

Coursespot – how we did it:

USC publishes data for all of their offered terms via a simple to use web API. The docs for this API can be located at:

http://web-app.usc.edu/ws/soc_archive/20081/ws/help/README.txt

We found the doc to be pretty useless so here's a quick summary

- Get the list of active terms: <http://web-app.usc.edu/ws/soc/api/terms>
- Get a list of departments: [http://web-app.usc.edu/ws/soc/api/dept/\[term#\]](http://web-app.usc.edu/ws/soc/api/dept/[term#])
- Get session info: [http://web-app.usc.edu/ws/soc/api/session/001/\[term#\]](http://web-app.usc.edu/ws/soc/api/session/001/[term#])
- Get course info: [http://web-app.usc.edu/ws/soc/api/classes/\[dept-name\]/\[term#\]](http://web-app.usc.edu/ws/soc/api/classes/[dept-name]/[term#])

Note that with the above urls you have to replace [...] with the relevant information. Also all the urls return data in a JSON format.

On USC's term numbering system, USC makes their term numbers by taking the year, and appending a 1, 2, or 3 to the end. What number you append is decided by the following legend.

- 1 = spring
- 2 = summer
- 3 = fall

An example.

Let's say we wanted to find out all the information about the chemistry department (CHEM) for the spring 2014 term (20141). We would simply go to

<http://web-app.usc.edu/ws/soc/api/classes/chem/20141>

And what do you know, there's everything we ever wanted to know, in an easy to process (for a computer) format.

*To see this data in a more understandable format, you can also simply go here and then click the viewer tab

<http://jsonviewer.stack.hu/#http://web-app.usc.edu/ws/soc/api/classes/chem/20141>

So every time you requested us to track a class, we simply remembered the department name, the term number, and the section number so that we could find the exact class you wanted at a later time. Then we set up a program that ran every 15 minutes on our servers that would go and recheck all the classes we were tracking to see if there was a space that opened up.

That's it.

Happy hacking,
The coursespot team.