This repository | Search   Pull requests   Issues   Gist

📖 txt / se17   👁 Watch ▾   3   ★ Star   0   ⑂ Fork   6

‹› Code   ⊙ Issues 0   ⑂ Pull requests 0   ▦ Projects 0   ▦ Wiki   ∿ Pulse   �📊 Graphs

Branch: master ▾   se17 / doc / syllabus.md   Find file   Copy path

▦ ai4se saving   b55a7a8 27 days ago

2 contributors ▦ 🧑

Executable File   328 lines (247 sloc)   12.3 KB   Raw   Blame   History   🖥 ✏ 🗑

home | syllabus | submit | chat

© 2017 tim@menzies.us

Syllabus

CSC 510 - 001 (2216)
NcState, ComSci
Spring 2017

EE-II room 1021
Tues,Thurs 4:30PM - 5:45PM
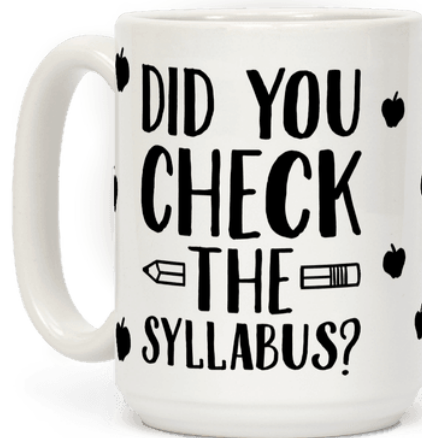
Overview

Topics

An introduction to software life cycle models; size estimation; cost and schedule estimation; project management; risk management; formal technical reviews; analysis, design, coding and testing methods; configuration management and change control; and software reliability estimation. Emphasis on large development projects. A group project required following good software engineering practices throughout the semester.

Objectives

Students are expected to gain practical exposure to tools, processes, and principles of software engineering through hands-on projects while being able to explain empirical and theoretical evidence, technical mechanisms, and models supporting software engineering.

Prerequisites

- CSC 316 and CSC 226

Textbook

- Software Engineering: A Practitioner's Approach, 7th International edition by Roger Pressman (optional).

Assessment

Student will sit exams to determine their understanding of lecture material.

Students will work in groups of three using Github to test their ability to work in groups to deliver software.

Students will use Github to store their software and Github issues to document their communications between each other for that project.

Grades will be assigned as follows:

- Spot quizes, misc (quick) home works, 5 marks.
- Mid-term: Tuesday, March2, 15 marks
- Final exam: 20 marks
- Participation in evaluations: 10 marks (one per evaluation)
  - Students will be issued 10 "chits" with 10 magic numbers
  - When they perform any evaluation, they hand over the "chit"
  - When students hand in their Jan31 and Mar31 reports, they list the chit numbers of the students present for their evals.
  - Chits must be "spent" in other projects (you cannot hand in chits from your own people for your own project).
- Project: 50 marks,

due	marks	notes
Jan31	10	Initial project description: - Report on related work (5 marks) - short talk to class (5marks) - And your project name and URL here
Feb28	10	Progress report: - Report on 3 propose solutions and evaluation plan (5 marks) - Demos to lecturer or tutor (marks deducted if absent) - Much Github activity from all developers(*) (5marks). Submit link to this page in your repo
Mar31	20	Final report: - 10min talk to the class (10 marks); - A report document (results and recommendations) (10 marks). See example
Apr28	10	A report on "bad smell detection" in Github issues; e.g. here

(*) An active Github repo contains dozens to hundreds of commits and issues; all issues are in five to twenty (or more) milestones; issues are labeled; issues are getting opened and closed; (some) milestones are getting completed (but others might actually be your plan for your March work); all members of the team are contributing equally (plus or minus 33%).

With the final grades, the following grade scale will be used:

```
A+ (97-100),  A (93-96),   A-(90-92)
B+ (87-89),   B (83-86),   B-(80-82)
C+ (77-79),   C (73-76),   C-(70-72)
D+ (67-69),   D (63-66),   D-(60-62)
 F (below 60).
```

Group Slack group

It is each student's responsibility to join the Slack group:

- https://se17.slack.com
- Students are strongly encouraged to contribute their questions and answers to that shared resource.
- Note that, for communication of a more private nature, contact the lecturer on the email shown below.

All class communication from staff to students will be via this Slack group.

IMPORTANT: Students should not use Slack from their intra-group communication. All such communication should be via Github. Why? Well, the final project is a decision support system that reflects over the issue close times of data in Github.

