

Introduction to Technical Writing

1st Year Engineering Students
Errors in Writing



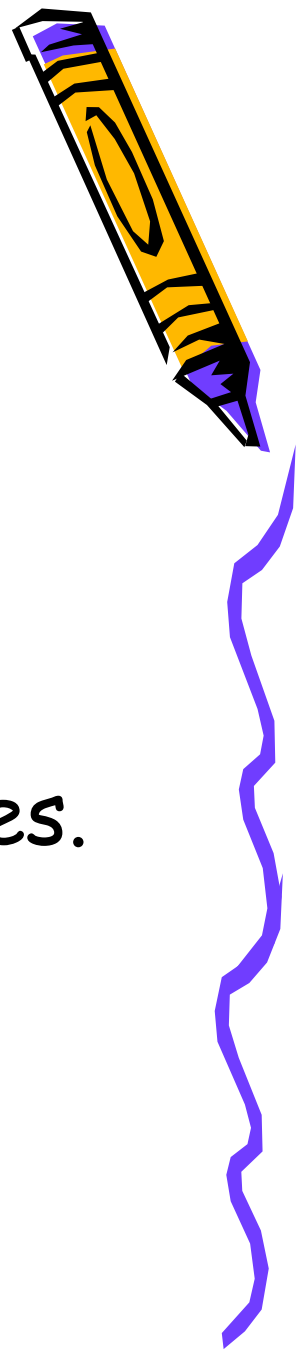
REFERENCES



- Leo Finkelstein, Jr.; Pocket Book of Technical Writing for Engineers and Scientists, McGraw-Hill's Best, 2005.
- Technical & Business Writing (ENGL 2311 at ACC).htm
- Communications\Introduction to Communication Skills - Mind Tools.htm



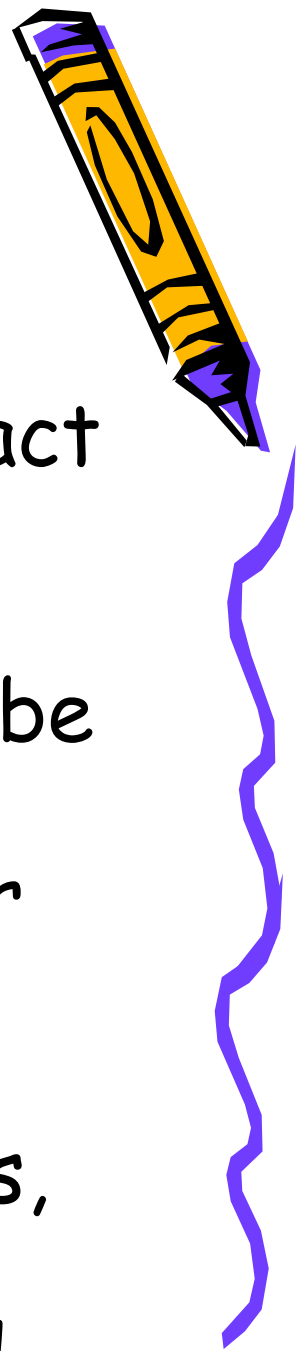
What makes writing not effective?



- Grammar mistakes.
- Vocabulary mistakes.
- Spelling mistakes.
- Mechanics and punctuation mistakes.
- Sentence errors.
- Pattern errors.



Write With Necessary Caution...

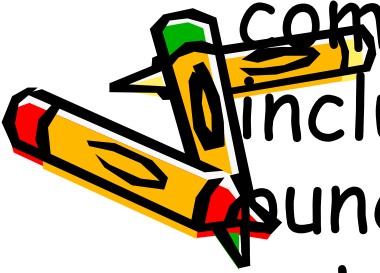


- When writing, be mindful of the fact that once something is in written form, it cannot be taken back.

Communicating through words can be more concrete than verbal communications, with less room for error and even less room for mistakes. This presents written

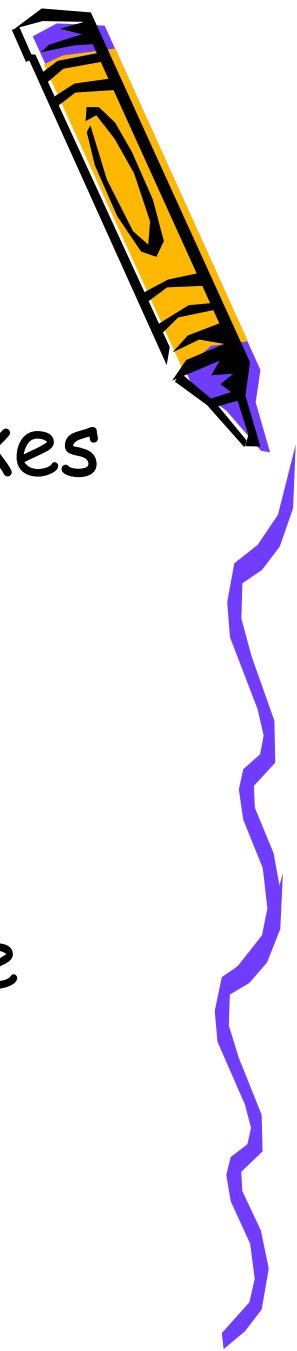
communicators with new challenges, including spelling, grammar,

