From 2004-2007, I taught a semester-long course in music technology at Florida State University for undergraduates. This course was intended to complete a campus-wide gen-ed requirement for computer literacy, but was only open to music majors. Until 2006, we were required by the University to incorporate coverage of HTML and PowerPoint in addition to generic computing skills; in the spring of 2006 this requirement went away (although I kept the unit on basic computer construction / operation and the basics of operating systems).

Three units— one each on Finale, audio, and MIDI respectively— comprised the bulk of the course. Each unit had a separate project that students needed to complete in order to pass the class, with approximately 10-15 hours of work needed to complete each project in addition to class lecture time and quizzes / tests.

**Finale project:** Choose and completely transcribe a public-domain work of approximately 100-300 measures for 2-10 instruments into Finale using either Simple or Speedy Entry. The finished project would include one completed, carefully edited score in addition to at least one extracted and proofread instrumental part. Completed scores were expected to match all details of the “source score” within reason (all articulations and dynamics accounted for, same number of pages, identical system layout, etc.).

**MIDI project:** Create a short MIDI arrangement (one minute and length or more) using at least four VSTi virtual instruments (no more than two “repeated” instances of a given instrument allowed). Students were expected to quantize or otherwise edit MIDI clips where appropriate and play the sequence in using a MIDI keyboard as opposed to entering note data via Finale or another such tool. The use of clip looping was restricted to ensure students had a sufficient amount of time working in the MIDI environment. Platforms used included Cubase SE and REAPER.

**Audio project:** Create a short “acousmatic” composition (one minute in length or more) from two of your own source sounds. The lab facilities did not allow us to teach recording effectively, but I did show the students the basics of digital audio recording as we recorded their source sounds. The source sounds were then processed creatively by each student using a prescribed workflow method, and assembled by each student into a finished composition in an NLE package. The project was intended to teach the techniques and astounding possibilities of both destructive and non-linear digital audio editing, in addition to introductory coverage of modern-day signal processing (VST plugins, destructive DSP via Sound Forge, etc.). To successfully complete the project, students had to work extensively with Sound Forge, an NLE audio package (Cubase SE or REAPER depending on the semester), and various effects plugins available for the NLE platform in use.

Note that while two of the three units above are generalized in their description, I say “Finale” above as opposed to “computer-based notation,” as notation solutions at present are all quite proprietary with limited common operational threads. We taught only Finale because this was what our lab administrator kept on our stations. I would have liked to incorporate Sibelius as well, but the funding was not available for licenses for all stations in addition to Finale. I consider Sibelius to be a superior product, although both packages have extremely serious flaws and quirks. Finale, however, is the worse offender in this regard, being a legacy product 20 years old that has not been updated fully to modern operating-system standards in any of its never-ending annual updates, which as best I can tell are created more or less exclusively for fiscal gain on the part of MakeMusic rather than offering any real improvements in operation from year to year. Even with Finale 2007, much class time was spent teaching students “workarounds” for the way Finale thinks, as opposed to the way musicians do.

In the final few semesters I taught the course, we added a blogging component to the course. Students were expected to blog every so often about their experiences with the technology and all students were required to post a longer “blog report” on a given technological topic of their choice. Competency exams rounded out each unit, with students required to personally demonstrate proficiency in the use of a given software product in person / in realtime, in addition to written tests about theoretical concepts of music technology.

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