AHST 2331-001 (20045)

Understanding Art: Virtual Reality, Infrastructure, and Prosthetics

Dr. Charissa N. Terranova
Tuesdays and Thursdays 11:30-12:45
ATC 1.102

Office Hours: Tu-Th 1:00-2:00
and by appointment
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DESCRIPTION:
This course offers a general investigation into the hybrid realm of **art-science-technology**. The class focuses on the nature of the visual arts and architecture and the role of science and technology therein. It emphasizes the influence of scientific and technological invention on the issues and ideas that artists explore through their work and how these ideas translate into the artwork. Attention is given to the interpretation of the role of science and technology within art and architecture and how the forces together relate to and constitute society over the last two millennia.

THEMES:
There are three primary themes in this class, which are often interwoven each week. This means, most lectures have elements of each theme.

1.) Virtual Reality: In the most basic sense, "virtual reality" or VR refers to an experience that is not exactly real, but near real. Humans have been creating near real experiences in VR for several millennia. This class will study the human penchant to recreate reality virtually in drawing, painting, architecture, and through digital technology.
2.) Infrastructure: The term infrastructure refers to the basic, underlying framework or features of a system or organization. Often, these basic frameworks serve a country, city, or defined area. Examples include sewer and light systems, transportation and communication systems, power plants, and schools.
3.) Extensions of the Senses and/or Prosthetic Extensions: The great Canadian media theorist Marshall McLuhan used the word "extension" to describe various technological media, ranging from writing and moveable print-type to film and the automobile to photography and the computer. This class explores how such technological extensions function as prosthetics which enhance the capabilities of the basic human body.

ORGANIZATION:
The class is organized around theme-driven modules that include short reading assignments, lectures, in-class note-taking, films, quizzes, and discussion.

REQUIREMENTS:
Students are required to attend every class, complete all assignments, and participate with candor and verve in class. Students are allowed two unexcused absences after which each absence will result in the lowering of the final grade by a half a letter grade. Students with illnesses that require extended periods of absence are encouraged to officially withdraw from class.

ASSIGNMENTS – QUIZZES, NOTEBOOKS, EXAMS:
1.) Quizzes: Each sub-module culminates with a quiz, which is then followed by discussion. The quizzes consist of one very general question derived from the week's reading assignment(s). There are twelve quizzes in the class. Percentage of grade: 30%.
2.) Notebooks: Students are required to keep a notebook that records attendance and the notes you have taken based on lectures, in-class discussions, and/or films. Each entry should be dated and titled. The title should come from the professor's lecture title and/or the syllabus. Students are encouraged to use bullet points and titles of works of art from presentations to organize notes. Notebooks must be neatly handwritten and bound in a notebook. Students submit notebooks for a grade at the midterm on **Thursday March 2, 2017** and at the final exam, tba. Percentage of grade: 30%.
3.) Exams: There are two exams in the course, a mid-term on **Thursday March 2, 2017** and a final exam, tba. The tests consist of slide identification and short answer questions. The test material is taken from the lectures. The professor distributes a review sheet prior to each test. Percentage of grade: 40%.

READING ASSIGNMENTS:
The reading assignments are available in your textbook and at the Docutek website listed below:

1.) Textbook: Oliver Grau, *Virtual Art: From Illusion to Immersion.* Cambridge, MA: MIT Press, 2003.
2.) Docutek, an on-line resource offered by the university library
   - Docutek URL: http://utdallas.docutek.com/eres/coursepage.aspx?cid=2107
   - Docutek Password: obscura

SLIDE PRESENTATIONS:
All slide presentations are available at www.charissaterranova.com.

STANDARD UTD POLICIES:
http://www.utdallas.edu/deanofstudents/conductguidelines.html
http://provost.utdallas.edu/
http://www.charissaterranova.com/syllabi/utd-policies.htm

SCHEDULE:

VIRTUAL REALITY: FROM PREHISTORIC CAVES TO ANCIENT ROME

Tuesday January 10
Introduction and Lecture: *Techne* and Art; Virtual Reality and Prehistoric Cave Drawings
Reading Assignment
a.) Chapter 1, "Introduction," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 2-22.
b.) "Virtual Realities Then and Now: The Caves of Lascaux," http://www.transparencynow.com/lascaux.htm.

Thursday January 12
Film Screening: *Cave of Forgotten Dreams* (2010) Directed by Werner Herzog

Tuesday January 17
Quiz #1 and Discussion

Thursday January 19
Lecture: Roman Urbanism, Architecture, and Infrastructure
Reading Assignment:
a.) J. N. Hopkins, "The Cloaca Maxima and the Monumental Manipulation of Water in Archaic Rome," in K. Rinne, ed., *The Waters of Rome* (Charlottesville, VA: University of Virginia Press, 2007) 1-15. http://www3.iath.virginia.edu/waters/Journal4Hopkins.pdf

Tuesday January 24
Lecture: Roman Interiors and Paintings
Reading Assignment:
a.) Chapter 2, "Historic Spaces of Illusion," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 24-89.