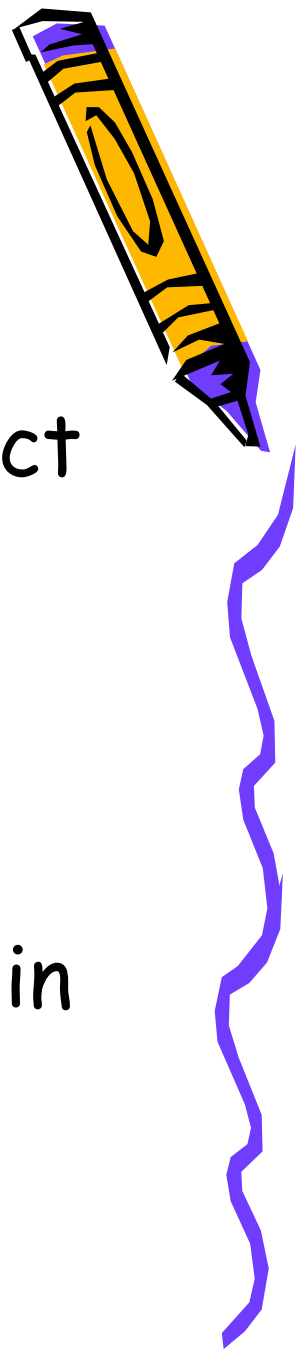
punctuation, even writing style and actual wording.



Check tools


- Thankfully, today's technology makes memo, letter and proposal writing much easier by providing reliable tools that check and even correct misspelled words and incorrect grammar use. Unfortunately, these tools are not fail proof and will require your support, making your knowledge in this area important.





Common Grammar Errors:

- Lack of agreement: between subject and verb; pronoun and antecedent.
- Illogical sequence of verb tenses; (the tense of the verb in the subordinate clause should be adjusted to the tense of the verb in the main clause).



Problems involving the use of modifiers.

Problems involving the use of modifiers:



- Dangling sentences:

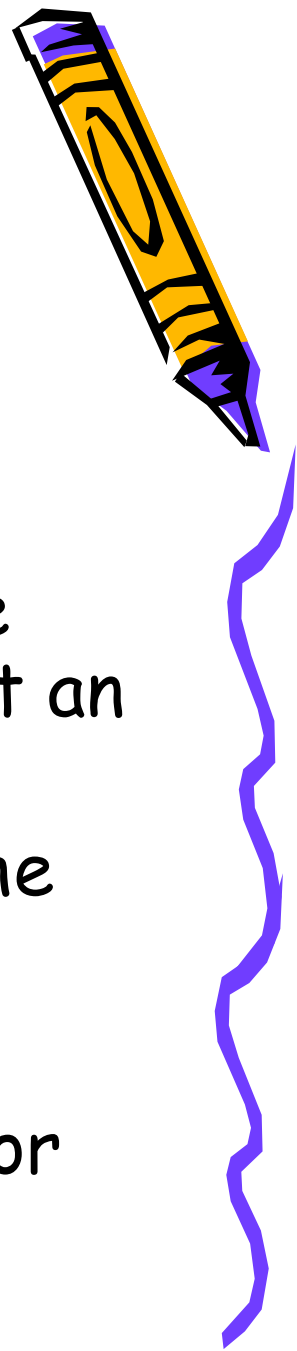
Modifiers are words, phrases, or clauses which alter the meaning of the sentence elements by limiting, describing or emphasizing them. The modifier is dangling when there is no word to which they can clearly and logically relate.

Example:



~~leaving~~ at last reached home, the door closed behind him.

Problems involving the use of modifiers:



- To eliminate the error:

Change the word-order so that the dangling element relates to an adequate subject, or expand the sentence so that an adequate subject is provided:

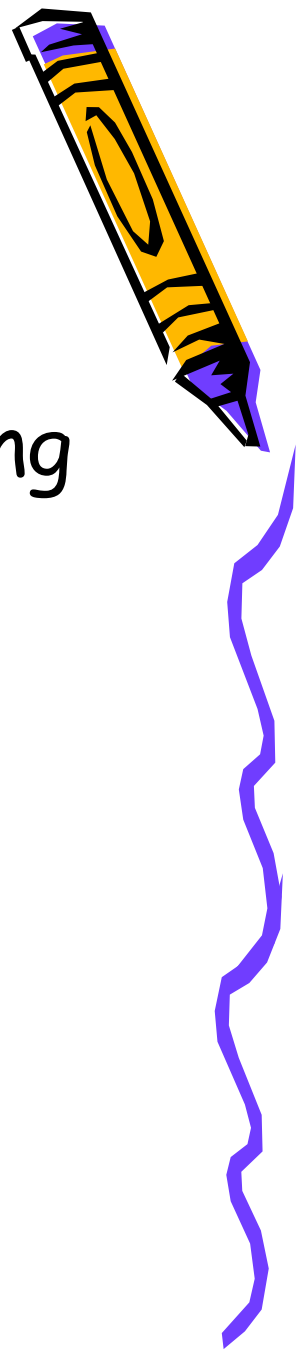
Having at last reached home, he closed the door behind him.

Or

When he reached home, he closed the door behind him.



Problems involving the use of modifiers:



- Dangling participles at the beginning of the sentence:

Swimming and playing tennis, our vacation passed happily. (Dangling)

Correction:

We passed our vacation happily, swimming and playing tennis.



