NNHS Software Engineering 1 Syllabus

Mission
To educate students to be self-directed learners, collaborative workers, complex thinkers, quality producers, and community contributors

Course Description
Software Engineering 1 is a weighted, one-semester course for students that have completed AP Computer Science. The course starts with a core set of software engineering topics (e.g., ethics, data structures, software engineering process) followed by a series of software topics selected by students that are aligned to students’ products (e.g., synchronization, embedded systems, network programming, web apps, mobile apps). Students will explore topics aligned to their project which can be completed in Software Engineering 2.

Fall Semester Course Learning Standards
- Understand and explore agile software development methodologies in the context of an existing technology product (15%)
- Understand, create, analyze, and apply data structures to solve various computational problems (35%)
- Analyze, evaluate, and debate issues at the intersection of technology, society, and ethics (15%)
- Explore, practice, and apply specific software technologies in preparation for creating a software product (35%)

Grading:
Your course grade will reflect what you have learned, not what you have completed!

Overall Semester grade:
- 95% Coursework
- 5% Final Exam

The final semester grade will be rounded to the nearest percentage point.

Course Grade

Fall Semester

Standard 1 - Understand and explore agile software development methodologies in the context of an existing technology product
- Lab: Raspberry Pi
- Exam

Standard 2 - Understand, create, analyze, and apply data structures to solve various computational problems
- Ch 15 – The Java Collections Framework
- Ch 16 – Basic Data Structures
- Ch 17 – Tree Structures
- Ch 15 Exam
- Lab: Morse Code
- Lab: Maze App

Revised 14 August 2018
● Ch 17 Exam

Standard 3 – Analyze, evaluate, and debate issues at the intersection of technology, society, and ethics
  ● Panel Discussion

Standard 4 - Explore, practice, and apply specific software technologies in preparation for creating a software product
  ● various chapters based on topic
  ● various labs based on topics

Each unit/standard is assigned a particular percentage.

Within each unit, summative and formative sections are weighted as follows:
  100% Summative; 0% Formative

Grading Disbursement:
A= 90-100 B= 80-89 C= 70-79 D=60-69 F= <59

Assessments are graded on a 1-5 scale in a manner consistent with the AP Computer Science exam:
  5: Extremely well qualified
  4: Well qualified
  3: Qualified
  2: Possibly qualified
  1: No recommendation

A 5 corresponds to a 100%; a 4, 88%; a 3, 75%, a 2, 62%; a 1, 50% in the grade book.

Reassessment Policy

Summative Assignments (exams, labs): These assignments must be completed within two weeks of the due date or else they will receive no credit. The maximum score on a summative lab submitted after the due date is a 4.

Formative Assignments (homework, discussions, activities): Formative assignments are for developing understanding.

Reassessment Policy (reassessments are only on selected summative work, such as exams, excluding final exams):

1. Students are only allowed reassessments on assessments on which they receive a 3 or below.
2. The maximum score the student can get on the reassessment is a 4.
3. The higher of the two scores will be entered in Infinite Campus
4. The reassessment times and locations are left up to the individual teacher.
5. Students are required to complete exam corrections and other prescribed practice in detail before any reassessment will be allowed.

Communication

● Teachers make every effort to respond to emails and phone calls within 48 hours during the work week.
● The best way to communicate with teachers is through email; however, if you haven’t received a response in 48 hours, please resend the email or call their voicemail. Your email may have gone into the spam folder.

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Help

- Make an appointment with your teacher.
- Attend S.O.S (supervised open study) in the Literacy Center M, W & Th from 3:15 to 4:15.
- Drop in for peer tutor during lunch periods or before school through the Literacy Center.

Parents or Guardians

We need your help!

- Parents should actively check Infinite Campus for their student's grade.
  - The grades on Infinite Campus will be accurate only at Mid-Quarter and Quarter. Prior to those dates, the grade reflected is fluid.
  - Infinite Campus is a communication tool until final grade is posted.
- Please ask your student about their school work
- Check with your individual teacher for classroom procedures, schedules, and daily class news.