To maximize induction, the most turns of coil possible was needed. The sizes of coils were selected with radii of 3.3 cm. Each coil was constructed with 1000 windings. The windings were kept at 1000 due to the limited amount of wire. Once the best arrangement and size had been determined, a coil with a greater or lesser number of loops will be developed.
We require *as many* turns as possible to maximize induction .... *We selected* coils with radii of 3.3 cm .... Each coil had 1000 windings because we had limited wire. When we decide on the best *configuration* and *diameter*, we will *fabricate* a coil with more or fewer turns.

When you do something, take credit for it.
Misplaced modifiers, dead words, and circumlocutions

By placing a resistor at the front of the amplifier filter circuit, a current will be allowed to flow causing a force on the system opposite any motion.

This says that the current placed the resistor; compare with By shooting an arrow, the bird was shot.
Placing a resistor at the front of the amplifier filter circuit allows a current to flow. The current causes a force on the system opposite any motion.

Not recommended:

By placing a resistor at the front of the amplifier filter circuit, we allowed a current to flow.
In terms of magnets, the horseshoe magnet used from the previous semester was tested.
We tested the horseshoe magnet used last semester.

Or, if it is a new paragraph or topic,

As for the magnets, we tested the horseshoe magnet used last semester.
After mixing with a needed hardener ($10 a gallon), only about 3 quarts will be needed.

BTW: Does the hardener alone cost $10/gal? Or the epoxy paint including the hardener?
We will need only about 3 quarts of epoxy once it is mixed with a required hardener, which costs $10 a gallon.

Or

Only about 3 quarts of the epoxy-hardener mixture will be needed. The cost is $10 per gallon.
Rubber stoppers will be applied around the edge of the base in order to avoid human laceration injuries.
We will attach rubber stoppers around the edge of the base to prevent human laceration injuries.
Unfortunately, due to the weight of the panels, the torque placed on this bracket could possibly cause the shape of the bracket to distort and therefore would be cause a safety hazard.

Exactly *what* is the hazard here? (*Distort the bracket* wd be even better.)
A form of misplaced modifier

[which some experts accept]

A test was chosen that would ....

or, better,

We chose a test that would ....
Comma-Kazes! (They can make you comma-tose)

The mechanism will be a somewhat simple device, consisting of a semicircular piece of steel with holes in it, which will be connected to the bottom panel, and a pin-spring system, which will be attached, to the top panel, by four bolts.
The mechanism will be simple and consist of a semicircular piece of steel with holes in it. This piece will be connected to the bottom panel. A pin–spring system will be attached to the top panel by four bolts.
Naked “this,” “these,” and “it” [without antecedent]

This force eventually overcomes the force of static friction, and the spring will pull the block back to equilibrium along the cardboard. This occurs because....


An emf will be induced in the coil when there is a change in magnetic flux; this is caused by ground motion.

What is caused? The change? The flux? The emf?
It was not plausible to categorize the slopes from topographic maps without extensive analyses. These would be less accurate and not worth the time involved.

*What* would be less accurate? Maps? Analyses?

There are different aromatics and molecules of interest in the water, the hydrosol, and the oil, the attar. *This* must be stored in the cold.

The punctuation here isn’t so hot either.
Instead, the problem is measuring the initial velocity. To do this, the model uses a numerical looping calculation that gives an output for the initial velocity vector. It does this by following the path from a set starting point and calculates the effect of friction and air resistance. This cannot be done analytically, hence the numerical calculation. The model does this for several coefficients of friction.

These are by no means limited to two dimensions or two operators. These are just generalization. This is important because quantum logic uses these tensor products, ....
The trends for different shots are almost identical. This suggests that this is a consistent phenomenon. Overall, there is a net effect of around 250 ns. This corresponds to a difference in path length of about 75 m.

The detector at B also begins to detect photons. This is because the hole is narrow. This means that the total probability of all the paths to B begin to compare to the arrows to A. This explains the pattern of light captured in the diffraction lab.
Moral: Always follow *this* or *these* with a noun.

