shape, texture, and silhouette to increase impact of design work.	Textures, colors, shape, unique silhouette are all clearly adding to the design with no ambiguity.	Textures, colors, shape, readable silhouette work cohesively.	Textures, colors, shape, a silhouette applied to model, though may have a degree of ambiguity.	Textures, colors, shape, silhouette are either not applied to model, or what is applied is unclear or can be missinterpreted from intent.	AN3D-1, AN3D-2, AN3D-3, AN3D-6	Critical Thinking, Design Competence
Experiment with different visual design styles.	Character follows a clear and cohesive visual style. Edgeflow and modeling mechanics used to clearly and effectively define style elements including muscle and anatomical structure, gender, and photoreal vs. stylized caricature.	Most character elements clearly define visual style. Edgeflow and modeling mechanics effectively define style elements.	Some elements of visual style succeed, but others require further development.	Visual style not clearly defined, character lacks detail and/or modeling mechanics not effectively used to define style elements.	AN3D-2, AN3D-3, AN3D-6	Critical Thinking, Design Competence
Recognize the importance of look development (Look Dev) in an animation production pipeline.	Character, clothing, and props are all modeled with all quads polygons. Model exhibits clean and organized edge flow, allowing for clean deformation when animated.	Character, clothing, and props are all modeled few triangles. Model exhibits clean and organized edge flow, allowing for readable deformation when animated.	Character, clothing, and props contain triangles. Model exhibits a mostly organized edge flow, allowing for deformation when animated.	Character, clothing, and props contain triangles and n-gons. Model does not exhibit organized edge flow, undesired deformation occurs when animated.	AN3D-1, AN3D-2, AN3D-3, AN3D-6	Critical Thinking, Design Competence
Translate 3D design work into functional, well-developed 3D assets.	Character, clothing, and props are all UVed efficiently within the 0-1 space, and there is no stretching as model animates and deforms.	Character, clothing, and props are all UVed efficiently within the 0-1 space, and there may be visible stretching as model animates and deforms.	Character, clothing, and props are all UVed though some UV shells may be outside the 0-1 UV space. Visible stretching as model animates and deforms.	Some of the character, clothing, and props are not UVed or there is obvious visible stretching as model animates and deforms.	AN3D-1, AN3D-3, AN3D-6	Critical Thinking, Design Competence