Problems involving the use of modifiers:



- Dangling participles at the end of the sentence:

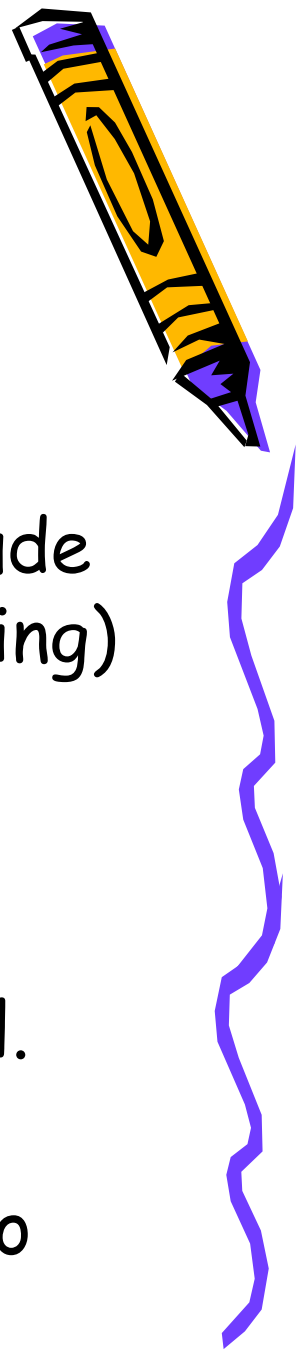
Our vacation passed happily, swimming and playing tennis. (Dangling)

Correction:

We passed our vacation happily, swimming and playing tennis.



Problems involving the use of modifiers:



- Dangling Infinitives:

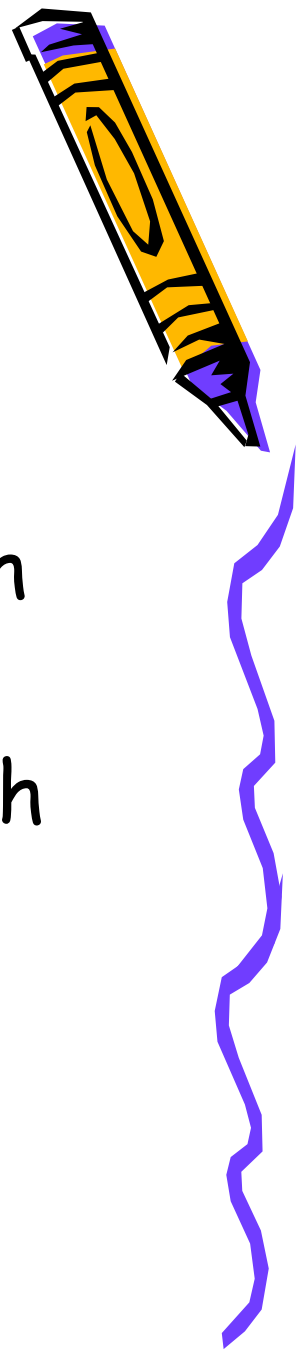
- To prepare for an examination, solitude and concentration are essential. (dangling)

To prepare for the examination, a man needs solitude and concentration.

- To have a successful party, good conversation and food are always useful. (dangling)

To have a successful party, one ought to provide good conversation and food.

Problems involving the use of modifiers:



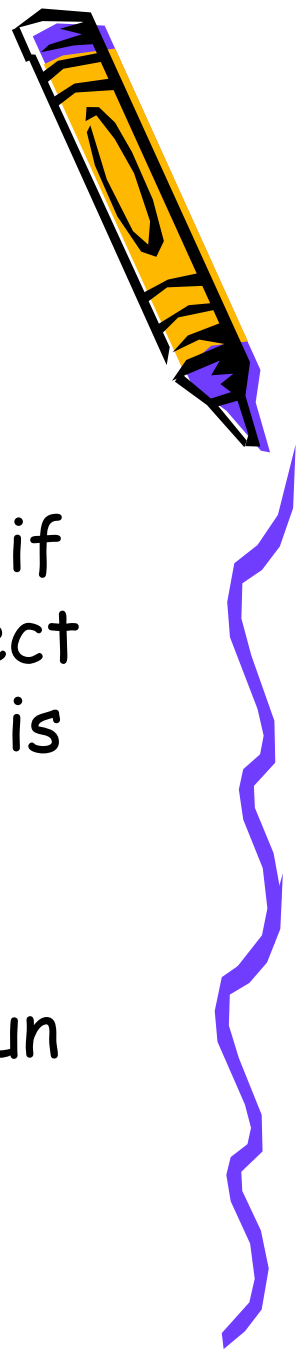
- Dangling Gerunds:

After seeing the dentist, his teeth stopped aching. (dangling)

After he saw the dentist, his teeth stopped aching.



Problems involving the use of modifiers:



- Dangling elliptical clauses:
- A subject or predicate may be omitted if the subject corresponds with the subject of the main clause and if the predicate is clear.

Right

- When I am hunting, I always keep my gun loaded.



When hunting, I always keep my gun loaded

Problems involving the use of modifiers:

Dangling

When the omitted subject does not correspond with the subject of the main clause, the elliptical clause dangles:

- While asleep in the underground, a thief picked my pocket.
- Right: While I was asleep, a thief picked my pocket.

or

- While sleeping, I had my pocket picked by a thief.



Problems involving the use of modifiers:



- Misplaced Modifiers

Squinting modifier

- I only told the jury what I had seen.

This sentence might have three meanings:

I and no one else told the jury.

I told the jury what I have seen and nothing else.

I told only the jury and no one else.



Problems involving the use of modifiers:

In all previous cases sentences should read:

Only I told the jury what I had seen.

