VISUALIZING VENICE SUMMER WORKSHOP
Work Schedule – 03/24/2012 *

The Waters of Venice: Visualizing the Cistern Network

Faculty: Professor Giorgio Gianighian, University IUAV of Venice
        Professor Mark Olson, Duke University
        Professor Victoria Szabo, Duke University

        The goal of the seminar is to train students in fundamental digital tools for modeling and communicating research on historical place and space. As a vehicle for training with digital technologies, we will examine the cisterns of Venice, modeling for four types of water supply systems in order to understand how they determined the shaping of architectural and urban space. We will model External, Internal, Palace, and Tenement cisterns using 3D modeling and mapping tools, as well as learn how to present richly annotated, time-based and interactive visualizations of our "case studies" online.

        The tools learned in the seminar are applicable to any type of research on urban, architectural, and environmental systems.

Mon, Jun 4 : Welcome and Orientation
AM: Welcome
   • Historical/framing presentation by Giorgio Ghianigian

LUNCH

PM: Orientation
   • Intro to Modeling in Sketchup
   • Walking Tour to explore our sites – participants should bring digital cameras and GPS devices so they can begin gathering contextual information and becoming familiar with our sites. We will capture imagery for: Photogrammetry, Map Annotations, and Augmented Reality referencing, and talk about the considerations that go into gathering materials for each of these purposes.

WELCOME DINNER (as a group)

Tues, Jun 5 : Modeling of the Cistern Types – First Steps

AM: Modeling Cisterns
   • External Setting (St. Mark's Square)
   • Convent System (San Severo)

PM: Sketchup building modeling
   • Palace (La Ca' d'Oro)
   • Tenement (Castelforte San Rocco)

Wed, Jun 6: Sketchup Modeling Continued; Photogrammetry

AM:
   • Modeling examples continued

PM: Photogrammetry
   • Cistern Cover and Facades (from reference imagery)

Thurs, Jun 7: Placing and Mapping in GE

AM: Content Management and Annotation Strategies
   • Qualitative Annotation and Layers

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* the schedule is subject to modification

- Omeka and Content Management with their own materials

PM: Google Earth Authoring
- Placing models and Qualitative Annotation
- Georectification and Layers

Fri, Jun 8: Presentation Strategies: Animation and AR

AM: Sketchup Animation – Campo San Paolo
- GE Tours
- Embedding

PM: Online Delivery Systems
- Augmented reality – Models integration, 2D imagery, text, A/V
- Links to Omeka
- Augmented Reality Testing in the Field

WEEK 2

Monday, Jun 11: Quantitative Visualization Strategies

AM: Working with GIS
- Georectification of Historic Maps
- Data Viz strategies within ArcGIS
- Export to Google Layers and GE integration

PM : Other Data Visualization Tools
- Map Overlays
- Charts w/ Fusion Tables
- Timelines
- Flows and Network diagrams

Tuesday, Jun 12: Putting it All Together

AM: Integrating Database Content
- Integrating Existing Data from Cistern Map DB – using Fusion Tables
- http://venice.homeftp.net/cd-cisterne/webmap/index.html?ZOOM=d+GPSX=2311533+GPSY=5034810

PM: Interactive Visualizations
- Faceted Mapping – greyfriars example
- Well-sized shape visualization
- Shadow City representation – creative strategies - thematic mapping engine

Wednesday, Jun 13
Work days in groups – guided tutorials as necessary for selected projects

Thursday, Jun 14
Work days in groups – guided tutorials as necessary for selected projects

Friday, Jun 15
AM: Advanced Topics
- Game Engines
- Mobile Apps
- Virtual Reality Systems

PM: Project presentations and closing reception