• Time: Tue/Thur 5:20-6:40PM
• Location: Room 102  Light Engineering
• Required Book: The Elements of Style, 4th edition (2000), Authors: Strunk and White $10 (or $4 2007 reprint by Coyote)
• Online Technical Writing, Author: David A. McMurrey  http://www.io.com/~hcexres/textbook/
• Recommended Textbook: Pocket Guide to Technical Communication, 5th ed. (2011). Author: Pfeiffer $42 list; $33 Amazon ($26+$4 used)
• Instructor: Professor Larry Wittie       TA: Sean Munson
• Office: CS Building, Room 1308
• Phone: 631-632-8750  (not 2-8456)
• Email: lw@ic.sunysb.edu
• Office Hours: 3:45-5:15PM Tue & Thu or by appointment
• Course Homepage: http://www.cs.sunysb.edu/~lw/teaching/cse300

Paper 1 My Weekend with Irene, printed and by email due today, 9/13.
CSE/ISE 300
First Paper - My Weekend with Irene

Your printed final paper is due in class today, Tuesday 9/13. Put the title centered at the top and your name plus the paper’s date under it. The paper should be 1.0 page (30+ lines) to 1.3 pages (~40 lines) in length. It should have lines spaced 1.5 (between single and double spaced), text lines at least 6 inches wide, 1.25 inch margins, and about 15 words per line. Use font 12 or larger. The title, your name, and blank lines do not count in the required 30+ lines. Aim for 36 lines of text to be safe.

Email .doc copy of your final paper to lw@ic.sunysb.edu with the Subject: 300 paper 1 - My Weekend with Irene.
Grammar by Blake: Elements of Technical Writing

Rules:

29. Avoid misplaced participles, phrases that begin with the -ing or past form of a verb but do not modify the nearest noun or pronoun. Rewrite the sentence.
   Studying in the lobby, the nearby snack machine is irresistible.
   Studying in the lobby, we cannot resist the nearby snack machine.
   Frightened by the flames, the exit was barely visible to them.
   Frightened by the flames, they could barely see the exit.

30. Avoid run-together sentences.
   I cannot access my data, please restart the file server.
   I cannot access my data. Please restart the file server.

31. Avoid sentence fragments.
   Two hundred error messages from each job. New students of C!
   New students of C often get 200 error messages from each job.
Rules:

32. Spell out abbreviations where they first occur, and use too few rather than too many. Abbreviations and acronyms are very common in computing documentation. If used extensively, they can render a technical document almost illegible. The first time you use an abbreviation, spell its word(s) in full, followed by the abbreviation in parentheses. The only exceptions are abbreviations that are so widely used in general literature that they have replaced the complex word(s) that they represent, such as LSD for lysergic acid diethylamide and DNA for deoxyribose nucleic acid.

FabLab has the latest computer-aided design (CAD) tools. Search the Association for Computing (ACM) digital library. The central processing unit (CPU) uses a Pentium III chip.
CSE/ISE 300
Abbreviation and Capitalization

Rules:

33. Omit punctuation (, and -) inside and after abbreviations, except titles and initials used in formal names and abbreviations spelled like small words.
   Dr. M. L. King will speak at 7pm to the National Association for the Advancement of Colored People (NAACP).
   This CPU uses 4 megabytes (MB) of electrically programmable read-only memory (EPROM) to hold its instructions.
   Fig. 7 in the text shows a small fig tree.

34. An abbreviation uses the same capitalization as the specific word or phrase it replaces, with the exception that acronyms are always completely capitalized unless for units of measure. An acronym abbreviates a phrase by the first letters of its major words.
   In 1974, the USA adopted a maximum speed limit of 55 mph.
   Dr. David R. Smith is a prof at Stony Brook University (SBU). Our department was founded by Prof. Smith.
Abbreviation and Capitalization

35. Avoid using signs for units of measure (“ for inch, ‘ for foot, and # for pound), except in tables. Instead, use the words or their abbreviations (in. for inch, ft for foot, and lb for pound).

   Not “Your 7# baby is 18” long”, said the 6’ Dr. Watson.
   “Your 7-pound baby is 18 inches long”, said 6-foot Dr. Watson.