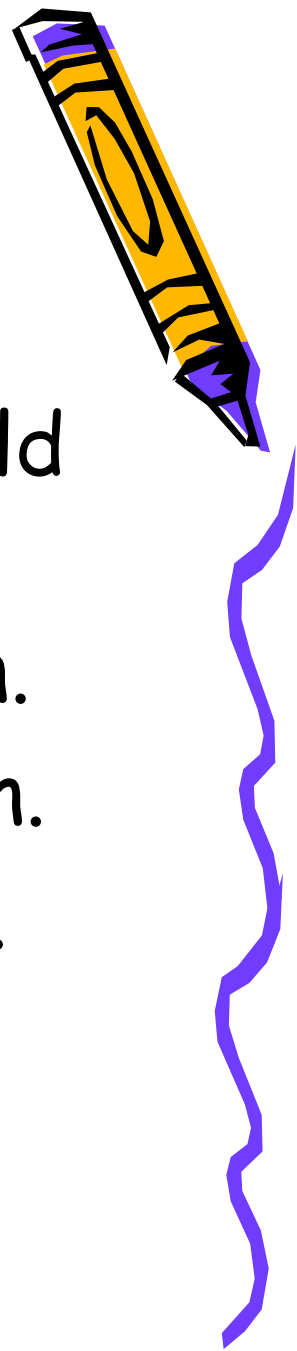
I told the jury only what I have seen.

I told only the jury what I had seen.

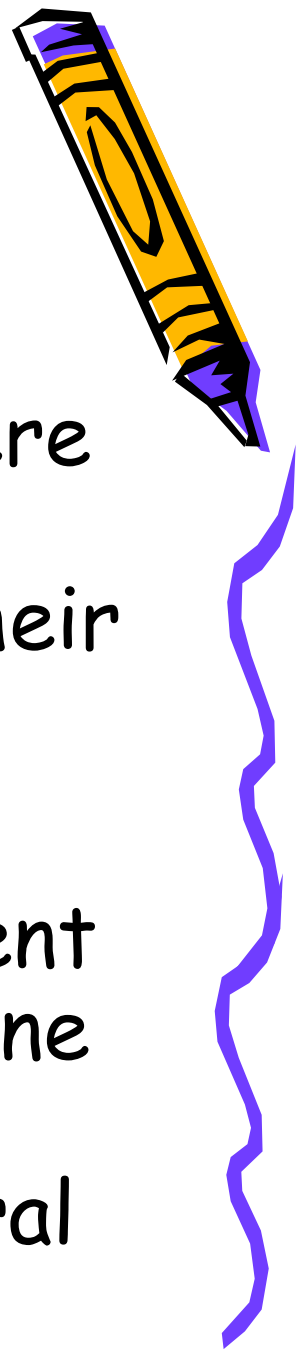
Also see:

Misplaced modifying clauses.

Misplaced modifying phrases.



Difference between technical and poet writing



- Time is a river flowing from nowhere through which everything and everyone move forward to meet their fate.
- Time is a convention of measurement based on the microwave spectral line emitted by cesium atoms with an atomic weight of 133 and an integral frequency of 9192631770 hertz.



Difference between technical and poet writing.



- Time is a river flowing from nowhere through which everything and everyone move forward to meet their fate.

- Flowing from nowhere, time makes people move to their end. Correct

Flowing from nowhere, people come to their end as time passes. Dangling

Assignments

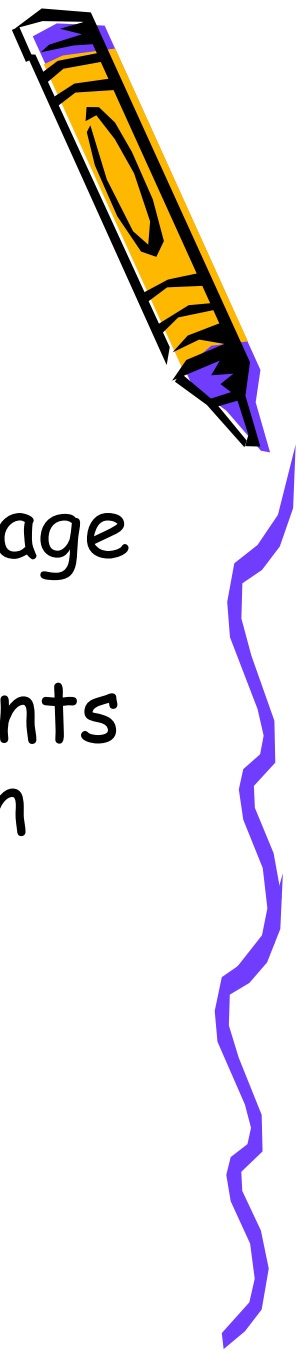


- 1. Prepare a message to your family consisting of younger generation informing them why did you chose to study In your Specific Area (Mechanical, Electrical, or Petroleum Engineering).
- 2. Do the same as 1 but this time your message is to your friends who decided to join other specializations.

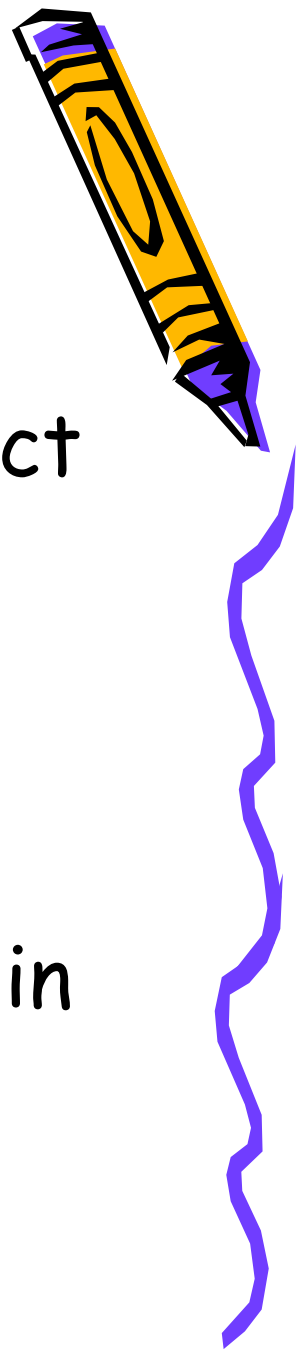


Tutorial


- In the tutorial for these lectures each student will present his message by any means he likes and we will discuss with the rest of the students how efficient he or she has been in conveying the message to the audience and we will have the comments of the rest of students.



