Tips for taking this course

Welcome to CNC Turning Center Programming! This course should prepare you for what it takes to become a proficient CNC Turning center programmer. It is quite comprehensive, and we want to give you some tips for getting started.

Course make-up

This course is comprised of several lessons. Lesson structure will be quite consistent, so once you get through lesson one, you'll have a pretty good idea about how the rest of the course will be presented. Here are the various learning activities included within the lessons (not all of the lessons include all of these activities):

- Lesson text (.pdf files) – a file that you can print and read in every lesson
- Supplements (.pdf files) – for some lessons, there will be supplemental information.
- PowerPoint presentations (.ppt files) –visuals that are included in all but lesson nine
- Class polls – For some lessons, you'll be asked to give your opinion about a topic of interest.
- Online tests – after you study each lesson, you'll be asked to complete the lesson test. Grading is automatic and you'll see your results immediately.
- Practice exercises (.pdf files) – In some lessons, you'll be asked to do a practice exercise (answers provided in the exercise) to help prepare you for the programming assignment.
- Programming assignments (.pdf files)– for some lessons, you'll be asked to do a programming assignment.

Note that you must complete all activities in one lesson before you will be allowed to continue to the next lesson. This will ensure that you're truly ready to continue. Also remember that you can view information (like the PowerPoint presentations) as many times as you need. So if you're feeling a little confused about a topic, and especially if you're having trouble with a test, practice exercise, or a programming assignment, *be sure to go back and review*.

Install the needed viewers

If you haven't already done so, you'll need to install two special viewers on your computer, one for viewing PowerPoint (.ppt) files and the other for viewing Adobe Acrobat (.pdf) files. If you need to install these files, come to our website (www.cncci.com) to download the viewer files. Look in SERVICES under ONLINE COURSES. If you're having problems viewing *any* file, be sure to email (lynch@cncci.com) or call me (847-639-8847).

You'll need to learn how to take full advantage of what we've intended with the course activities, especially the lesson text files, the supplements, the practice exercises, and the programming assignments. You can view/read them right on your computer, but we recommend that you print them (the text files) so you have a more permanent copy of the course text. Also, some of the illustrations in the text files may not appear clearly enough when you're just viewing them on the computer – so you'll need to be able to print them to see the illustrations. Note that you can even download them to your computer if you so desire.

To print files

Adobe Acrobat (.pdf) files only – From within each lesson, first click on the file name (which again, ends with the extension .pdf). With the file showing (you can read it), click the printer icon above the document.

To download files to your computer

Adobe Acrobat (.pdf) files only – From within each lesson, first click on the file name (ending with .pdf) you wish to download. With the file showing (you can read it), click the Save icon (a floppy disk) above the document. Select the folder into which you wish to place the document and then click Save.

PowerPoint (.ppt) files only – From within each lesson, first click on the file name (ending with .ppt) you wish to download. With the file showing (you can view it), click the File menu at the top of your browser display. Then select Save As. Next select the folder into which you wish to place the document and then click Save.

Follow the order given in our instructions

We provide you with step-by-step instructions for going through each lesson. While you can access lesson material in any order, we urge you to follow the order given in the instructions. Note that the activity list provided in each lesson may not match the order given in the instructions.

PowerPoint files are quite large, so…

Again, the PowerPoint slide presentations provide the visuals for each lesson. They're quite colorful and animated, and should make it easier to understand complex content. Note, however, that they are large files (some over 2.0 megabytes). If you have a fast connection (dsl or cable modem, for example) they should load in under thirty seconds. With slower connections (56k modems, for example), it may take over fifteen minutes to access the longest PowerPoint files. If you have a slower connection, we suggest that you first print the lesson text so you can be reading it while your PowerPoint presentation is being downloaded.

Getting around in PowerPoint files

To view a PowerPoint file (ending with .ppt), first click it from within a lesson. When a PowerPoint presentation is first displayed, you'll be shown the lesson's *presentation links* slide. This slide allows you to quickly jump to major topics presented in the lesson. While you may not need it the very first time you go through a lesson, this will help you review just the topic you're interested in without having to view the entire lesson again. There is also a *back* button (back arrow) in the lower left corner of every slide that, if clicked, will return you to the presentation links slide.

You'll have total control of when you advance slides – and you'll be stepping through the presentation one slide at a time. Use the right arrow button to advance to the next slide. While you shouldn't have to, you can also use the left arrow to back up. Remember that the browser must be your active desktop program in order for the arrow keys to work. If the arrow keys don't seem to work, left click on the slide to make the browser your active program.

Have a calculator handy

You'll need to do some addition & subtraction and even a little trigonometry in order to complete the programming activities. A calculator that has trig functions will really help.

Start a notebook

Get a 3-hole binder (at least 1" spine) and three-hole punch so you can build a book containing your lesson text, supplements, practice exercises, and programming assignments from the documents you print. Also, be sure to take notes and use a high-lighter pen to highlight key information.