36. Capitalize trade names.

   The name fiberglass came from the trade name Fiberglas.
   The 1921 slogan “I’d walk a mile for a Camel” refers to cigarettes.
   We do not have a Xerox photocopier in our department.

37. Do not capitalize words to emphasize them.

   Not Remember that Ethics is important in Computer Science.
   Remember that ethics is important in computer science.
   I learned to use the Computer in 2 Hours with Video Professor.
   I learned to use a computer in 2 hours with Video Professor.
CSE/ISE 300

Abbreviation and Capitalization

Rules:

38. **Capitalize the full formal names of companies, departments, and other organizations.** Do not capitalize words that are only parts of formal names.
   
   **Not** Our monitors cost too much. Talk to Engineering before asking Marketing for a new price.
   
   **Say** Our monitors cost too much. Talk to engineering before asking marketing for a new price.
   
   **Or** Our monitors cost too much. Talk to the Engineering Division before asking the Marketing Division for a new price.

39. **Capitalize all proper nouns, even those naming scientific laws and units of measure unless they are so frequently used that they are no longer associated with their original formal names.**
   
   At Mach 1, a jet plane flies exactly as fast as its engine noises. We own diesel cars. Ernst Mach and Rudolf Diesel were German.
CSE/ISE 300
Technical Writing Style

Rules:

40. Use the active voice.
   Say Mary wrote the code. Not The code was written by Mary.

41. Use plain and direct words, not complex or elegant language.
   Say Rain falls. Not Droplets of condensed water vapor become massive enough to precipitate to earth.
   Say I was fired. Not Corporate managers laid off many workers without any warning.

42. Delete words, sentences, and repeated phrases that do not add to your meaning.
   Say I worked hard to act properly.
   Not I had to find a way to make an ethical decision when it was very emotionally draining even to ask myself what was the ethically proper decision to make.
CSE/ISE 300
More Rules Blake: Elements of Technical Writing
Technical Writing Style

Rules:

43. **Use specifics, not vague generalities.** Do not just say something is long, fast, or valuable. Say *how* long, *how* fast, or *how* valuable.
   
   My shoes were cheap. My Timberland boots cost only $40 on sale.

44. **Use vivid colorful language in places to help readers remember.**
   
   Not just: Blood platelets help form clots.
   But: “Prick us and we bleed, but the bleeding stops; the blood clots. The sticky cell fragments called platelets clump at the site of the puncture, partially sealing the leak.” *Scientific American* 12/81, p 126.

45. **Use the past tense, not the present, to describe experiments.**
   
   We simulated the cooperative execution speeds of 2,800 separate computers running the same data-synchronized Gaussian elimination code. The computers changed equation coefficients in distributed shared memory using six different cache coherence methods.
Rules:

46. **Use present tense for most writing, other than experimental work and results, because it is more lively.** Theories, facts, and other “eternal” truths should be expressed in the present tense. References should be discussed in the present tense, if possible. Avoid *could* and *would.*

   The sides of all right triangles fit parametric lengths \((r^2+s^2)\), \((r^2-s^2)\), and \(2rs\), for integers \(r\) and \(s\). The hypotenuse has length \((r^2+s^2)\).

47. **Use technical terms for more concise writing, but only if they are clear to the vast majority of your readers.** Use simpler word phrases if many readers will not know a technical word.

   Today, many *collections of connected* computers that execute a single application code use the Linux *library of programs to control computer components* because *its source code is available.*

   Today, many *grids* of computers that execute a single application code use the Linux *operating system* because *it is open-source.*
CSE/ISE 300
Last Rules Blake on Technical Writing Style

Rules:

48. **Break your writing into short sections.** Cut 50-word sentences into two parts. Cut 12-sentence paragraphs in two. Readers lose the meaning of a sentence if it runs over several lines. They get bored and forget the points made in a paragraph that is pages long. Have separate paragraphs for the distinct ideas in a paper.

49. **Keep ideas and sentence structures parallel.**

   *Not:* What does your code do, its inputs, and its results?

   What are the inputs, purpose, and results of your code?

50. **Use an informal style, not a formal style.** Omit the extra words.

   It is very unfortunate that I was not available when you visited our laboratory facilities on Friday of last week.

