



**WELCOME BACK!**

**ENGINEERING  
TECHNICAL  
COMMUNICATIONS  
WEEK #6**

**LESSON 1**

**PRISMACOLOR®**  
Plastic Eraser  
Gomme en plastique





*Announcements*

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You cannot submit this assignment late.**

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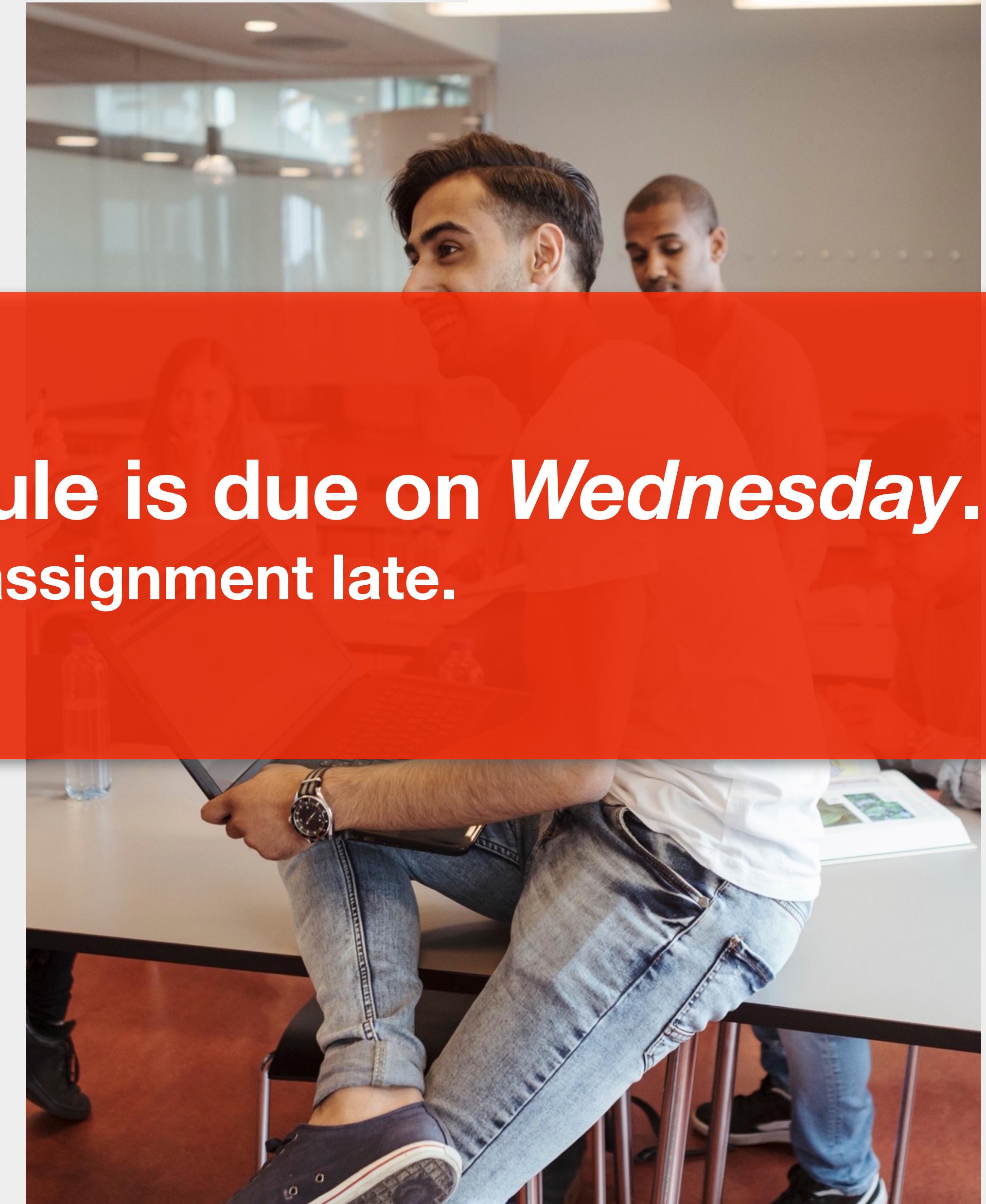


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## **Assignment #1: Project Problem Description**

Due Friday, Feb 17 – *next Friday*



**RECAP**

# LAST CLASS

- In-Class Exercise #2 Review
- Imposing Visible Structure: Headings
- Lists
- Parallel Structure
- Assignment #2 Prompt

**Today:**

- Parallelism Activity
- Writing Technical Sentences
- In-Class Exercise #3



MAINTAINING PARALLEL  
STRUCTURE (PARALLELISM)

# *Activity*

The following paragraph describes a series of WorkSafeBC infractions carried out by a framer on a construction site.