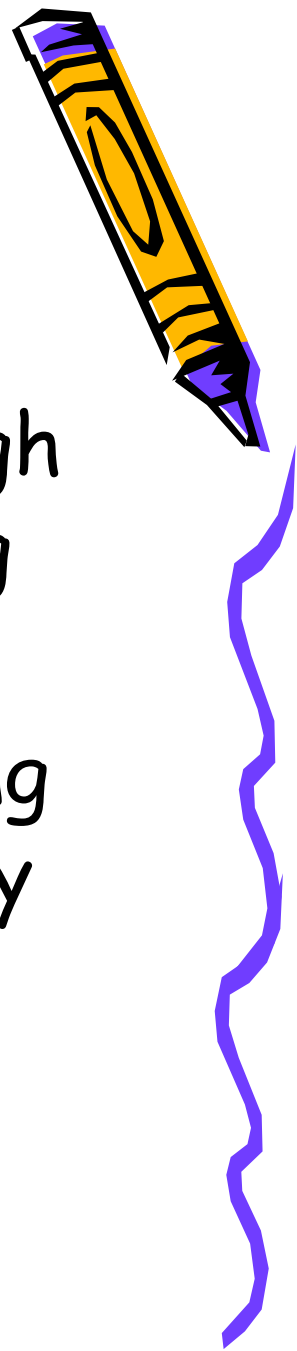
Reminder: Common Grammar Errors:



- Lack of agreement: between subject and verb; pronoun and antecedent.
- Illogical sequence of verb tenses; (the tense of the verb in the subordinate clause should be adjusted to the tense of the verb in the main clause).

 Problems involving the use of modifiers.

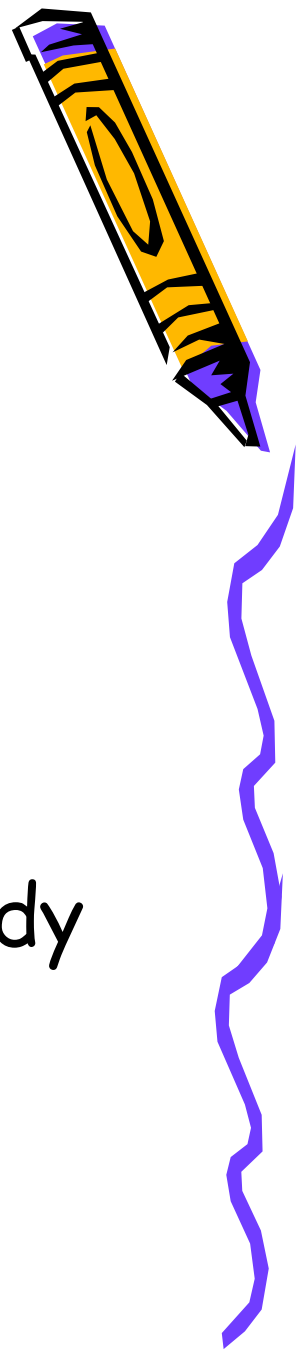
Follow Sentence Errors



- Last Lectures we have gone through errors in sentence related to using modifiers.
- This lecture we will continue talking about sentence errors: Consistency and Parallelism.



Maintaining consistency



- Consistency of number and person.

After I had a job, I met many difficulties.

- Consistency of tense.

We hurried to the door, but nobody was there.

- Consistency of mood and tone.



Maintaining consistency



- Consistency of voice and subject.
- Wrong: He abhorred prejudice and all people were considered equal by him.
- Right: He abhorred prejudice and considered all people equal.



Maintaining consistency



- **Consistency of tone:**
- Wrong: When studying for an examination, try to achieve flexibility in handling your material: aim at insight rather than sheer memory. What you must memorize will then benefit from a reserve of reflective thought.

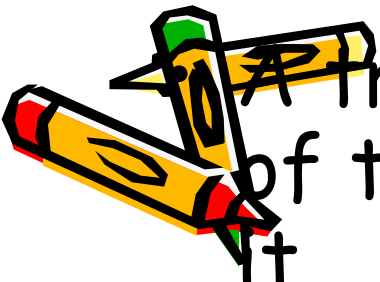
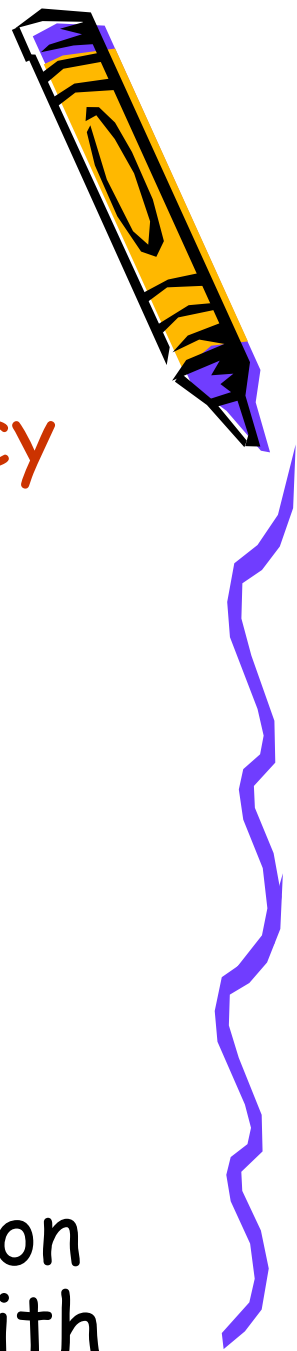
Right: -----try to anticipate the questions you may be asked -----

