This is a purely individual assignment. Prepare your answers to the following questions <u>in a plain ASCII text file</u>. Submit your file to the Curator system by the posted deadline for this assignment. No late submissions will be accepted. No other formats will be graded.

You will submit your answers to the Curator System (<u>www.cs.vt.edu/curator</u>) under the heading OOC04.

For questions 1 through 8, write a single, colloquial English sentence that states the precise conditions under which the given statement would be false.

- 1. If Fred is an omnivore then Butch is cautious.
- 2. If Butch is not cautious then Ralph is contented.
- 3. If Julia is traveling then Butch is not cautious.
- 4. Every person who is sane can understand logic.
- 5. No lunatics are fit to serve on a jury.
- 6. None of John's children can understand logic.
- 7. There is a day of the week such that, its name contains an 'r' and the succeeding day falls on the weekend.
- 8. There is a kind of tire such that, if it is not properly inflated then it will overheat.
- 9. Suppose that statements 1 through 3 are true. Suppose also that Julia is traveling. What facts, if any, can you infer? Explain clearly.
- 10. Suppose that statements 4 through 5 are true. What facts, if any, can you infer? Explain clearly.