   I am sorry that I missed you last Friday.

51. **Read what you write aloud, several times before you finish it.**
Accept/Except

Accept is a verb meaning receive. Except is a preposition (or verb) meaning is (or make) a special case.

I will accept the job offer from IBM. Everyone except Mary wants to work for a large company next year.
(Uncommon as a verb: Please except me from today’s deadline. I have the flu.)

Affect/Effect

Affect is a verb meaning influence.
Effect is a noun meaning result.
(Uncommon: Effect is a verb meaning cause {a result}.)

Birth orders affect adults’ goals in life; more first-born than second-born children attend graduate school.

One effect of burning gasoline in cars is urban smog.
(Uncommon: The new boss will effect change in the company’s line of products. Better: The new boss will change the company’s line of products.)
Amount, Much, Less/Number, Many, Fewer
Amount, much, and less are used with the collective names for substances for which individual items cannot be counted. Number, many, and fewer are used for the names of items that can be counted.

   The beach has much less sand this spring than last fall. Winter storms must have washed away a large amount of sand.
   The beach has many fewer sand dollars this spring than last year. Summer tourists must have taken a large number of sand dollars home as souvenirs.

Between/Among
Both between and among are prepositions. However, between is used for two items and among is used for three or more items.
   This agreement is between you and me.
   The two pizzas were shared among the four graders for the course.

Separate
Separate is frequently misspelled as seperate. Remember there is a rat in separate.
CSE/ISE 300
More Advice from Pfeiffer Appendix

Complement/Compliment
Complement is a verb (or noun) meaning \( that \ which \) make(s) complete.
Compliment is a verb (or noun) meaning praise.
We have a full complement of experts for the project.
The skills of a husband and wife often complement each other.
{The word complement contains the letters of complete.}
I like compliments. I compliment you on your stunning shoes.
{The word compliment contains an i.}

Continuous/Continual
Continuous means unceasing, without ever stopping.
Continual means repeated regularly, repeated after stopping.
The snow was continuous from 3 pm to midnight yesterday.
My clock loses a few minutes per month. I habitually and continually check it against the time from the radio news station.

Criteria is the plural of the Greek word criterion, not criterions.
The main criteria for selecting best shoes were comfort, utility, and style. The most important criterion was comfort.
Data is a plural, the plural of the Latin word datum, not datums. The data show the effectiveness of rimonabant (pronounced re-moan-a-bant) for weight loss.

Due to / Because of
Due to starts an adjective phrase that means “attributable to.” It must modify a noun, pronoun, or noun phrase. Usually it follows a form of the verb “to be.” It cannot mean the same as a prepositional (and usually adverbial) phrase beginning with because of, owing to, or as a result of.

The cracks in the sidewalk are due to expansion on hot days.

(Not: The cracks in the sidewalk are due to too few expansion joints.)

The sidewalk is cracked because it does not have expansion joints every three feet.

The sidewalk is cracked because of too few expansion joints.
CSE/ISE 300
More Advice from Pfeiffer Appendix

English

The **articles** (adjectives) *a*, *an*, and *the*.

The indefinite (no specific one) articles are *a* and *an*. The rarer form *an* is used only before words that start with a vowel sound.

*An* hour (pronounced like our) before sunrise is *an* excellent start time.
*A* ewe (pronounced like you or U) is *a* female sheep.

The definite article *the* is used to refer to a specific noun (or pronoun).

*An* hour before sunrise is *the* best time to start.
*Dolly* was *the* first cloned sheep. *She* was *a* ewe.
*Joan* was *the* first person across the finish line.

**Singular** versus **plural**

In a clause or sentence, subject and verb must agree in number. For subjects connected by *or*, the closest subject and the verb must agree.

*We are* here. *He is* there. *He and I are* leaving now. The players or the *coach selects* the most valuable player. The cow or the *sheep are* in the meadow.
Farther/Further
Both refer to longer distances, but farther refers to actual physical distances; further refers to other distances or it means “additional.”

{In Texan, a “fur piece down the road” means a “great distance”, not a mink shawl.}

In 15 minutes, Tom can run a mile farther than Bill. After I left, Kasia read 20 pages further in her book on owls. Please give further evidence that stress increases allergic reactions.