

# SCSU CSCI UDWR

## Literate Programming Rubric

Trait	Outstanding	Good	Marginal	Poor
Documentation & embedded comments	Multiple full-featured output formats generated. Comprehensive generation of graphical UML diagrams. A comprehensive tag set applied consistently.	A moderately-featured output format generated. Several graphical UML diagrams generated. A useful set of tags applied consistently.	Relatively few tags inserted and features exploited. Limited graphical output.	Few if any tags inserted, & those used applied poorly and inconsistently. No graphical output.

### Guidelines:

The proficient use of [literate programming](#) (as mandated) should provide a student with considerable progress towards satisfaction of the [Source Code Documentation](#) requirement. In practice, this rubric should be applied in conjunction with the [Source Code Documentation Rubric](#).

In all contexts, consistency of style is desired. The student should be free to express themselves with the documentation style of their choice, given that it is reasonable, so far as they apply it consistently.

Desirable features:

- Multiple output formats
  - **HTML**
  - **Man Pages**
  - **PDF** {with *pdflatex* and *hyperlinks* enabled}
- Automatic internal link generation
- External link generation
- UML diagrams
  - Class hierarchy
  - Inheritance relations
  - File dependency graph

- Call graph
  - Caller graph
- Mathematical formula inclusion.
- Tag categories
  - Author list
  - Examples of client use via demo code
  - Dates of development
  - File location and concise description of contents
  - Parameters *{w. in/out specification}* for a function
  - Preconditions for a function
  - Postconditions for a function
  - Return value description for a function
  - References to external resources
  - Test case description
  - Thrown exceptions descriptions for a function
  - Version
  - Warnings
  - Known bugs
  - To-do discussion

**Doxygen, Javadoc** or other contemporary literate programming tools can be used to satisfy this requirement.