

Ben Tyler, Associate Professor, School of Engineering and Digital Sciences  
[btyler@nu.edu.kz](mailto:btyler@nu.edu.kz)

## Our Approach to Online Course Creation

While I have not taught strictly online courses before COVID-19, a couple years ago I created online lectures and supporting materials so that we could deliver our introductory programming courses' content online in an asynchronous manner. We are still using these pages today, although we have had to overhaul our CSCI 152 pages when we switch programming languages. You can go ahead and self-register for these pages to see exactly what we've done:

<https://sst-csci.com/csci151/> Programming for Scientists and Engineers

<https://sst-csci.com/csci152/> Performance and Data Structures

These pages were developed using WordPress.org, and are hosted on a remote server that one of our former TAs set up. This takes a bit of work, and isn't free, and probably wouldn't be a viable option for faculty trying to get things set up in a very short period of time. Another option would be to sign up at WordPress.com (not .org) for free webspace and webpage builder - you don't have to set up or pay for anything on the back end. The downside is that you only get 3 GB (which is actually quite a bit), WordPress can put ads on your pages, WordPress has the right to use your content for self-promotion. If you are looking for a long-term solution, however, I think the WordPress.org approach is a better choice.

To create the video lectures themselves, I use a tool called Camtasia (<https://www.techsmith.com/video-editor.html>) which allows for many different screen capture modes, video editing with added effects, overlays, and basic animations. I paid less than \$80 for this several years ago, but I think it is now around \$170 for one educational license. (I would pay that amount now; it is really worth it if someone is seriously considering creating an online course.) The same company is offering a much more basic tool called Snagit for free until the end of June because of the coronavirus outbreak (<https://discover.techsmith.com/remote-techsmith/>), but I don't have much experience with it.

We have been experimenting with OBS (<https://obsproject.com/>) as a free solution for video recording, which we have been requiring our students to use for recording themselves during Moodle quizzes. It works really nice for screen recording and basic editing.

As for pointers about how to best prepare your videos for online learning, keep individual videos under 5 minutes each, even if you have to break down a longer discussion into bite-sized pieces. Also, you generally don't want to record videos that show your talking head. It can be very distracting to viewers.

Please feel free to share this information with anyone who might be interested. You can also email me ([btyler@nu.edu.kz](mailto:btyler@nu.edu.kz)) if you want to discuss further, or have some ideas that could help us improve what we are doing.