Change this series into a proper, parallel *list*.

Dave,

As I've mentioned to you a couple of times, your crew is breaking a bunch of WorkSafeBC regulations. We ought to follow those regulations, not just because they have the force of law in the province, but also because we want to keep everyone on site safe. Please make sure that your crew from now on lowers waste wood from the upper storey frames safely. Then they have to collect that waste wood; they have to remove all the nails and should deposit the wood in the wood recycle bins. Also make sure that your framers trap sawdust in containers at the cutting stations. Alternatively, they could wet the sawdust down.

Make sure you erect temporary railings on all stairs and across the low window openings in the upper storeys.

One more thing, neighbours have complained about acrid smoke when your guys burn their vinyl siding waste on site. This is a serious health hazard, so please follow the WorkSafeBC regulation and truck your vinyl waste off site for environmentally safe disposal.

Thanks for your help on this.

Hey Dave,

As I've mentioned to you a couple of times, your crew is breaking a bunch of WorkSafeBC regulations. We ought to follow those regulations, not just because they have the force of law in the province, but also because we want to keep everyone on site safe. Please make sure that your crew



Thanks for your help on this.

Dave,

As I've mentioned to you a couple of times, your crew is breaking a bunch of WorkSafeBC regulations. We ought to follow those regulations, not just because they have the force of law in the province, but also because we want to keep everyone on site safe. Please make sure that your crew from now on **lowers waste wood from the upper storey frames safely**. Then they have to **collect that waste wood**; they have to **remove all the nails** and should **deposit the wood in the wood recycle bins**. Also make sure that your framers **trap sawdust in containers at the cutting stations**. Alternatively, they **could wet the sawdust down**.

Make sure you **erect temporary railings on all stairs and across the low window openings in the upper storeys**.

One more thing, neighbours have complained about acrid smoke when your guys burn their vinyl siding waste on site. This is a serious health hazard, so **please follow the WorkSafeBC regulation and truck your vinyl waste off site for environmentally safe disposal**.

Thanks for your help on this.