Maintaining consistency

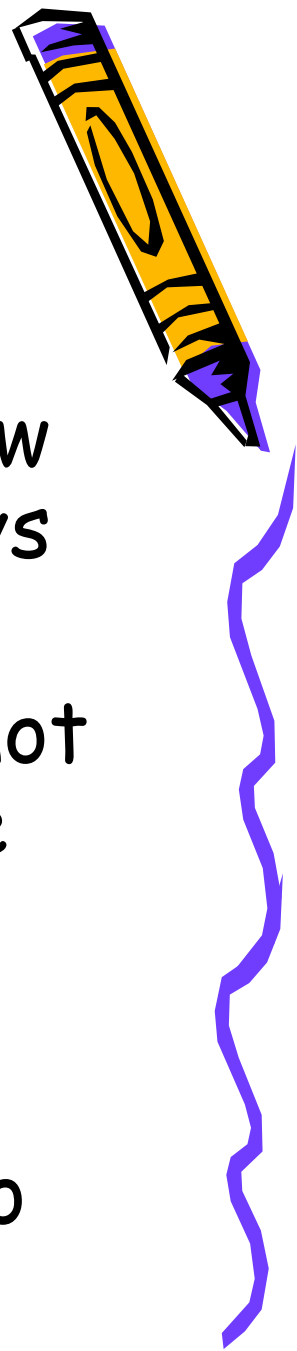
Correct all violations of consistency in number, person, tense, mood, subject, or tone:

- One should listen carefully to his employer if you want promotion.
- I know that I wouldn't go out with that group unless you want to get into trouble.

A true democrat accepts the opinion of the majority if they disagree with



Maintaining consistency



- An experienced wrestler knows how to feign agony, and you could always tell they were not really hurt.
- Giving directions to a stranger is not always easy but you must try to be simple and specific. What does it matter if he gets lost a little; he'll see more of the town. But in any event, it is only courteous to try to guide him as well as possible.



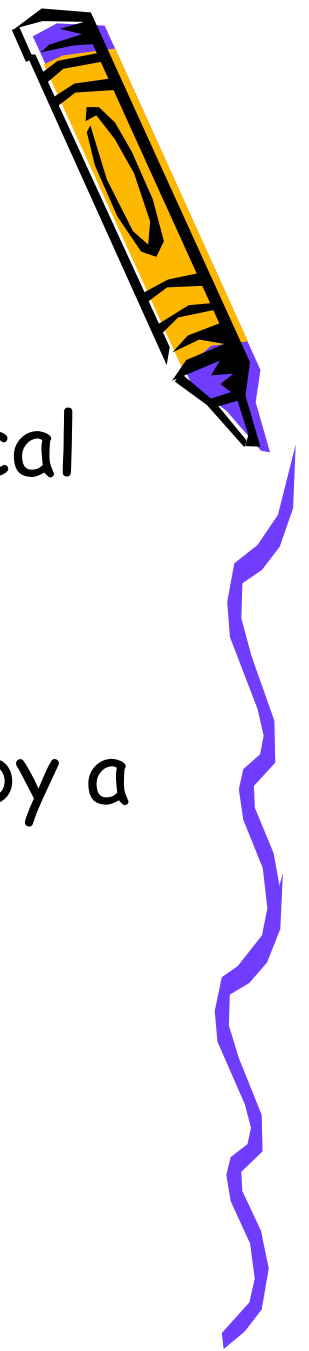
verb, verb and complement,
unless there is a very good
reason..



- Wrong: The teacher suggested, since so many students had failed to do the exercise which had been set two weeks before, that they remain after school.
- Right: Since so many students had failed to do the exercise which had been set two weeks before, the teacher suggested that they remain after school.



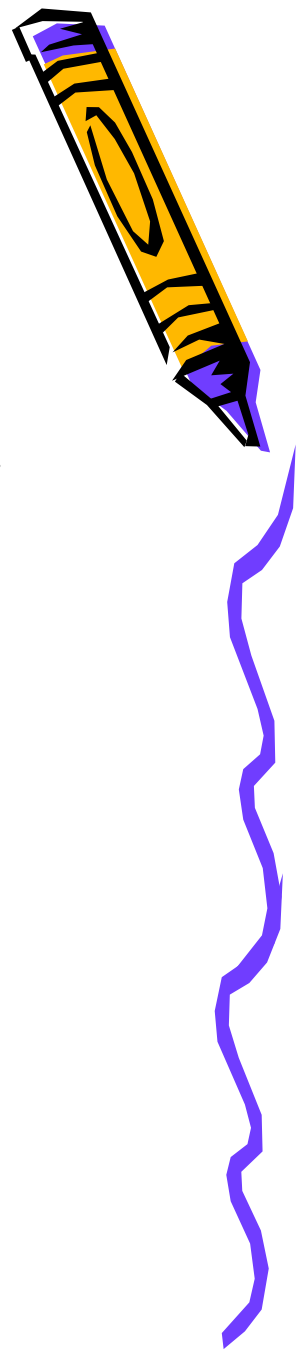
Parallelism



- Parallelism signifies the grammatical balance of two or more logically related sentence elements.
- Parallel sentence elements linked by a co-ordinating conjunction must be parallel in form: noun must parallel noun, adjective must parallel adjective, phrase must parallel phrase, etc...



