When should one use a comma?
1. To separate introductory element from main clause

- First, let me give you a few examples.
- After this course, you will not do any comma mistakes.
- Though individual estimates vary, the average remains constant.
- In this review, we focus on what matters.
- But what truly matters is already handled elsewhere.
- Note that there is generally no comma if the subordinate clause is *after* the main clause.
2. With a conjunction, to join two independent clauses

- The new method seems better, and it is.
- It gives more accurate results, but requires parameter fitting.
- I ran the program, and the damn thing crashed.
- It is clear that it has a bug and should be fixed. (note the implicit “that” in the 2nd relative clause)
- The program output a few lines and died. (exceptionally, ok)
3. To separate items in a series (3 or more items)

- A clear, coherent, succinct review
- Life, the universe, and everything

The comma before “and” is sometimes omitted. I add one, because it helps to avoid ambiguities. In any case, be consistent.

- We eliminated non-binary trees, trees based on mosaic genes or genes with repeated domains, and trees that show evidence of horizontal gene transfer.

4. To separate *coordinate adjectives* 
(as alternative to “and”)

- We present a new, better solution...
- .. to this classic biological puzzle.
5. To separate a non-essential clause

- This lead to a new model, which Darwin called *descent with modification*.
- It was a radical departure from the theory that Lamarck had set forth.
- Endless forms most beautiful and most wonderful have been, and are being, evolved.
Right or Wrong?

• “The factor is for convenience, the number is too small.”
• “The analysis suggests, that the conjecture holds in all practical cases.”
• “The points, which fall outside 2 standard deviations, were excluded.”
• “The other, somewhat related, problem was already solved last year.”
(Answers)

• “The factor is for convenience; the number is too small.” (cf. point 2)

• “The analysis suggests that the conjecture holds in all practical cases.” (cf. point 5)

• “The points which fall outside 2 standard deviations were excluded.” (cf. point 5)

• “The other, somewhat related problem was already solved last year.”
Right or Wrong?

- “After computing the results are stored in a table.”
- “We have, by now, already discarded the table, we have to recompute it.
- “The optimal configuration, and its likelihood, are printed at each step.”
- “The problem has been in essence already recognized for a long time.”
(Answers)

• “After computing the results are stored in a table.”

• “We have, by now, already discarded the table; we have to recompute it. (cf. point 2)

• “The optimal configuration and its likelihood are printed at each step.”

• “The problem has been, in essence, already recognized for a long time.” (cf. point 1)