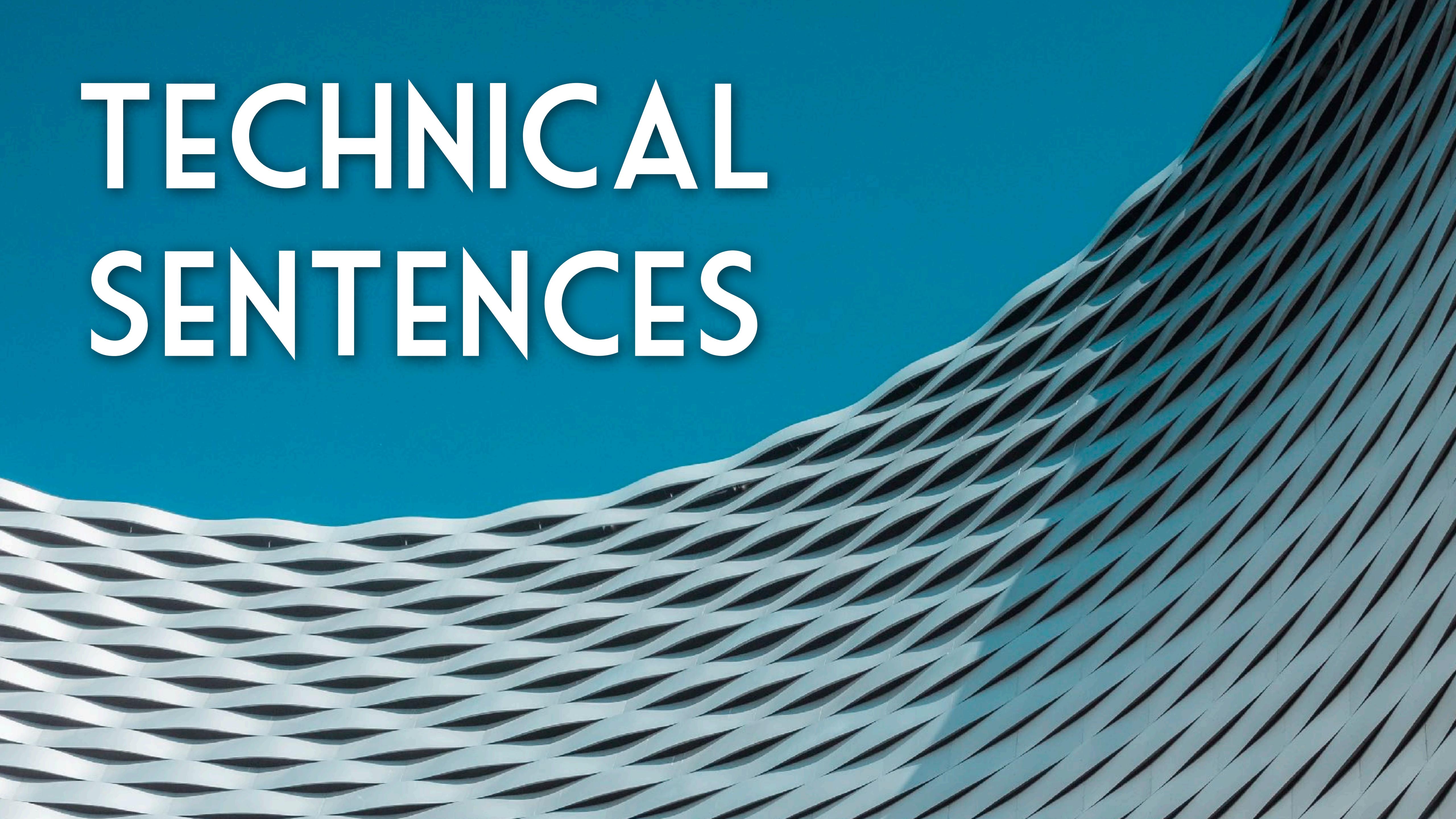
Hey Dave,

As I've mentioned to you a couple of times, your crew is breaking a bunch of WorkSafeBC regulations. We ought to follow those regulations, not just because they have the force of law in the province, but also because we want to keep everyone on site safe. Please make sure that your crew

- lowers waste wood safely from the upper stories
- collects waste wood
- removes nails from waste wood
- deposits the waste wood in the wood recycle bins
- *traps or wets down* saw dust at the cutting stations
- erects temporary railings on stairs and across low window openings in the upper storeys
- trucks vinyl siding waste off site for environmental disposal.

Thanks for your help on this.

# TECHNICAL SENTENCES



# WHICH VERSION IS BETTER?

## Original

Also reviewed was the root barrier installation on the upper roof decks, which was progressing during inspection. It was observed that the root barrier was installed; however, correction of the irrigation scuppers and waterproofing of the anchor back plates was not carried out.

(43 words)

## Revision

The root barrier on the upper roof decks was being installed during inspection; however, the irrigation scuppers had not yet been corrected, nor had the anchor back plates been waterproofed.

(30 words)

# STRATEGIES FOR TECHNICAL SENTENCES

If you employ the following strategies, your writing will become more clear and more concise:

- Find the real subject.
- Find the real verb.
- Edit for conciseness.
- Edit for clarity.

**Find the real subject.**

# FIND THE REAL SUBJECT

- The *subject* of a sentence means two things:
  1. The **topic** of the sentence.
  2. The **main noun** (or pronoun), the one that performs the main action.
- Sentences generally work best if these two coincide.

**Be as direct as possible.**

The decision of the engineers was to double the chlorine concentration in the water treatment process.

*versus*

The engineers decided to double the chlorine concentration in the water treatment process.

The drainage of runoff should be directed onto pervious ground.

*versus*

Runoff should be directed onto pervious ground.

**Avoid meaningless sentence starts.**

There are eight hoisting points that need to be reinforced.

*versus*

Eight hoisting points need to be reinforced.

It is not expected that we pay immediately.

*versus*

We are not expected to pay immediately.

*versus*

We do not need to pay immediately.

**Use the active voice.**

## **Passive voice:**

- It was done by her.

## **Active voice:**

- She did it.

## **Passive voice:**

- The data were analyzed, and the findings were discussed.

## **Active voice:**

- The team analyzed the data and discussed the findings.

# USE THE ACTIVE VOICE

- The instrument was carefully calibrated by the engineer.

*versus*

- The engineer carefully calibrated the instrument.

