GRMN 150
Water Worlds: Cultural Responses to Sea Level Rise & Catastrophic Flooding
Professor Simon Richter

Course Description: As a result of climate change, the world that will take shape in the course of this century will be decidedly more inundated with water than we’re accustomed to. The polar ice caps are melting, glaciers are retreating, ocean levels are rising, polar bear habitat is disappearing, countries are jockeying for control over a new Arctic passage, while low-lying cities and small island nations are confronting the possibility of their own demise. Catastrophic flooding events are increasing in frequency, as are extreme droughts. Hurricane-related storm surges, tsunamis, and raging rivers have devastated regions on a local and global scale. In this seminar we will turn to the narratives and images that the human imagination has produced in response to the experience of overwhelming watery invasion, from Noah to New Orleans. We’ll start with the ancient flood narratives (Atrahasis, Utanapishtim, Noah, Deucalion, Manu, etc). We’ll also look at several nations and cities whose existence and identity involve the integration of water into urban space and the struggle to remain above water, with particular emphasis on Amsterdam and the Netherlands and New Orleans and the Mississippi Gulf Coast. We’ll spend time on historical disasters such as dam breaks, tsunamis, and hurricanes. We’ll look into the new Black Sea deluge hypothesis and the controversies surrounding the ARK Encounter theme park being built in Kentucky. Objects of analysis will include mythology, ancient and early modern diluvialism, literature, art, film, and commemorative practice. Although the texts and events we will consider come from all over the world, the course will carry a slight Germanic accent in that we will find that the Netherlands, Germany and Denmark provide important paradigmatic cultural and philosophical responses to sea level rise and catastrophic flooding as well as models of hydrological sustainability. It should be noted that Penn itself plays a role in the cultural history we’ll be examining. Penn historian Bruce Kuklick’s Puritans in Babylon documents the archeological race between Ivy institutions around 1900 to acquire cuneiform tablets from Mesopotamia, among them important flood documents. A controversial player in this contest was Penn’s own German-trained archaeologist Hermann Hilprecht.

Goals of the Course: The primary goal of the course is to involve you in a process of interdisciplinary academic inquiry that spans the humanities (literature, film, history of art, religious studies), the social sciences (anthropology, archaeology, history of science, urban studies), and to some extent the physical sciences, especially earth and environmental science. As such, this course is an example of the new interdisciplinary field known as “Environmental Humanities.” Even though environmental humanities and social and environmental sciences share the same set of objects of study, they deal with them in very different ways. While the environmental humanities are deeply aware of their aspirational partnership with the disciplines that focus on sustainability and climate change, the opposite is not necessarily true. Confronting this situation and attempting to create a more effective communication between the two sides is the primary challenge of this course. The
basic question we’ll be asking is: What can we learn from the humanities that will be helpful for confronting the problems and challenges caused by climate change and sea level rise? By the end of the course, we will know a great deal about floods and flooding from a variety of perspectives; we will have analyzed and interpreted texts, images, and films from multiple disciplines and cultural traditions; and we will have developed interpretive models for understanding the role culture plays in the human response to flooding, tsunamis, and rising sea levels. Because of the international scope of the course, intercultural analysis is a vital component. Important themes and motifs include: water and memory, “porousness” as a cultural construct and feature of individual and national identity, sacrifice and other cultural forms of propitiation, prophecy and catastrophe, and the metaphor of the ark.

**Course Requirements and Grading:** This course is constructed on the model of the “flipped” classroom. In other words, there will be no in-class lectures. Class time will be used for interactive activities, large and small-group discussions, and interactions with invited guest experts. Online lectures and assigned films will be viewed outside of class. Students are expected to keep up with assigned readings. Assessment will be based on the following:

- Midterm and final exams consisting of fact-based short answer questions derived from online lectures, readings and screenings
- In class and/or online student presentations on Noah, Controversy and the Culture Wars
- Two five-page interpretive essays on a literary work and a film, respectively
- Group or individual projects that showcase innovative ideas and new models for understanding the humanities’ role in responding to sea level rise and catastrophic flooding.
- Participation in online and in class discussions

**Public Roundtable and Poster Session on Sea Level Rise, Catastrophic Flooding, and the Environmental Humanities.** All members of the class will be involved in planning a public roundtable discussion with key academics and activists. In conjunction with the roundtable, a poster session will be organized to allow students to present their group and individual projects.

**Guest Experts.** The calendar (below) mentions several SAS professors and local experts by name who may be invited to present and participate in a discussion on a given day. Invitations would be extended before the semester begins.
Calendar

**Week 1**  Introduction

**Week 2**  Water Worlds and Water Wars

**Screening**  *Blue Gold: World Water Wars*

*Water World*

**Readings**  Diane Raines Ward, *Water Wars* (excerpts)

Vandana Shiva, *Water Wars* (excerpts)

**In Class**  Discussion, analysis of film clips

**Week 3**  Ancient Flood Accounts (Gilgamesh and Memory)

**Screening**  Online lecture (Gilgamesh, Noah, Deucalion)

**Readings**  *Gilgamesh*

Irving Finkel, *The Ark Before Noah* (excerpts)

Bruce Kuklick, *Puritans in Babylon* (excerpts)


**In Class**  Visitor: Steve Tinney (NELC)

**Week 4**  Ancient Flood Accounts (Noah and Prophecy)

**Screening**  Online lecture

**Readings**  Genesis account

Historical traditions of interpretation

Contemporary biblical scholarship (excerpts)

