Lecture Outline:
• Colons
• Semicolons
• Question Marks
• Exclamation Marks
• Apostrophes
• Quotation marks
• Hyphens
• Dashes
• Parentheses
• Brackets

Colons:
Use colons for the following purposes:
• to introduce and emphasize lists, quotations and explanations and certain appositional elements (see Layout)
• to express ratios
• to separate numbers signifying different nouns, such as in separating units of time or elements in a bibliographic citation
• to separate titles from subtitles

To set off and emphasize lists—The market for photovoltaic power systems includes the following items: intrusion alarms, flood monitors, calculators, and telephone call boxes.
OR
The market for photovoltaic power systems includes the following items:
• intrusion alarms
• flood monitors
• calculators
• telephone call boxes

To set off and emphasize quotations—

The contract reads: "DL-400 coaxial cable shall be used for all platform instrument installations at Site 5, unless a specific exception is justified in the approved work order."

Kulik noted: "Even potatoes are probably much better guarded today than radioactive materials." Phil Williams, and Paul N. Woessner, "The Real Threat of Nuclear Smuggling," Scientific American

(Place colons outside quotation marks.)

To set off and emphasize explanations and appositional elements—
In designing the tachometer, the team first posed a question: What operations are needed on the input signal in order to generate the desired output?

To express ratios—

- The ratio of drag torque to bearing friction torque cannot exceed 3:1.
- The anti-GAP 43, anti-MAP 2, and anti-synaptophys in antibodies were diluted 1:1000, 1:300, and 1:100, respectively, in phosphate-buffered saline containing 10% bovine serum albumin.

Andreas Schwarz et al., "A Regulatory Role for Sphingolipids in Neuronal Growth," Journal of Chemical Biology

To separate units of time—

- The main thruster engines ignited at 7:05 a.m. EDT.
- Thu Mar 16 03:21:44 1995
- To separate elements in a citation (in certain documentation styles)

Semicolons:

- Use semicolons to join two independent clauses or to separate parts of a sentence that have commas in them.
- To Join Two Independent Clauses
- The system has three beam launchers; two are in the two-tube combiner, and one is in the OP receiver.
- To Separate Sentence Elements with Commas

Italicize titles of journals, books, newsletters, and manuals; letters, words, terms, and equation symbols; foreign words; and names of specific vessels.

Question Marks:
Use a question mark to end an interrogative sentence.
Have past efforts to develop an AIDS vaccine been based on the wrong approach?
Use a question mark to change a declarative or imperative sentence into a question.
Their testing of the system was exhaustive? [declarative changed to interrogative]
Start production on Friday? [imperative changed to interrogative]
When a directive or a command is phrased as a question, a question mark is optional.

Exclamation Points:
In technical and scientific writing, use exclamation points only to end warning or caution statements or as specialized scientific notation. For other purposes, use a period or question mark.

Apostrophes:
Use apostrophes to form the possessive case of nouns and indefinite pronouns, and contractions. Optionally, apostrophes may also be used in the plurals of abbreviations and numbers. Form the possessive of singular nouns and indefinite pronouns and of plural nouns that do not end in -s by adding-'s.

Quotation Marks:

Unless the documentation style you are following specifies otherwise, use quotation marks
1. to enclose the names of articles, short reports, and other brief documents cited in your
document or
2. to indicate direct quotations of speech or excerpts from other documents.

Do not put quotation marks around a quotation in block form (that is, indented to set it off from
the main text). Avoid using quotation marks for emphasis.

**To Enclose the Names of Articles, Short Reports, and Other Brief Documents:**

The source of the design information is the 1982 article "Boundary Layer Development on
Turbine Airfoil Suction Surfaces," which appeared in the *Journal of Engineering for Power*.

**Hyphens:**

Use hyphens to link

- certain prefixes, suffixes, letters, and numbers with nouns
- compound nouns
- compound modifiers
- spelled-out numbers

Also use hyphens for the following purposes:

- To clarify the meaning of certain words
- To divide words
- To express to or through between two letters or numbers
- For specialized scientific notation

**To Link Certain Prefixes, Suffixes, Letters, and Numbers with Nouns**

Use hyphens to connect certain prefixes to nouns. In most scientific and technical styles, the
following prefixes are usually followed by a hyphen:

- all-
- ex-
- half-
- quasi-
- self-
- hex-

However, scientific and technical writing styles omit the hyphen between most prefixes,
especially prefixes that are not words themselves. The following list of prefixes that normally
are not followed by a hyphen is adapted from Scientific Style and Format by the Council of
Biology Editors:
When adding a prefix to a noun forms a homograph (a word with two meanings), use a hyphen for clarity.