# USE THE ACTIVE VOICE

- The investigation into the Johal noise complaint was conducted on May 15th. Noise measurements were taken at 50 m intervals in a direct line from the wind turbine toward the Johal residence. This line was deviated from at the pond, at which point measurements had to be taken around the perimeter of the pond until the original line of travel was able to be resumed. (passive voice)

*versus*

- We investigated the Johal noise complaint on May 15th, taking noise measurements at 50 m intervals in a line from the wind turbine toward the Johal residence. We had to deviate from this line at the pond, taking measurements around its perimeter until we were able to resume the original line of travel. (active voice)

# A NOTE ABOUT ACTIVE VS. PASSIVE VOICE

- Use active voice for responsibility, passive voice for detachment.
- Remember rhetorical situation!

Here is another slide about technical sentences:



**Address the reader directly  
(use second person).**

If a leak is detected . . .

*versus*

If you detect a leak . . .

Do not open any fitting unless accompanied by qualified personnel and it has been ascertained that the component is not pressurized.

*versus*

Do not open any fitting unless you are qualified to do so and are certain that the component is not pressurized.

One must read all safety rules and instructions before beginning work.

*versus*

Read all safety rules and instructions before you begin work.

# A NOTE ABOUT ADDRESSING THE READER DIRECTLY

- This is appropriate when giving instructions and directions.
- **This should not be used when imperative voice and second-person are not appropriate.**
- Remember rhetorical situation!

**Find the real verb.**

Avoid **nominalizations**:

A nominalization is a noun that would be easier to understand as a verb.

**My recommendation is for a larger budget.**

*versus*

**I recommend a larger budget.**

**Initiate the application of the sealant.**

*versus*

**Apply the sealant.**

The programmers **made a modification** to the software after the technical writers had completed the documentation.

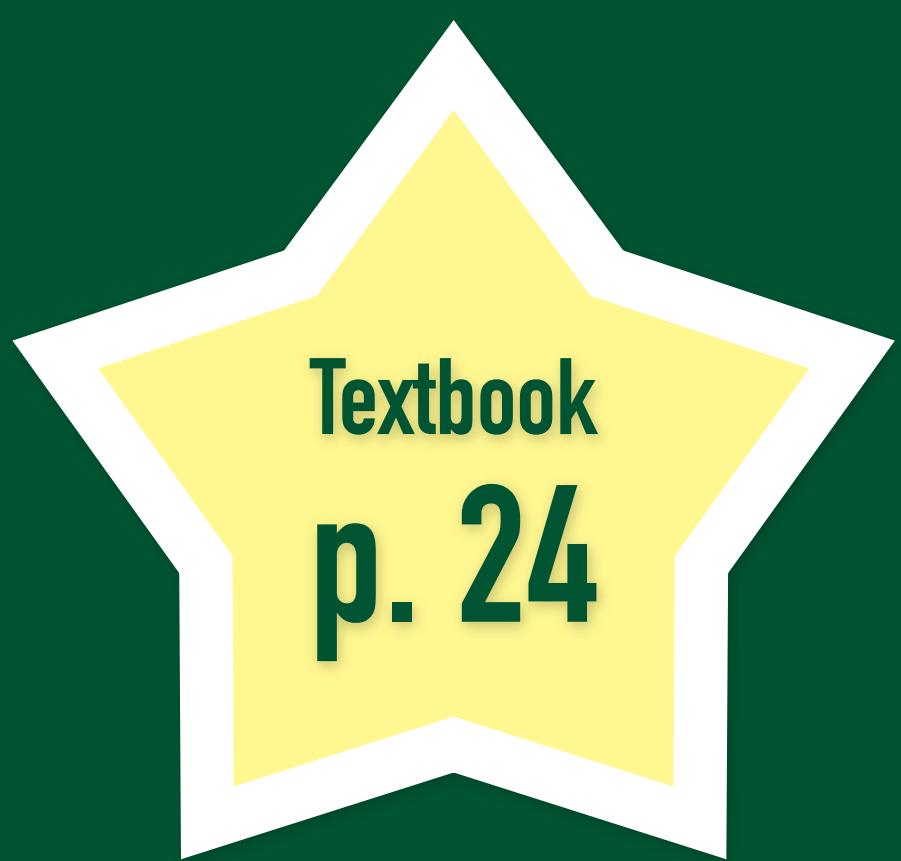
*versus*

The programmers **modified** the software after the technical writers had completed the documentation.

The chemistry professor **gave** a demonstration of cold fusion.

