

MUMT 301 – Music and the Internet
Winter 2008

Instructors:

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Chronogram and Syllabus

Week 1 – Jan. 03 (Andrey and Nils) Course Introduction

Instructors meet students; course content; grading scheme; communication protocol; office hours; final project discussion.

Week 2 – Jan. 10 (Andrey) Introduction to the Internet and Interactive Music

Brief Internet history; TCP/IP protocol; Domain name system; Client-server architecture. Music and the Internet – Beyond files sharing. Unix Essentials I; ssh, scp and the like. Class exercises.

Week 3 – Jan. 17 (Andrey) Internet Extended / Legal Issues

Collaborative production; real-time performances; computer music before the Internet. Musical depositories. Legality and the Internet; copyright issues; fair use. Class exercises.

Week 4 – Jan. 24 (Andrey) Online Distribution

Sharing music files; the peer-to-peer architecture; client-server schemes. Lyrics databases; notation databases; sharing musical footage. Class exercises. **First assignment (due Feb. 07).**

Week 5 – Jan. 31 (Andrey) Copyright II/ Internet Labels / Search Engines

Copyright issues around the world; copyright issue in Canada; Creative Commons. Search Engines; metadata-based search; search based on musical features. Internet labels (IL); IL advantages; IL operation. Class exercises.

Week 6 – Feb. 07 (Andrey) Audio and Video Formats for the Internet

Raw formats. Compressed formats; lossy codecs, lossless codecs. Streaming preparation; digitalization; encoding; packetization. Class exercises. **Second assignment (due Feb. 21) .**

Week 7 – Feb. 14 (Nils) Optimizing Audio for the Internet

Soundedits; Dynamics for the web audio. Choosing the right codec. Meta informations and ID3-tags. Digital right management (DMR) and watermarks.

Week 8 – Feb. 21 (Nils) Embedding Audio and Video

Forms and scripting languages; cascading style sheets (CSS); using flash, JAVA and RealMedia. Podcast management and archiving.

Study week – Feb. 25 to 29

February 28th – Extended abstract submission.

Week 9 – Mar. 06 (Nils and Andrey) Midterm Presentations

Week 10 – Mar. 13 (Nils) Streaming, Broadcasting and ShoutCasting

Intro to audio / video streaming; braodcasting, multicasting and shoutcasting. The Apple Quicktime broadcaster. Retrieving listener information. Visiting the WebCast crew at McGill.

Easter holidays

Week 11 – Mar. 27 (Nils) Network Music / Collaborative Approach

Introduction to online collaborations. Current online services; Ejamming, Ninjam and Jacktrip. Linking Digital audio workstations (DAW's) over the Internet. VST-Tunnel, Wormhole.

Week 12 – Apr. 03 (Nils) Integration of Web Content in Artistic Projects

History and examples. Scaling and mapping. Retreving web content in Max. Python scripting and Sunflower. HTML renderer for Jitter. Examples an 'hands on' in Max/MSP.

Week 13 – Apr. 10 (Andrey and Nils) Final Project Presentations

Grading

Assignments 1, 2, 3 and 4	40 / 100
Midterm project presentation	20 / 100
Final Project	40 / 100

Communication

Any communication will be established via email and class Podcast.

(see email addresses on the top of this document)

Midterm Presentation

The goal of the midterm presentation is to prepare students for their final project. It is a chance for the students to discuss their projects ideas and eventual difficulties with the instructors and other colleagues. **An extended abstract of the project should be sent to the instructors one week before the presentations take place.** Students will be given 10 minutes to present their ideas related to final project. The grading will be based on the following criteria:

- Clarity on the presentation
- Clarity on the project goal

- Review of previous work
- Explanation of the necessary steps to accomplish the goal
- Pinpointing the main difficulties during the implementation

Final Project

Individual final projects will be graded based on two parts, namely the written part of the project and the final presentation.

Written part:

The written part should be sent to the instructors via email not after the presentation day. It should contain all the details of the project, such as its goal, the literature review (previous similar works), the steps necessary for the project implementation, the main difficulties and their solutions, functionality and references.

Final presentation:

Students will be given 15 minutes to present their final project. The presentation can be explanatory, in the form of slides, or as an *in loco* demonstration of the project.

Office Hours

Andrey

Fridays from 15h to 17h

505 Sherbrooke St W, 5th floor at CAML

Phone 514 3984400 ext. 094836

Nils

Mondays from 9h to 11h

505 Sherbrooke St W, 5th floor at RTML

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