Syllabus: Interdisciplinary Approaches in ATEC[v1]

Instructor: Dr. Maximilian Schich, Associate Professor
ATEC6300.501.14F

General information

The course meets in *Fall 2014*, *Wednesday 7:00–9:45pm* in room *ATC 2.602*.
Coursebook: http://go.utdallas.edu/atec6300.501.14f
Course website: http://elearning.utdallas.edu / tbd

Instructor contact

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Email note: ***"ATEC6300.F14" is required as a prefix in the email subject line in all communication with the instructor!***
Office hours: Please meet me right after the course or make an appointment via email.

Course Description

This course provides an introduction to the interdisciplinary study of mutual interactions between technology and the creative arts. Establishes basic theoretical concepts and principles underlying the graduate program in Arts and Technology. This course is required for ATEC MA, MFA and PhD students.

Student Learning Objectives/Outcomes

The objectives of this course are (1) to **explore and map the emerging landscape of actitivites in ATEC** in collaboration and (2) to **create an individual mission statement towards the final degree**. Students will engage in multidisciplinary research and collaboration, exploring and charting uncovered terrain.

As such the course feeds into the expected general knowledge, competenties, and expertise of MA, MFA, and PHD students in ATEC. The respective core objectives, as defined by the *ATEC Graduate Studies Committee*, include (a) knowledge in the fields of media and digital media, contemporary arts, and communication; (b) capacity to analyze and design conceptual and technological tools interfacing content, information, and users; (c) knowledge of information, mediation, and processing of information; (d) collaborative practice; (e) analyzing and articulating critical theories in arts and technology; (f) integration and application of theoretical and empirical information to address current issues in arts and technology; and (g) fluency in the use of digital media. For PhD students core objectives, as defined by the *ATEC Graduate Studies Committee*, further include (h) expertise in the fields of media and digital media, contemporary arts, and communication; (i) expertise in the field of information, mediation, and processing of information; and (j) knowledge of research strategies and methodologies.

Required Textbooks and Materials

The class will explore interdisciplinary acitivities within ATEC as they emerge, covering a broader territory than existing textbooks. Literature, as relevant to specific aspects of ATEC, will be collected as part of student assignments. Required readings will be assigned throughout the semester.

Essential required readings include:
- Uri Alon: **How To Choose a Good Scientific Problem.** *Molecular Cell* 35 (2009) 726-728
  DOI: http://dx.doi.org/10.1016/j.molcel.2009.09.013
- [Nature editors]: **How to construct a Nature summary paragraph.** (London: Nature Publishing Group, 2010)/
  URL: http://www.nature.com/nature/authors/gta/2c_Summary_para.pdf
- Matt Makowka: *ATEC 6300 - Interdisciplinary Approaches to Arts and Technology Handout.*
  (Richardson: **UTD McDermott Library**, 2013)
  URL: http://libguides.utdallas.edu/ATEC6300
- Uri Alon: **How To Build a Motivated Research Group.** *Molecular Cell* 37 (2010) 151-152
  DOI: http://dx.doi.org/10.1016/j.molcel.2010.01.011
- Uri Alon: **How To Give a Good Talk.** *Molecular Cell* 36 (2009) 165-167
  DOI: http://dx.doi.org/10.1016/j.molcel.2009.10.007

Academic Calendar

The academic calendar will be differentiated throughout the semester, depending on collaborative progress.

- Session 1 (2014-08-27) Introduction
- Session 2 (2014-09-03) Aspects of ATEC 1
- Session 3 (2014-09-10) Aspects of ATEC 2
- Session 4 (2014-09-17) Aspects of ATEC 3
- Session 5 (2014-09-24) Aspects of ATEC 4
- Session 6 (2014-10-01) Aspects of ATEC 5
- Session 7 (2014-10-08) Aspects of ATEC 6
- Session 8 (2014-10-15) Guest lecture
- Session 9 (2014-10-22) Aspects of ATEC 7
- Session 10 (2014-10-29) EODIAH opening
- Session 11 (2014-11-05) Aspects of ATEC 8
- Session 12 (2014-11-12) Aspects of ATEC 9
- Session 13 (2014-11-19) Aspects of ATEC 10
- Session 14 (2014-12-03) Final presentations 1
- Session 15 (2014-12-10) Final presentations 2

Grading policy

Percentages: Assignments 45% + Attendance & Participation 45% + Presentation 10%
Grading scale: A = 100 - 90 B = 89 - 80 C = 79 - 70 D = 69 - 60 F = 59 - 0

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 at 9am 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***. When writing code, it is highly encouraged to use a version control system, such as github, bitbucket, etc.
- Storage (regardless of the procedure): Maintain a ***digital library of examples*** (painting, sculpture, music, literature, computer art, interactive works, etc.) to be shared in class. Strictly adhere to academic and intellectual property procedures when quoting a work, or when presenting it as an example. Do not present the same work in two different classes.
- Please contact the instructor if you have a disability that requires some arrangements so that appropriate arrangments 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.

Instructor Bio

Dr. Maximilian Schich joined UT Dallas ATEC as Associate Professor in January 2013. He studied Art History, Classical Archaeology, and Psychology at LMU-Munich (M.A. 2001), HU-Berlin (PhD 2007), and MaxPlanck in Rome (PhD-fellow 2002-2004). Since 1996, Maximilian also was a project consultant for large-scale cultural graph data.From 2008 to 2012 he explored the Ecology of Complex Networks in Art Research with Albert-László Barabási at Northeastern University and Dirk Helbing at ETH Zurich. He received generous funding from the Special Innovation Fund of the President of Max-Planck-Society (2008) and a Research Grant from German Research Foundation (2009-2012). Maximilian has collaborated, presented, and published in prestigious venues in Archeology, Art History, Computer Science, Complexity, Sociology, Physics, and Visualization. He is an Editorial Advisor at Leonardo Journal (MIT-Press) and chairs a popular symposium series on Arts, Humanities, and Complex Networks (14.5% acceptance). Maximilian was invited to SciFoo twice (2009/2013). Recently he published A Network Framework of Cultural History in Science Magazine and a popular visualization on Nature Video (see www.cultsci.net).