*versus*

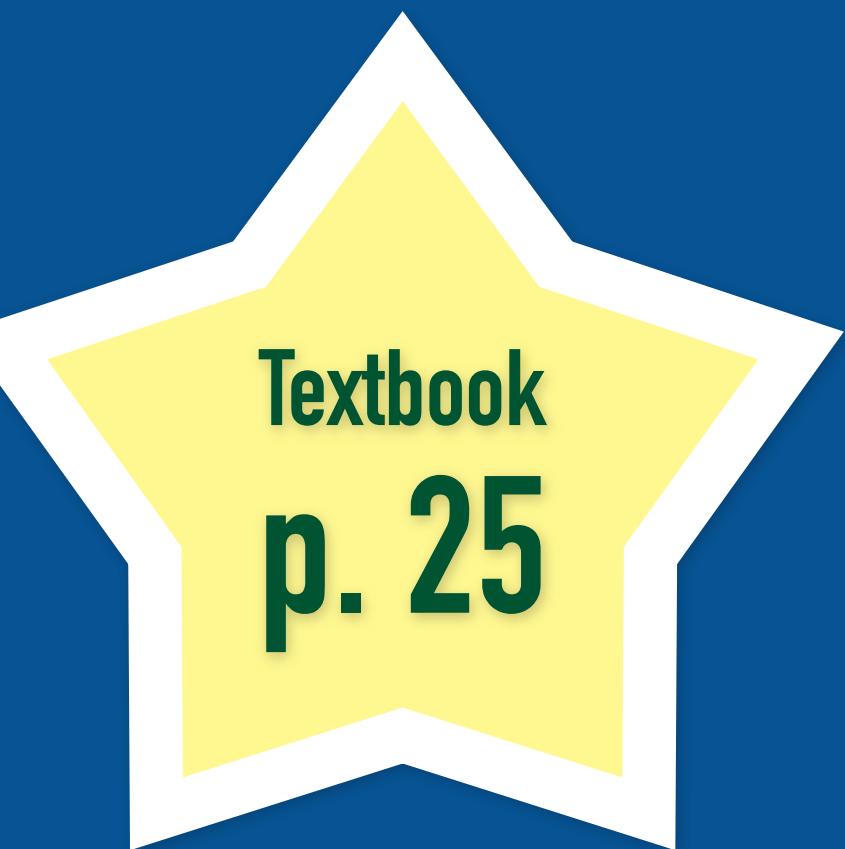
The chemistry professor **demonstrated** cold fusion.



- Gave assistance to ...
- Assisted ...
- Performed an inspection of ...
- Inspected...
- Had a discussion about ...
- Discussed...

