Improving Processes, Reducing Error Rates:

The Checklist Process

- Experts in aviation and medicine (high stakes) have reduced error rates by implementing checklists.

- The magic is not in the checklist—it’s in the process

- This can work for us
  - Doing better on exams (avoid the avoidable)
  - Spending time to build knowledge, skills of value
  - Practicing a good engineering process

The Checklist Manifesto: How to Get Things Right, Atul Gawande, (Picador, 2011)


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Improving Processes, Reducing Error Rates: The Checklist Process

✓ Ask: **What goes wrong**

On a test, for example:
- Wrong sig figs
- Calculator error
- Fail to answer the question asked
- Ran out of time

✓ Ask: **What can be done to NOT do that**

- ???

✓ **Think ahead:** What can be done to recover, if something goes wrong? Prepare for this.

- ???

✓ The magic is not in the checklist—it’s in the **process**.

✓ This can work for **us**.

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✓ Ask: What goes wrong

✓ Ask: What can be done to NOT do that

✓ Think ahead: What can be done to recover, if something goes wrong? Prepare for this.

Simply making a checklist does not reliably work

What works is following this process ahead of time

For us: follow this process while studying