



**NEW JERSEY INSTITUTE OF TECHNOLOGY
COLLEGE OF ARCHITECTURE AND DESIGN**

ABSTRACTION – ANIMATION, TRANSFORMATION, SOUND

COURSE: DD 284 – Video and Animation (3 credits)
PROGRAM: Digital Design/School of Art + Design
LOCATION: Second semester second year course/spring term (undergraduate)
INSTRUCTOR: Polina Zaitseva

DESCRIPTION: This course explores concepts of linear, motion-based two-dimensional media and includes motion graphics, live action filming, particle systems, digital video editing and digital video compression. Projects include the design and production of multiple projects addressing both technical and creative decision making. Overall, the semester focuses on narrative design and the craft of motion-based media.

PROJECT: The fourth of five short projects requires students to develop a one- to two-minute animated film thematically based on an audio track of the student's choice. The audio may be musical or ambient, but not spoken and not from a motion picture. The animation must be based on a non-literal approach to form (i.e. no characters, animals, or real world sets) and include geometric transitions between shapes and forms. Objectives include (1) providing students an opportunity to practice, apply, and reinforce basic compositional principles learned in courses during the freshman/foundation year; (2) providing students an opportunity to learn, practice, and apply techniques in animation and non-linear editing by using *Autodesk 3DS Max*, *Autodesk Maya*, and *Adobe After Effects* in a design context; (3) begin to apply techniques syncing sound and motion and understanding the relationship between video and audio; (4) develop facility with motion and geometric transformations. (Images shown are screen captures from animation.)

REFERENCES: (1) Birn, Jeremy. *Digital Lighting and Rendering*. (San Francisco, CA: New Riders Publishing/Peachpit Press/Pearson, 2013). (2) Demers, Owen. *Digital Painting and Texturing*. (San Francisco, CA: New Riders Publishing/Peachpit Press/Pearson, 2001). (3) Derakhshani, Dariush and Randi L. Derakhshani. *Autodesk 3ds Max 2016 Essentials*. (Hoboken, NJ: Sybex/Wiley, 2015). (4) Maschwitz, Stu. *The DV Rebel's Guide*. (5) Murch, Walter. *In the Blink of an Eye: A Perspective of Film Editing*. (5) Palamar, Todd. *Mastering Autodesk Maya 2016*. (Hoboken, NJ: Sybex/Wiley, 2015). (6). Perkins, Chad. *The After Effects Illusionist: All the Effects in One Complete Guide*. (New York, NY: Focal Press/Routledge/Taylor & Francis Group, 2012).

A subscription to *Digital Tutors* provides online access to tutorials for software use.