



Preliminary Course Syllabus: ATEC6389.001.13f: Topics in Arts and Technology NETWORKS AND HISTORY

Sign-up

Course information can be found at <http://go.utdallas.edu/atec6389.001.13f>

To sign-up please contact ATEC graduate advisor Chip Wood <chip.wood@utdallas.edu> or ATEC Ph.D. advisor Christine Messik <christine.messick@utdallas.edu>. Please cc the instructor <maximilian.schich@utdallas.edu> for speedy approval.

General course information

Semester Fall 2013
Date & Time Thursdays 4:00–6:45pm
Location Edith O'Donnell Arts and Technology Building (TBA)
Course website <http://elearning.utdallas.edu>

Course summary

This research course aims for lab-style collaboration in the area of **Networks and History**. Students can bring in their existing expertise and build new skills by taking an iterative “small steps” approach. Retracing and extending over existing work by the instructor and his collaborators, the course aims to transcend the disciplinary boundaries of (art) history, digital humanities, information design, computer science, and physics.

We will start from and extend over a particular example: *The growing interrelation of cultural centers in the Western World over two millennia, based on large datasets of noted people and artists*. Intellectual challenges include the combination of the qualitative and quantitative, the integration of humanistic inquiry & data visualization & scientific modeling, apparent (super)exponential growth of knowledge, vast heterogeneity of data density, and the communication of results to different constituencies. Practical issues include acquiring data from public and proprietary sources, cleaning and geolocating data, finding a worthwhile question to answer, (dynamic) visualization of historic growth and wild spatial heterogeneity, the characterization of large complex networks, and last not least separating facts from bias.

The *Networks and History* course extends over two years of **ArtsScience** collaboration initiated by the instructor with a number of world-class physicists and information designers. The respective paper, along with extensive supporting material and video visualizations is currently in review. Results of the course can lead to further co-authored publications that students can add to their CVs.

Instructor

Dr. Maximilian Schich joined UTD as Associate Professor in Arts and Technology in January 2013. He earned his Ph.D. in art history (HU-Berlin 2007) with a work on “Reception and Visual Citation as Complex Networks”. Since then, Max has worked to transcend disciplines at Max-Planck in Rome and as a post-doc with network/socio-physicists László Barabási (Northeastern) and Dirk Helbing (ETH Zurich). In addition, Max looks back at consulting experience with “graph data” starting in 1996, while also acquiring hands-on expertise in the Munich Glyptothek sculpture museum, and ZI Munich, one of the world’s foremost art libraries. Max is the organizing chair of a successful symposium series on “Arts, Humanities, and Complex Networks” at NetSci conferences (15-24% acceptance rate) and an Editorial Advisor at Leonardo Journal.

Web <http://www.utdallas.edu/atec/schich/>
Email maximilian.schich@utdallas.edu (please prefix **ATEC6389 (your name)** in subject for prompt attention)
Phone +1-972-883-4334
New Office Edith O'Donnell Arts and Technology Building: ATEC 3.301
Office hours Immediately after course or by email appointment
Note: I try to respond to student email within 24 hours Monday to Friday.

Course requirements

The course is open as an elective with 3 hours credit to **UTD grad-students in A&H, CS, EMAC, and of course ATEC. NS&M** grad-students are welcome to participate without credit. You should be interested in multidisciplinary research and collaboration.

The **academic calendar, project assignments, readings, and presentation requirements** will be discussed and defined together in the first course session.

Grading policy

Percentages Project 45% + Attendance & Participation 45% + Presentation 10%

Course & instructor policies (aka the fine print)

Class policies

- All announcements will be sent **via email**. Students are responsible for reading each announcement in detail.
- All students will participate in the discussion. Observers are expected to participate in the discussion equally.
- Students need to read all the assigned readings or complete homework prior to the class discussion. Homework assignments need to be handed in before the respective class. The nature of an assignment including deliverables will be defined together and announced in class or sent out as an announcement.
- Students have the responsibility of backing up all their data, code, and preliminary work. It is highly encouraged to use a version control system, such as github, bitbucket, etc.
- Please contact the instructor if you have a disability that requires some arrangements so that appropriate arrangements can be made.

UT Dallas Syllabus Policies and Procedures

- The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.
- The principles of academic honesty and ethics will be enforced. You should credit all your sources. Plagiarism (see UTD syllabus policies for definition) in final presentations, papers, or posters results will not be tolerated.
- Excessive unexcused non-attendance (see UTD syllabus policies for definition) will lower your grade.

The descriptions and timelines contained in this syllabus are *subject to change* at the discretion of the instructor.