**In Class**  Visitor: Steve Weitzman, Director of Katz Center

**Week 5**  Noah, Controversy, and the Culture Wars
Screening  
Noah, Aronofsky

Readings  
D. R. Montgomery, The Rocks Don’t Lie

W. B. Ryan & W. C. Pitman, Noah’s Flood: The New Scientific Discoveries

Ark Encounter, Kentucky: A Casebook

In Class  
Student Presentations

**Week 6**  
The Dutch and Their Polders, Dikes, and Dams

Screening  
Online lecture

Readings  
Simon Schama, The Embarrassment of Riches (excerpts)

Metz, Tracy et al, Sweet and Salt: Water and the Dutch

In Class  
Visitor: Larry Silver (ARTH)

**Week 7**  
Goethe, Faust, and Naturphilosophie

Screening  
Online lecture

Readings  
Goethe, Faust (excerpts)

Goethe, Nature writings

Abraham Gottlob Werner (excerpts)

**Week 8**  
Ritual Negotiations with Nature (Sacrifice)

Screening  
Online lecture

Water, Deepa Mehta

Reading  
Storm, The Rider on the White Horse

Theories of sacrifice (e.g., Walter Burkert)

Mantiades, The Environmental Politics of Sacrifice (excerpt)

Assignment  
5-page interpretative essay on The Rider on the White Horse

**Week 9**  
The Flood of 1953, Zeeland, the Netherlands
Screening  Online Lecture
Short documentaries on the flood and the construction of the Eastern Scheldt Storm Surge Barrier

Readings  Margriet de Moor, *The Storm*

**Week 10**  Hurricane Katrina and the Flooding of New Orleans
Screening  *When the Levees Broke*, Spike Lee
Reading  Jed Horne, *Breach of Faith*

**Week 11**  Hurricane Katrina (continued) & Hurricane Sandy
Screening  Trouble the Water
Shored Up, Ben Kalina
In Class  Visitor: Ben Kalina (film maker)

**Week 12**  Tsunami 2004
Screening  Online lecture
*The Impossible*
*A Wonderful Town*
Assignment  5-page interpretive essay on *The Impossible* or *A Wonderful Town*

**Week 13**  What Can the Humanities Contribute?
(Class-Organized Public Roundtable and Poster Session)

(Partial) Bibliography and Filmography:

*Noah, Deucalion and Atrahasis*  
*Genesis*  
*Atrahasis*
J. G. Frazier, “Ancient Stories of a Great Flood”  
Irving Finkel, *The Ark Before Noah*  
Darren Aranofsky et al, *Noah*  
Bruce Kuklick, *Puritans in Babylon*  
Hermann Hilprecht, *The Earliest Version of the Babylonian Deluge Story and the Temple Library of Nippur*, The Babylonian Expedition of the University of Pennsylvania,  
David R. Montgomery, *The Rocks Don’t Lie: A Geologist Investigates Noah’s Flood*  
*When the great abyss opened : classic and contemporary readings of Noah's flood* / J. David Pleins.

**Neptunism**  
Abraham Gottlob Werner  

**Early Modern and Modern Diluvialism**  
Thomas Burnet, *The Theory of the Earth* (1686)  
John Woodward, *An Essay Toward a Natural History of the Earth* (1695)  
*Cataclysms and earth history : the development of diluvialism* / Richard Huggett.  
Thomas Huxley,  
D. C. Allen, *The Legend of Noah* (1949)  
H. M. Morris & J. C. Whiston, *The Genesis Flood*  
Rhoda Rappaport, “Diluvialism: For and Against”  
H. M. Morris & J. C. Whitcomb,  

**Water Wars**  
Vandana Shiva, *Water Wars*  
Diane Raines Ward, *Water Wars*  
Marq de Villiers, *Water: The Fate of Our Most Precious Resource*  
Marc Reisner, *Cadillac Desert: The American West and Its Disappearing Water*

**The Netherlands**  
Simon Schama, *The Embarrassment of Riches*  
Henk L. F. Saeijs, *Turning the Tide: Essays on Dutch Ways with Water*  
Diane R. Ward, “Hold Back the Sea”

**Katrina and New Orleans**  
*Building after Katrina : visions for the Gulf Coast* / edited by Betsy Roettger  
Jed Horne, *Breach of Faith*

**Fiction and Poetry**  
Ecclestone, *Noah’s Flood, or the History of the General Deluge, an Opera* (1714)
Joseph Vail, *Noah’s Flood, A Poem* (1796)
Nicole Cooley, *Breach*
Dave Eggers, *Zeitoun*
Margriet de Moor, *The Storm*
Theodor Storm, *The Rider on the White Horse*
Tom Piazza, *City of Refuge*
Robert Penn Warren, *Flood*
Joyce Carol Oates, “Upon the Sweeping Flood”
Margaret Atwood, *The Year of the Flood*
Josh Neufeld, *A.D. New Orleans After the Deluge*
Chris Rose, *1 Dead in Attic*

Films
Holland’s Barriers to the Sea
Trouble the Water
Blue Planet
Tsunami 2004
When the Levees Broke
Waterworld (2 disc extended edition)
Blue Gold: World Water Wars
A Wonderful Town
Water: The Great Mystery
Water (directed by Deepa Mehta)
Ondine
Disney’s 20,000 Leagues Under the Sea
The Big Uneasy
The Impossible
Chinatown
Connecting Delta Cities
Noah
Deliverance
Flood (2008)