Illinois Physics Research Highlight Science Writing Contest Grammar Cheat Sheet

Punctuation

En-dashes and em-dashes
Use an en-dash (–) rather than a hyphen (-) to separate ranges of numerals.

> 3–4

Use an em-dash (—) without surrounding spaces to set off clauses containing additional information or word definitions.

> The project—the culmination of a decade's work—revealed that…

Single quotes and double quotes
Use double quotes ("") to indicate direct quotations or to mark the nonstandard use of a word. Do not use quotation marks simply to emphasize a word. Use single quotes ('') for the same two purposes only when occurring within a longer quotation.

> "It's an exciting time in astrophysics," adds Martinez.
> Through electrochemical signals, biomolecules "talk" to each other.

Punctuation within quotations
Place commas and periods inside of double quotes, but outside of single quotes.

> Says Lan, "Within that graph, we discovered a 'bump'."

Curly and straight quotes
Avoid inconsistent use of curly quotes ("") and straight quotes (""). This inconsistency is common if you have written your submission using multiple devices or within multiple writing applications.

> "There's a great deal of uncertainty," *not*
> "There's a great deal of uncertainty."

Colons and semicolons
Use a colon (:) to introduce information set up in the previous independent clause. Do not use a colon at the end of a phrase or clause that cannot stand alone.

> The student group visited two national labs: Fermi and Argonne, *not*
> These factors include: elasticity, pliability, and strength.

Use a semicolon (;) to join independent clauses that are closely related in meaning.

> Results were positive; researchers saw marked improvements in stability.

Compound adjectives
Place a hyphen between two words acting together as a single adjective when they occur before the noun being modified. Do not hyphenate such words when they occur after the noun plus a linking verb. Never hyphenate words that end in -ly, which are clearly adverbs and cause no confusion.

> The long-anticipated result surprised no one.
> The result was long anticipated.
> The highly anticipated result still yielded some surprises.

Serial (Oxford) commas
Maintain consistency in the use or omission of the serial comma in lists of three or more nouns, verbs, adjectives, or adverbs. In this area, style guides differ. Choose a style and stick to it.

> strong, weak, electromagnetic, and gravitational forces *or*
> strong, weak, electromagnetic and gravitational forces

Word usage

Affect vs. effect
Use "affect" as a verb to mean "have an impact." Use "effect" as a noun to mean "result."

That mistake may have affected their results.

The effects were mathematically significant in two of the experimental conditions.

(Note: "affect" as a noun means "the body language accompanying an experienced emotion." "Effect" as a verb means "to bring about.")

Naked "this"

Pair "this" with a noun clarifying what it refers to at the beginning of a sentence.

This research redefined the field, *not*

This redefined the field.

Since vs. because

Use "since" for time frames and "because" for explanations.

Because our results were positive, *not*

Since our results were positive

"With"

Avoid using "with" to mean "by means of" or "having the quality of," as this may introduce ambiguity. Instead, use "using" and "having," respectively.

using the tools at our team's disposal, *not*

with the tools at our team's disposal

a field having strong [], *not*

a field with strong []

Which vs. that

Use "that" without a preceding comma to introduce a clause containing information necessary to understand or identify the preceding noun (a restrictive clause). Use a comma followed by "which" to introduce a clause not necessary to understanding or identifying the preceding noun (a nonrestrictive clause).

The crystals that we grew for this experiment are difficult to replicate.

The crystals, which were prepared via microdialysis, will be difficult to replicate.

Style

Personal pronouns

Use first-person narration for this format. Explain your work from your own perspective, using the pronouns "I" or "we."

Title capitalization

Write the title of your submission in sentence-case format, capitalizing only the first word and any proper nouns. Note that after a colon, the first word is also capitalized.

Theory capitalization

Do not capitalize the names of theories or scientific disciplines, except for proper nouns.

Einstein's theory of general relativity

quantum and classical mechanics

Do not automatically capitalize terms having commonly accepted acronyms.

the standard model of particle physics

condensed matter