Use hyphens to connect numbers or letters used as prefixes to a noun.
- The T-cell
- 10-cylinder

Use a hyphen to connect any prefix to a capitalized noun.
- post-Newtonian universe
- ex-Soviet scientist

In most cases, do not place a hyphen before a suffix.
In most scientific and technical styles, however, the following suffixes are preceded by a hyphen.
To Link Compound Nouns

Use a hyphen to link compound nouns, especially when the lack of a hyphen would change the meaning of the term.

- light-year
- light year
[The first term is a unit of measurement, not of time; the second pair of words, on the other hand, may indicate a year that is not heavy.]

To Link Compound Modifiers

Use a hyphen to connect compound modifiers to promote clarity and prevent ambiguity.

Examples:

- laser-alignment process [compound modifier + noun] laser alignment [modifier + noun]
- the two-tube combiner
- wire-grid aperture cap [aperture cap for a wire grid]
- wire grid-aperture cap [a wire cap for a grid aperture]
- wire-grid level adjustment
- wire grid-level adjustment
- heavy-water cavity [a cavity for heavy water]
- heavy water cavity [a water cavity that is heavy]

To Link Spelled-Out Numbers

Use a hyphen to join spelled-out numbers from 21 through 99 and spelled-out fractions.

Examples:

- twenty-one moving parts
- the thirty-third experiment
- four-fifths of the subjects

To Divide Words

In general, avoid dividing words. However, use hyphens to split words at the end of a line to prevent large spaces between words in justified text and noticeably uneven margins in unjustified text.

The following guidelines for dividing words are adapted from the Chicago Manual of Style and the NASA Style Guide and the Council of Biology Editors’ manual.

- Divide words between syllables. If you are unsure of the syllabification, consult a standard dictionary.
  - com-pu-ter
- Divide between the compound parts of compound words:
  - light-year
- Divide after a prefix or before a suffix:
  - intra-system
To Stand for to or through Between Letters and Numbers

Use hyphens to stand for through or to, especially in bibliographies and reference lists. (However, when a number, letter, or date is preceded by the word from, use the word to instead of a hyphen.)

Examples:
- pages 25-63 sections 15.2-15.8
- 1901-1911
- from 1901 to 1911

Specialized Uses

Use a hyphen in the following circumstances:

To represent single bonds in chemical formulas:
(CH₃)₂-CH-CH₂-CH(NH₂)-OH

Between the spelled-out name of a chemical element and the mass number of the specific isotope:
Carbon-14

Between sequences of amino acids:
Asp-His-Lys

Suspended Hyphens

If all unit modifiers in a series end with the same term, the term does not have to be repeated each time; for brevity you may suspend the hyphens and use the modified term only at the end of the series.

Examples:
- The first-order, second-order, and third-order equations have all been solved.
- The first-, second-, and third-order equations have all been solved.
- 2- and 3-phase controllers

Dashes:

Use dashes “sparingly” to indicate abrupt shifts in thought and to set off or emphasize appositional or parenthetical elements or interjections. In most cases, use commas or parentheses instead.

- Although we have made these comments with specific reference to water—only because of our familiarity with water—all pure substances exhibit the same behavior.
• In typewritten documents, use two hyphens (--) with no spaces between or around them to form a dash.

**Parentheses:**
Use parentheses to enclose qualifying detail that is of secondary importance to the main discussion.

- Use parentheses sparingly within sentences; commas often do the job better.
- Parentheses can also be used to enclose one or more entire sentences that add relevant but not essential detail to the main discussion.

**Brackets:**
Use brackets to set off an explanatory reference, your own comments, or corrections within material you are quoting.

- According to Smith, "Proton energy levels [in the accelerator] are consistently higher than expected."
  [These comments were made before Brodier became aware of Lightman's experiments.]

Unless the documentation style you are following specifies otherwise, use the Latin term *sic* in brackets to indicate that material in a quotation is incorrect.

- Freedman stated, "Various Indo-European languages such as Rumanian, Hindi, Hungarian [sic], and Serbian exhibit similar morphological patterns." [Hungarian is not an Indo-European language.]

Use brackets to enclose parenthetical material that is within material already in parentheses.

- The first extant cosmological theories were developed by the early Babylonians and Greeks. (See Alan Lightman, *Ancient Light* [Cambridge: Harvard University Press], pp.5-9.)

Use brackets to indicate the isotope of a specific chemical.

- [*14C*]urea