

## Software Verification and Validation, ESOF 411, Fall 2019

### PHPUnit Testing

Example of what needs to be tested:

- addCourse(cAbbrev, cName, csFlag, seFlag, begin, Sem endSem, outcomes)
  - Missing code
    - Check that arguments passed are legal and throw an exception if they aren't.
    - Check if course is already in db. If it is, don't make any db modifications (don't add course and don't add outcomes to course), and return F.
    - If course is in the db, add it, along with its outcomes, and return cAbbrev.
  - Testing:
    - Check that parms are the right format, or an exception is raised - test\_addCourse\_DetectsBadArg, maybe several tests
    - Course, with valid parms, wasn't in the db, now it is in the db and function returns cAbbrev – test\_addCourse\_SuccessReturnsCabbrev
    - Course, with valid parms, was in the db, no change to the db and function returns F - test\_addCourse\_DuplicateCourseReturnsFalse
    - Course, with valid parms, wasn't in the db, now it is in the db – test\_addCourse\_InsertedInDB
    - Course, with valid parms, was in the db, no change to the db and function returns F - test\_addCourse\_DuplicateCourseNoChange