Carbon NMR; No Different than ^{1}H NMR

You wil not be expected to memorize these shifts, just to be able to rationalize the appearance of peaks at lower or higher ppm values based on electronic environment.

Carbon NMR uses ^{13}C, the isotope of carbon with 6 protons and 7 neutrons (rendering its nucleus spin-acgtive), which represents only about 1% of all of the carbon atoms in the universe.

Contrary to proton NMR (as almost every hydrogen atom in the universe is spin active), we can only extract information about a carbon's chemical environment from the ^{13}C NMR spectrum.

The likelihood of finding two ^{13}Cs adjacent to one another in a molecule is near zero, so peak splitting (coupling) is no concern. Similarly, the low abundance renders integral values useless (they don't correlate to nuclide count).