

Coding Expectations

One of the goals of the course is to assist in the development of good coding practices. Mature development practices significantly reduces debugging time because programming bugs never make their way into the code base in the first place. Because of this goal, what would earn you an A in your previous computer science courses will likely earn you a C in this one. To reach the high marks, your code must not only work but it must follow coding standards and good writing practices. Just to get you started, everything you write **MUST** have a top level header comment that has your name, the creation date and a high level description of the purpose and theory of operation of the module. A listing of all the methods (or functions) in the file is also required. You cannot earn an A if these elements are missing. Each method (or function) must be fully described in a block comment, including a description of the function (or method), all of the arguments, return values and special considerations (for example, does the method perform error checking or must the calling routine insure that all passed arguments make sense). In-line comments should also be used to help guide the reader and improve clarity. Variable names must be as self explanatory as possible and you should use consistent naming conventions. For example, (i, j, k) are great general index variables and should not be used for other purposes unless doing so improves readability. If you are working in Java with rows and columns as well as x and y, then use index names such as iRow and iY along with jColumn and jX (Java arrays are row-column based which map into Y and X coordinates, respectively). The i and j prefixes help remind the reader that the values are array index integers.

Code Reuse and Abuse

Unless otherwise indicated, you may NOT copy work from another source and paste it into your code base. All code elements in this course must be written by you (exceptions will be noted). Any incidence of copying will be immediately handed over to Mr. Williamson and the honor council.

Your Computer **MUST** Work

Your computer must be functioning at a level sufficient to meet the requirements for the course. You must be able to connect to the network, access web sites, upload to Athena, *etc.* I strongly recommend that you backup your work on a nightly basis. A crashed computer is not an acceptable excuse for lost work!