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## **Lecture 22**

CPSC 110

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## Lecture 22

### Clicker questions

- The only point of variance between `positive-only` and `negative-only` is the predicate used to decide if an element remains in the list.

### Abstraction

- Signature for filter
  - `(@signature (T -> Boolean) (listof T) -> (listof T))`
  - !!! (need to double check)
- Signature for map
  - `(@signature (T -> U) (listof T) -> (listof U))`
  - T and U can be different
- Built-in abstract functions
  - `map`, `filter`, `foldr`, `foldl`, `build-list`, and more
- Any function that uses abstract functions must use the `use-abstract-fn` template tag
  - `(@template use-abstract-fn)`
- Closures: remember that functions have access to parameters of functions they are contained by!
  - Do not have to use `encapsulated` tag
  - If you are depending on an additional parameter, you must use a `[local]` parameter.
  - If the work is simple/trivial, use `local`.
  - If the work is crazy complicated, write a separate function.