**Edit for conciseness.**

# AVOID WORDY EXPRESSIONS



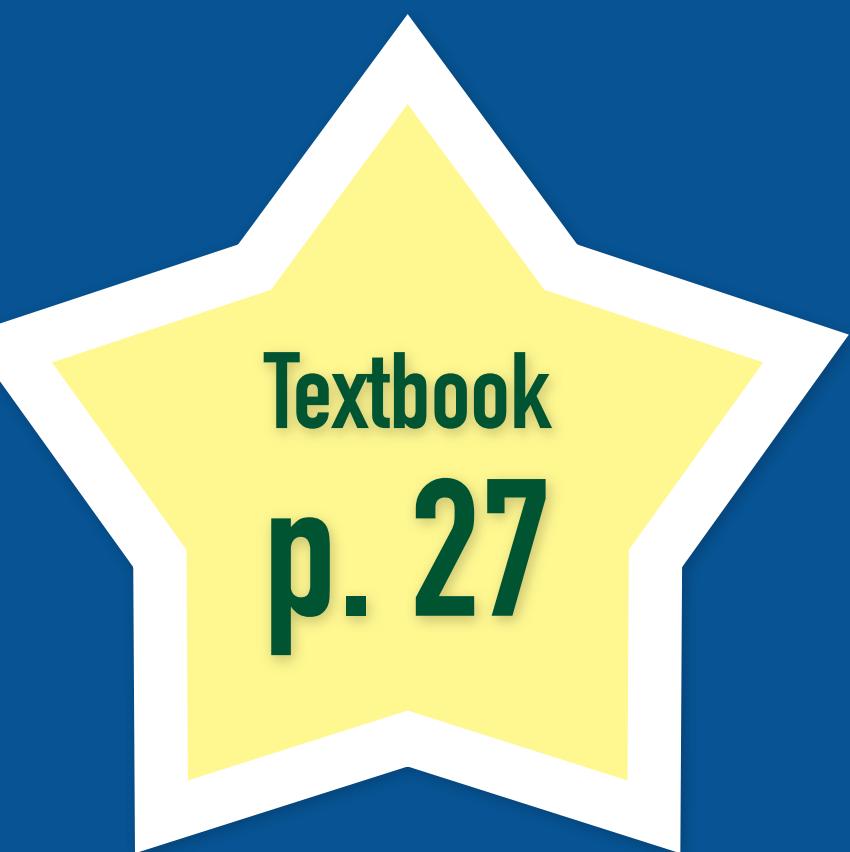
Textbook  
p. 25

- At a rapid rate
- In close proximity to
- Due to the fact that
- Come to the conclusion that
- Has the ability to
- At the present time
- rapidly
- near
- because
- conclude
- can
- now

# AVOID FILLERS

- Avoid clutter words
  - e.g., “very,” “quite,” “actually”
- Avoid qualifiers
  - e.g., “I think,” “it seems,” “in my opinion”
- Avoid prefaces
  - e.g., “As far as I am concerned,” “The purpose of this is”

# AVOID REDUNDANCY AND REPETITION



- A **redundant** expression says the same thing twice, in different words.
- A **repetition** says the same thing twice or more in the same words.

# AVOID REDUNDANCY AND REPETITION

Textbook  
p. 27

- The collapse of the structure was a terrible tragedy.
- We will use several different varieties of fasteners.
- The stains were in near proximity to the coolant tanks.
- The regrind will completely eliminate the imbalance in the impeller.
- Techniques of artificial respiration include mouth-to-mouth [respiration] and mouth-to-nose [respiration]

# AVOID REDUNDANCY AND REPETITION

There is a recommendation that I would suggest:

However currently it is not at 4 seconds and is just a little above 4 seconds.

The project took place over the entire time of the term.

The data had to be analyzed further in order to come up with one of the parameters that was not going to cross over into the boundaries of the other parameters which allowed for the remaining parameters to be opened up in order to accept the right part more often.

It is extremely important that this data is correct and there are no errors due to its severe consequences.

**Edit for clarity.**

# EDIT FOR CLARITY

- Use simple language.
- Avoid jargon.

# USE SIMPLE LANGUAGE

We are in receipt of your recent correspondence indicating your interest in securing the advertised position. Your correspondence has been duly forwarded for consideration by the personnel office, which has employment candidate selection responsibility. You may expect to hear from us relative to your application as the selection process progresses. Your interest in the position is appreciated.

Your application for the advertised position has been forwarded to our personnel office. As the selection process moves forward, we will be in touch. Thank you for your interest.

# AVOID JARGON

Avoid unnecessary **jargon**: Use jargon only when you know your audience will understand it.

A bolt “exhibited classic ductile tensile failure.”

*versus*

The bolt broke when pulled with a particular force.

I have made some improvements to the **user interface**.  
(appropriate use of jargon)

*versus*

We need to **interface** about that. (annoying use of jargon)

*versus*

We need to **discuss** that. (translation of annoying jargon)

# In-Class Exercise #3

Name:

Student ID:

### In-Class Exercise

*Please edit the following sentences to make them as clear and concise as possible, without changing their meaning. Write your responses on the reverse side of this page.*

1. There is a type of species called a keystone species that is one that has a disproportionately large effect on its host environment when compared to its relatively small numbers.
2. Such species are described as playing a critical role in helping in the maintenance of the structure of an ecological community.
3. It is said that they have an effect on many other organisms in an ecosystem and help to determine the types and numbers of various other species in the community.
4. To give just one example, when wolves were reintroduced to the famous Yellowstone National Park they immediately began to hunt and prey on the elk that had been the only other major mammalian species in the area.
5. As an immediate consequence, the number of the elk population began to dwindle and as the elk began to learn to stay on the high ground to better see their predators and thereby stay safe, there were a number of startling changes that began to take place in the park.
6. In the valleys, all the various young saplings that the elk had been eating up to that point were now able to grow into full trees.
7. This had the consequent effect of attracting many species of bird that had been up to then missing from the area.
8. What happened also is that because the streams and the rivers were once again shaded by trees, their temperature dropped and this had the resultant effect of allowing trout to return and indeed to thrive.
9. With the abundance of trees, beavers once again found a home in the area, where they built the dams for which they are so known, and this created ponds that attracted frogs, as well as the predators of frogs such as snakes.
10. It was in this way that wolves even despite their small number were nonetheless able to affect the restoration of the balance and also of the diversity of the ecosystem in Yellowstone National Park.