

# Semester Review

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CMPT140

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# CMPT140 on one page

- The **Art** of Software Development:
  - People: **toolsmiths**, **architect** vs. **engineer**, ...
  - Process: **Req**→**spec**→**design**, **WADES**→**V**→**spirl**
  - **Pseudocode**, **stubs**, **pre/post**, testing, **OO**, **GUI**
- The **Craft** of Programming:
  - **Basics**: **variables**, **types**, **ops**, strings, **if/while/for**, **functions** (CBR vs. CBV), modules
  - **ADTs**: **list**, **dict**, **stack/queue**, **set**, **OO classes**
  - **Libraries**: **math**, **string**, **random**, **graphics**
  - **Misc**: **file I/O** (pickle), **exceptions**, **hex**

# Review lectures 29-36

- Earlier reviews are in lectures 12 and 27
- 29: OO classes, `__init__`, `set/get`
- 30: Dictionaries
- 31: Stacks (LIFO) and Queues (FIFO)
- 32: Sets: union, intersection, bitsets
- 33-34: Graphics: GraphWin, drawing, Text/Entry, `getMouse()`, widgets
- 35: Waterfall, V, Spiral, principles of AgileDev
- 36: Principles of GUI design