Staff

Lecturer

Tim Menzies

- Github id: timm
- Office Hours: Tuesday, 2:30-4:30 and by request
- Location of Office Hours: EE II room 3298
- E-Mail: tim.menzies@gmail.com
    - Only use this email for private matters. All other class communication should be via the class news group, listed below.
- Phone: 304-376-2859
    - Do not use this number, except in the most dire of circumstances (best way to contact me is via email).

Tutor

Effat Farhana

- Github id: effat
- E-mail: efarhan@ncsu.edu
    - Only use this email for private matters.
    - All other class communication should be via the class news group, listed after.
- Office hours: Wed 12:00 to 2pm
- Office location: 1229B

Other Information

Attendance

Attendance is extremely important for your learning experience in this class. Once you reach three unexcused absences, each additional absence will reduce your attendance grade by 10%.

As to what is an "excused" class, see the list at https://policies.ncsu.edu/regulation/reg-02-20-03:

- Anticipated absences:
    - Representing an official university function (e.g. athletics)
    - Required court attendance as certified by the Clerk of Court.
    - Students will be allowed a minimum of two excused absences per academic year for religious observances
    - Required military duty as certified by the student's commanding officer.

- Unanticipated absences. Examples include:
    - Short-term illness or injury
    - Death or serious illnesses in the family when documented appropriately.

Attendance in Week1

Regarding attendance in week one, material will be presented n the first week that is important for the course, assignments, and exams. Groups will be formed for project(s). It will be each student's responsibility to make up any missed lecture material or sort out group membership after your return, and you should not expect the instructor or TAs to offer any make up or other supplemental material for the days that you miss.

Expected Workload

Students must be prepared to dedicate AT LEAST 5-8 working hours a week to this class (excluding the time spent in the classroom). Laboratory instruction is not included in this subject.

Sometimes, the lecturer/tutor will require you to attend a review session during their consultation time. There, students may be asked to review code, concepts, or comment on the structure of the course. Those sessions are mandatory and failure to attend will result in marks being deducted.

Academic Integrity

Cheating will be punished to the full extent permitted. Cheating includes plagerism of other people's work. All students will be working on public code repositories and informed reuse is encouraged where someone else's product is:

- Imported and clearly acknowledged (as to where it came from);
- The imported project is understood, and
- The imported project is significantly extended.

Students are encouraged to read each others code and report uninformed reuse to the lecturer. The issue will be explored and, if uncovered, cheating will be reported to the university and marks will be deducted if the person who is doing the reuse:

- Does not acknowledge the source of the product;
- Does not exhibit comprehension of the product when asked about it;
- Does not significantly extend the product.

All students are expected to maintain traditional standards of academic integrity by giving proper credit for all work. All suspected cases of academic dishonesty will be aggressively pursued. You should be aware of the University policy on academic integrity found in the Code of Student Conduct.

The exams will be done individually. Academic integrity is important. Do not work together on the exams: cheating on either will be punished to the full extent permitted.

Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation(REG 02.20.01).

Students are responsible for reviewing the PRRs which pertain to their course rights and responsibilities. These include: http://policies.ncsu.edu/policy/pol-04-25-05 (Equal Opportunity and Non-Discrimination Policy Statement), https://oied.ncsu.edu/home/ (Office for Institutional Equity and Diversity), http://policies.ncsu.edu/policy/pol-11-35-01 (Code of Student Conduct), and http://policies.ncsu.edu/regulation/reg-02-50-03 (Grades and Grade Point Average).

Non-Discrimination Policy

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated.

- Note that, as a lecturer, I am legally required to report all such acts to the campus policy[1].

[1]Note that any remark you make in some on-line comment tracking system like Github is a public document. So take heed of the following cautionary tale. One year, a student was joking around with his buddy in a Github issue report. Then he was rude enough and stupid enough to add a remark about how the rest of the team was just so ■■■■ ■■■■■■■. Needless to say, the rest of the team took great offense at this remark and invoked the University's non-discrimination policies. As a result, everyone lost much time that semester, as well as grades.

Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at http://policies.ncsu.edu/policy/pol-04-25-05 or http://www.ncsu.edu/equal_op/. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

Liability Insurance.

Non-scheduled class time for field trips or out-of-class activities are NOT required for this class. No such trips are currently planned.

However, if they do happen then students are required to purchase liability insurance. For more information, see http://www2.acs.ncsu.edu/insurance/.