**Syllabus**

You know the basics of programming in Python: elementary data types (numeric types, strings, lists, dictionaries and files), control flow, functions, objects, methods, fields and mutability. **You need to be good at these in order to succeed in this course.**

LTP: Crafting Quality Code covers the next steps: designing larger programs, testing your code so that you know it works, reading code in order to understand how efficient it is, and creating your own types.

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| **Week** | **Topics** |
| 1 | Designing algorithms: how *do* you decide what to do in a function body? How *do* you figure out what functions to write in the first place? |
| 2 | Automated testing: doctest and unittest |
| 3 | Analyzing code for speed; details of searching and sorting |
| 4 | Creating new types: classes in Python |
| 5 | To be determined |