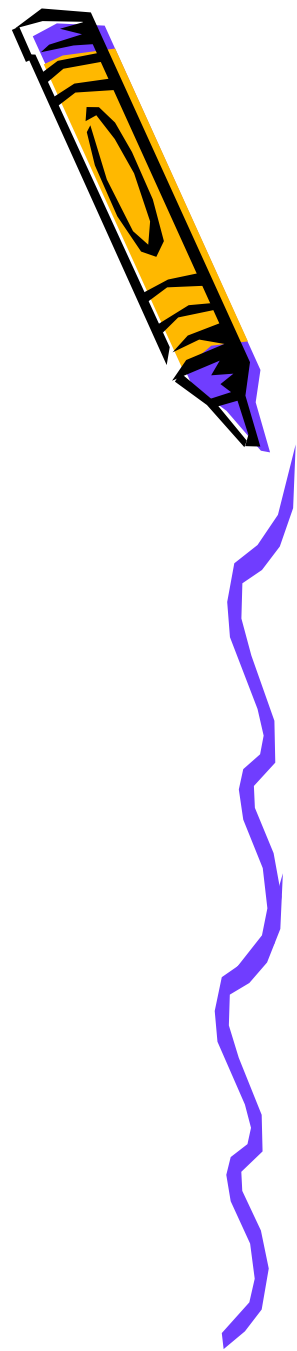
Parallelism



- Parallelism is the repetition of the same grammatical structure especially when writing lists: Lists should be cast in the same grammatical form.
- Here are 1) Parallelism within the same sentence and 2) Parallelism between larger elements.



Parallelism



- Parallelism within the sentence:
 - Facilitates reading and
 - Clarifies meaning.
- Lists within sentences are either:
 1. Vertically formatted with alpha numeric sequence.
 2. Partially formatted with alphanumeric sequence.
 3. Not formatted.



Parallelism



- Wrong: A good scholar must be precise and possesses originality.
- Right: A good scholar must be precise and original.
- A good scholar needs precision and originality.
- Wrong: Consider the origins of man and how he has developed.
- Right: Consider the origin and development of man.



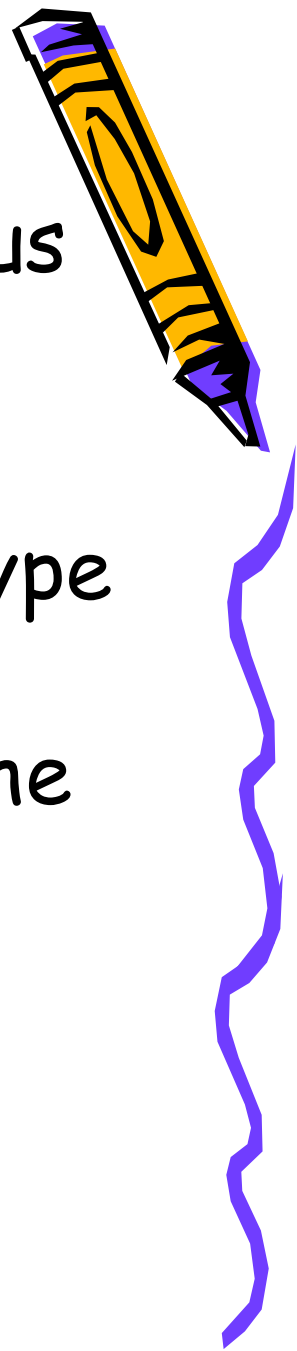
Parallelism



- Wrong (Correct):
- The building is 140 ' long, 80 feet wide and is four stores in height.
- Judge people by what they say and their actions.
- People fall between two classes: the workers and those who like to depend on others work.



Parallelism

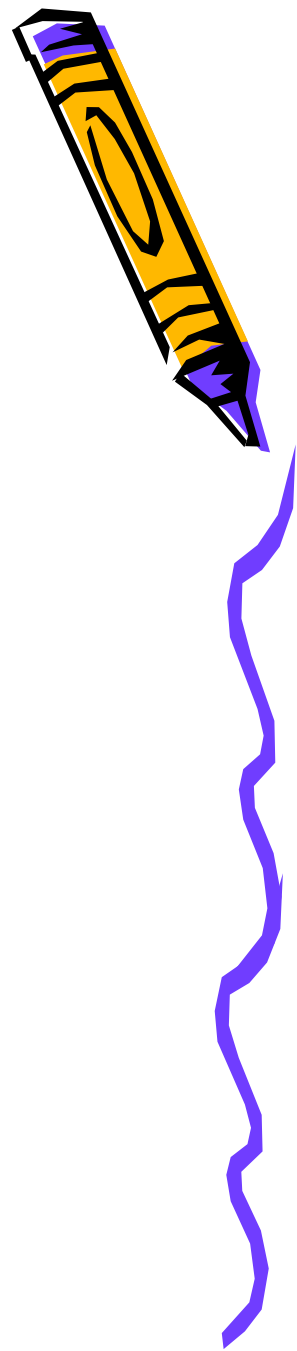


- The group was quiet and in a serious mood after the meeting.
- The variables are pressure and temperature of the boiler, what type of fluid fuel is required, oxygen amount, and the temperature of the fluid.
- The principle processes for the operation are: coagulating, flocculation, removing the solids, nitrogen removal and disinfection.