What, always? Yes, always. What, always? Well, almost always. [Apologies to W. S. Gilbert]

Acknowledgement. I mercilessly adapted some overheads from Jon Leydens and Deanna Young. Remember: *When you steal from one author, it’s plagiarism; if you steal from many, it’s research.* (Wilson Mizner)
Editor’s last inch

1. Vogue words (words that are in fashion and are overused or imprecisely used)

Determine = measure, calculate, decide, learn, find out, ...

It was determined = We decided

$L$ and $g$ determine the period of a pendulum

All you can do is measure it

Use determine primarily to mean cause or regulate:

The pendulum determines the accuracy of the clock
1. **Vogue words** (cont.)

Create = write, design, build, draw

You *design and build* a weather station, not *create* it

Reasonable = ??? (and to whom?)

Do not use *reasonable* as a substitute for *approximate* or for *good, fair*

Believe (≠ think ≠ feel)

Tell what you think or can prove, not what you believe or feel
2. References, documentation

What is the function of a reference?
References

Establish your competence in a field
Provide further detail for your readers
Protect you from charges of plagiarism
Credit previous workers in the field
What good is private communication?

None unless the source is clearly identified with contact information

So make most of your private communications into acknowledgments

Acknowledgments. ... We are likewise indebted to G. Brent Dalrymple, Professor Emeritus of ... at ..., who did not know us from Y-chromosomal Adam, for his careful review of Chapter 15. [Yes, this is a real acknowledgment.]
3. Units and symbols

Use unit symbols, not complete spellings

Minor exceptions

A few kelvins *not* a few K
300 K, *not* 300 kelvins

Use ampere *not* Amp, kelvin *not* Kelvin, *but* A and K

*Symbol* is capitalized when unit is named for person

*Name* of unit is not capitalized (ampere, kelvin)

Micrometer *not* micron

Celsius *not* Centigrade; 20 °C *not* 20 C

5 x 10^6 *not* 5E06 and *not* 5*10^6

Avoid * for multiplication (* means convolution)
4. **Lawyer’s words** — be less formal

Said techniques, aforementioned report

In the same spirit:

There are, *not* There exist

Rules of thumb:

If tempted to write *there is*, don’t
If tempted to write *there exists*, write *there is*

How do you say in English:

There is this dog that my sister has that I like to photograph.

[Real quotation from photography magazine.]
My sister has a dog that I like to photograph.

I like to photograph my sister’s dog.
5. Capitalization and punctuation

detector circuit *not* Detector Circuit

Capitalize only names and trade names (*no* ugly ® on *someone else’s* trademarks)

Usually no comma before paren


We have a dog and a cat, *not*

We have a dog, and a cat

We ate and drank, *not*

We ate, and drank
6. Use *will not would* (more forceful)

The experiment would = The experiment will

After rinsing it, I would clean = After rinsing it, I cleaned

Please give me your approval to continue; *when* I receive it, I

*will* ..., *not*

*If* I receive[d] it I *would* ...

but be careful not to seem pushy, as in *I await your immediate approval and will* ....
7. Circumlocutions and dead (unnecessary) words

In the process of, serves to, it has been shown or found that, it is the case that — almost never needed

Control of the experiment is accomplished by = The experiment is controlled by ....

Eclosion of the moths occurs in June = The moths eclose in June.

Is accomplished, occurs, is done, is performed are signs of a circumlocution
Not to mention:

able to

amount of

We were able to measure the amount of volume =

We measured the volume.
8. **Dangling and misplaced modifiers** *(never mind the difference)*

Make sure that any -*ing or -*ed word that begins a sentence refers to the *subject* of the sentence

   Also *by* + -*ing or -*ed word

Deep down, these are *verbs* and demand *subjects*

   So they grab the subject of the sentence
Partly assembled and dirty, I disassembled the pump.

(Get yourself together and clean up!)

By adjusting the initial conditions, a galaxy will form.

While a small child, Einstein’s father sent his son to gymnasium.

(His father was a small child?)

Although dormant for 9000 years, the experts said that the volcano could erupt at any time.

(The experts slept for 9000 years?)
9. And, finally,

Our patients were wearing thin, as were the patients of everyone else.