Thursday January 26
Quiz #2 and Discussion

VIRTUAL REALITY AND SACRED SPACES

Tuesday January 31
Lecture: Hagia Sophia: Symbolisms and Strata of Structures and Time
Reading Assignment:
a.) Emma Wegner. "Hagia Sophia, 532–37." In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, 2000–. http://www.metmuseum.org/toah/hd/haso/hd_haso.htm (October 2004)
b.) Rowland J Mainstone. "Questioning Hagia Sophia." In *Hagia Sophia: From the Age of Justinian to the Present*. Princeton, NJ: Princeton University Press, 1988. 158-176.

Thursday February 2
Quiz #3 and Discussion

Tuesday February 7
Lecture: Mosque of Cordoba: Spoilage and Repetition of Forms
Reading Assignment:

a.) Tracy Hildebrand. "Architectural Origins of the Mosque of Cordoba," http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1174&context=nebanthro

Thursday February 9
Quiz #4 and Discussion

Tuesday February 14
Film Screening: *Cathedral* (2012) PBS Documentary narrated by David Macaulay
Reading Assignment:

a.) Jean Sorabella. "Pilgrimage in Medieval Europe." In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, 2000–. http://www.metmuseum.org/toah/hd/pilg/hd_pilg.htm (April 2011)

Thursday February 16
Quiz #5 and Discussion
Distribution of Mid-Term Exam Review

TECHNOLOGICAL EXTENSIONS AND PROSTHETICS OF VISION

Tuesday February 21
Lecture: Lenses and Prosthetic Vision in Early Modernity: Italy and England
Reading Assignment:

a.) "The Telescope," The Galileo Project, Rice University, http://galileo.rice.edu/sci/instruments/telescope.html
b.) Matthew F. Walker, "The limits of collaboration: Robert Hooke, Christopher Wren and the designing of the monument to the great fire of London," *The Royal Society Journal of the History of Science* (February 2011).

Thursday February 23
Quiz #6 and Discussion

Tuesday February 28
Mid-Term Exam Review

Thursday March 2
Mid-Term Exam

Tuesday March 7
Lecture: Painting with Grids – From Vermeer to Photorealism
Reading Assignment:

a.) Gerhard Gutruf and Hellmuth Stachel, "The Hidden Geometry in Vermeer's 'The Art of Painting'," http://www.heldermann-verlag.de/jgg/jgg14/j14h2gutr.pdf
b.) "Vermeer and the Camera Obscura," http://www.essentialvermeer.com/camera_obscura/co_one.html#.WFBlqJIuqVs

Thursday March 9
Quiz #7 and Discussion

Tuesday March 14 / Thursday March 16
Spring Break No Class

ARCHITECTURE, MOBILITY, INFRASTRUCTURE, AND VIRTUAL REALITY

Tuesday March 21
Lecture: Rolling Through the Landscape and Spatial Surrounds: Trains and Panoramas
Reading Assignment:

a.) Chapter 3, "The Panoramas of the Battle of Sedan: Obedience through Presence," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 90-139.

Thursday March 23
Quiz #8 and Discussion

Tuesday March 28
Lecture: Mobile Prosthetics: Automobiles and Highways
Reading Assignment:

a.) Paul Mason Fotsch, "The Building of a Superhighway Future at the New York World's Fair," *Cultural Critique*, no. 48 (Spring 2001) 65-97.

Thursday March 30
Quiz #9 and Discussion

Tuesday April 4
Lecture: Virtual Realities in Painting and Photography

a) Chapter 4, "Intermedia Stages of Virtual Reality in the Twentieth Century: Art as Inspiration for Evolving Media," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 140-191.

Thursday April 6
Lecture: Virtual Realities Constructed, Edited, and Made: Film and Montage

a.) David Bordwell, "The Idea of Montage in Soviet Art and Film," *Cinema Journal,* Vol. 11, No.2 (Spring, 1972) 9-17.

Tuesday April 11
Film Screening *Man with a Movie Camera* (1929) Directed by Dziga Vertov

Thursday April 13
Quiz #10 and Discussion
Distribution of Final Exam Review

VIRTUAL REALITY IN THE DIGITAL AGE

Tuesday April 18
Lecture: The Digital Image in Art
Reading Assignment:

a.) Chapter 5, "Virtual Art – Digital! The Natural Interface," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 192-211.
b.) Chapter 6, "Spaces of Knowledge," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 212-269.

Thursday April 20
Quiz #11 and Discussion

Tuesday April 25
Lecture: Telecommunications and Biology in Art
Reading Assignment:

a.) Chapter 7, "Telepresence: Art and History of An Idea," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 270-295.
b.) Chapter 8, "Evolution," Oliver Grau, *Virtual Art: From Illusion to Immersion*, 296-337.

Thursday April 27
Quiz #12, Discussion, and Final Exam Review

FINAL EXAM TBA