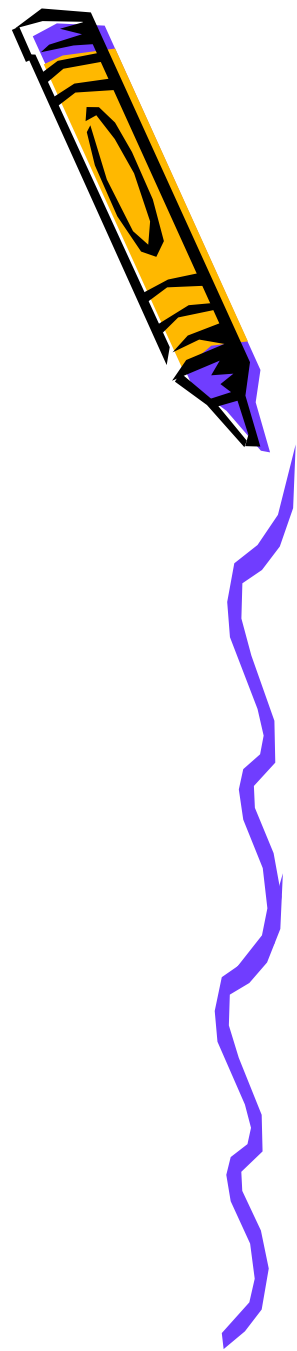


Parallelism

- Effective sentences should
 - ❖ Show unity of idea,
 - ❖ Emphasize the right parts,
 - ❖ Show cohesion between parts,
 - ❖ Be precise in meaning,
 - ❖ Be concise,
 - ❖ Show word propriety,
 - ❖ Be clear in meaning,
 - ❖ Show variety in structure.



Parallelism



- Effective sentences should show the following:
 - ❖ Unity of idea,
 - ❖ Emphasis,
 - ❖ Cohesion between parts,
 - ❖ Preciseness,
 - ❖ Conciseness,
 - ❖ Word propriety,
 - ❖ Clarity of meaning,
 - ❖ Variety of structure.





- After going through sentence errors the last part of the presentation focuses on style. Style of writing has direct link with peoples' education, readings, culture, and even social background.



The Importance of "Style"...



Some of the most basic tips to remember when writing include:

- Avoid the use of slang words
- Try not to use abbreviations (unless appropriately defined)
- Steer away from the use of symbols (such as ampersands [&])
- Clichés should be avoided, or at the very least, used with caution
- Brackets are used to play down words or phrases



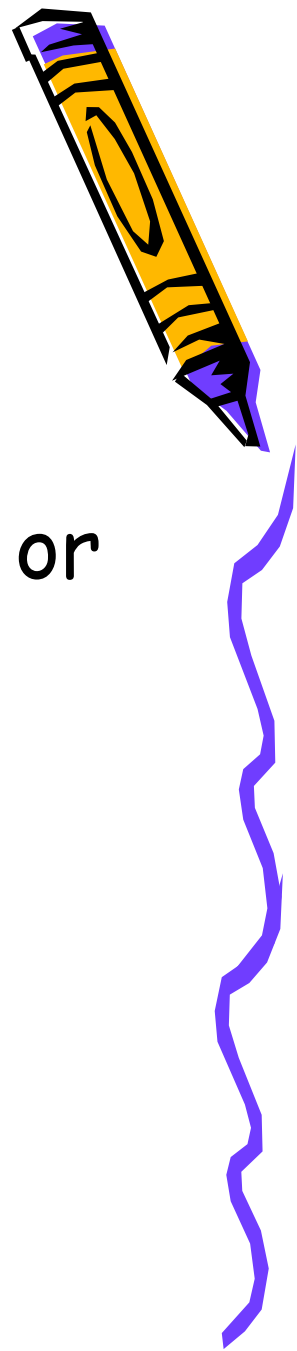
The Importance of "Style"...



- Dashes are generally used for emphasis
- Great care should ALWAYS be taken to spell the names of people and companies correctly
- Numbers should be expressed as words when the number is less than 10 or is used to start a sentence (example: Ten years ago, my brother and I...). The number 10, or anything greater than 10, should be expressed as a figure (example: My brother has 13 Matchbox cars.)



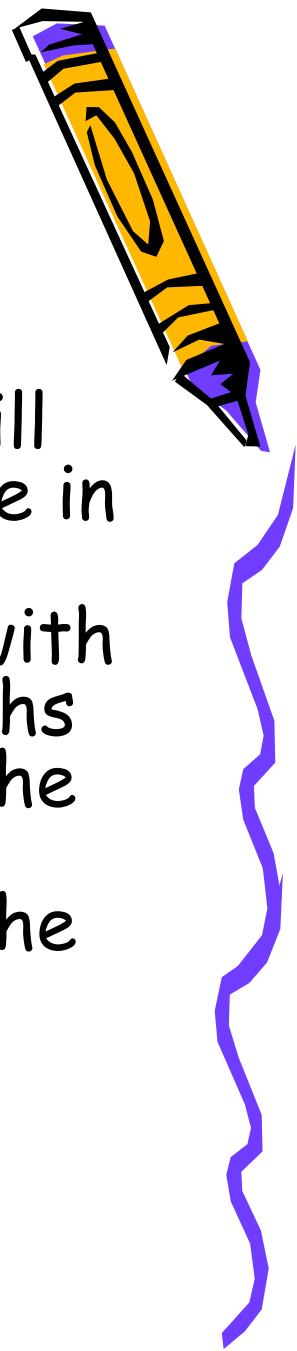
The Importance of "Style"...



- Quotation marks should be placed around any directly quoted speech or text and around titles of publications.
- Keep sentences short



Tutorial



- In the tutorial for these lectures we will discuss together a real scientific article in the field for both groups of computer science and engineering. We will start with simple articles including a few paragraphs and we will identify in each paragraph the message to be conveyed, this will be an initial step to getting acquainted with the idea of a topic sentence.



Tutorial

- The students will discuss the structure of each sentence and we will look for modifiers, parallelism in the sentence, and consistency. At the end each student is expected to deliver a written assignment on what we have discussed in class.

