Introduction to Analysis of Algorithms **Spring 2021**

CSE 102 [previously CMPS 102]

Grading and Evaluation Policy Updates

1. No Mid-Term: There will be no-mid term exam[1].

2. Quizzes: There will be 6 quizzes in the class. The last quiz will be on May 26, Wednesday.

3. Adv HW Objectives:
(i) Demonstrate Independent Thinking on Novel Problems, and
(ii) Demonstrate effort towards a detailed complete solution[2] .

4. **Final Project**:
Students will be selected on the basis of a combination of performance in quizzes (as reflected in Tiers) and advanced homework. Will be decided in consultation with the instructor between May 17 and May 28. The student will research an algorithm or a topic relevant to the course (and not discussed in the class) and submit a final project report on this topic and create a presentation. Some topics from advanced homework may also be allowed.

Clarification on Grading Policy:
1. Tiers will be decided on the basis of first 5 quizzes[3].
2. Tiers 0, 1, 2 + No or minimal Adv HW => "B" is the highest grade => Higher grades REQUIRE Adv HW
3. Adv HW has two tiers: "A-" and "B+" (essentially, one or two grades up)
4. Final Projects also has two tiers: "A+" and "A" (additional, one or two grades up)
5. Requires effort and independent thinking for higher grades: B+, A-, A, A+.

---

[1] Because there are very few not passing students. This exam was meant to provide an opportunity for not-passing students to succeed in the class. These few students, who are still at risk, can demonstrate their competency in basic concepts of the course through 1-1 engagement with a teaching staff.

[2] Solutions should include description of algorithm in words (understandable to students in this class), accompanying figures or diagrams, simple cases with low size inputs or base cases or boundary cases, a few examples to illustrate how algorithm works, proof of correctness (for greedy algorithms, lower bounds, and future topics as needed), pseudo-code with comments, time (and possibly space) complexity of algorithm. In other words, solutions should resemble the level of details presented in books and ideally, should NOT require additional verbal explanations.

[3] Because the final quiz scores will not be available till the end of the quarter. Tiers need to be determined before then to allocate final projects to students.

6. Weights (40%) : Students are not in competition with each other. Rather, each student has an opportunity to demonstrate competence through a variety of evaluation mechanisms, with ranges, best suited to individual needs.

Allocation of Weights (40%):

		Quiz 6	Re-Submitted Quizzes + Explanations	Adv HWs	Final Project	Expected Grade[4]	Current # of Students
Tier 0	F/NP	10%	30%	0%	0%	F	2
Tier 1	C/C+	10%	30%	0%	0%	C/C+/B-	16
Tier 2	B-/B	10%	20-30%[5]	0-10%	0%	C+/B-/B/B+	23
Tier 3	B+/A-	10%	5-10%	20-25%[6]	0%	B/B+/A-	20
Tier 4	A/A+	10%	0-5%	20-25%	10-15%	A-/A/A+	21

Earlier allocation is described in the footnote[7] for reference.

[4] Final Grades will be modified for most students by one grade above or below the primary grade. In some cases, when the performance in the four components above is far above expectations or far below expectations, the final grade may be two grades above or lower than the primary grade. The new table presents a higher probability scenario in comparison to the previous table.

[5] The range will be used in favor of students. For example, if a student is submitting excellent quality "ReSubmittedQuizSolutions+Reflections" and providing outstanding explanations to the teaching staff, the student can receive a B grade without any advanced homework.

[6] The range will be used in favor of students. For example, if a student is submitting high quality advanced homework, there will be less emphasis (or weight) on resubmitted quizzes+reflections.

[7]

		Midterm Exam 1	Re-Submitted Quizzes + Explanations	Adv HWs	Final Project	Expected Grade
Tier 0	F/NP	10%	30%	0%	0%	F/C/C+
Tier 1	C/C+	10%	30%	0%	0%	F/C/C+/B-/B
Tier 2	B-/B	10%	20%	10%	0%	C/C+/B-/B
Tier 3	B+/A-	5%	10%	25%	0%	B-/B/B+/A-
Tier 4	A/A+	5%	5%	20%	15%	B+/A-/A/A+