Curriculum Committee
Minutes

October 11, 2007

Attendees: Tom Doeppner, John Hughes, Anna Lysyanskya, John Savage (Chair), Warren Schudy
Guests: Chad Jenkins, Roberto Tamassia, John Cayley (Visiting Professor, Literary Arts)

1. Proposed New Course “Advanced Programming for Digital Art/Literature”

Roberto Tamassia presented a course proposal submitted by Daniel C. Howe with the endorsement of John Cayley of Brown’s Literary Arts department. It is proposed that the course be offered in the spring of 2008 on an experimental basis. We were asked to give our approval for this one time offering of the course, which it is proposed be cross-listed between Brown and RISD.

Daniel, who has a Brown Master’s degree in Literary Arts, is a digital artist and researcher in NYU’s Media Research Lab will completing his PhD there. He teaches part-time at RISD. This course would be cross-listed between Brown and RISD. The instructor’s proposed description follows.

John Cayley is a visiting professor of Literary Arts at Brown.

This workshop will explore advanced tools and techniques for the creation of innovative and expressive works of digital art. Lectures will address the application of best practices from the software design community to the context of digital media. In the first section of the course, students will exercise their skills with new techniques (integrated development tools, agile and object-oriented programming, rapid debugging and prototyping, etc.) on a range of ’mini-projects’, specifically the analysis, generation and digital presentation of computationally-augmented literary texts. Assignments will include web-data parsing, speech synthesis, context-free grammars,
and statistical generation techniques. During the second half of the course, students will focus on a larger work of their own design, participating in regular critical reviews throughout the development cycle. Although assignments will focus on digital literature, a wide range of media will be explored including sound, image, video, 3D, and installation. Although there are no formal prerequisites, familiarity with at least one modern programming language is highly recommended.

The committee explored a number of issues with the proposers. The reason given for offering this course as a computer science course is that it would have require a substantial amount of programming and would explore the creative use of computer science concepts. The high-level topics that would be introduced are shown below.

**TOPICS**

- Introduction and Course Tools (Processing, Eclipse, PText, etc.)
- Methods
- OO-Topics
- Grammar-based Approaches
- Statistical Approaches
- Semantics
- Web-tools and Text-mining
- Feature Analysis
- Visualization/Auralization
- Text-To-Speech
- Working with a Lexicon
- Recombination and Literary Form
- Historical Precursors

Committee members found that there is a substantial overlap between these topics and topics taught in other courses. Nonetheless, we found that there is also substantial overlap of this kind between the animation courses taught by Barb Meier and our other courses. Thus, it isn’t a major concern in this case given that it would serve a much different audience than most of our courses. Roberto argued that we show ourselves open to cooperation with colleagues in the creative arts by offering this course.
The question was posed as to whether or not this course could be used for CS concentration credit. Roberto argued that we should be willing to give it concentration credit for our students who do a substantial project. This issue was debated without coming to a conclusion. It was pointed out the CS92, Educational Software, could not be used for concentration credit but over time as the course changed we did decide to use it in this way.

In the end we approved the course for instruction next spring but deferred a decision on whether to allow the course to be used for concentration credit. We decided that Tom and John agreed to talk to Daniel to see if there was enough material in the course so that it could be used for concentration credit. If we do decide that it meets this condition, then we need to give it a 1000-level number.

2. Minutes of the September 27, 2007 Meeting

The minutes of the September 27 meeting were approved.

3. Proposed New Course – CSCI 1340 Innovating Game Development

Chad Jenkins presented for approval by the committee the course entitled CSCI 1340 Innovating Game Development. The proposed catalog description of the course follows.

What technologies will shape the next generation of video games?
This project-centered course focuses on computational innovations for game development. Students examine innovative game technology through case studies of existing games and talks by industrial and academic game professionals. In teams, students propose and implement a project demonstrating a novel technology for gaming. Recommended: strong computational or engineering background.

After some discussion the committee found the course acceptable with certain understandings. In particular, Chad agreed to recommend that students take two relevant 1000-level computer science courses such as CSCI 1230 and 1410. Chad was also told that he would need to supply a syllabus in order to secure approval from the College Curriculum Council.

4. Revision in the Master’s Degree Program

We revisited the Master’s degree requirements discussed at the last meeting to provide a mechanism for foreign students to work outside the university. They would have to complete a project supervised and approved by her or his advisor and complete a two-to-three month internship, approved by the advisor, that
complements the project. Tom agreed to draft language and incorporate it into the language approved at the September 27 meeting.