PIC 10A SECTION 1, JAN-MAR, 2015



INSTRUCTOR: Michael Lindstrom (Mike)

OFFICE HOUR (MS 5622): Official: W 10:30 – 11:30, F 9:30 – 10:30

Unofficial: drop by! I'll do my best to help whenever I have time.

CONTACT INFO: *e*: M I K E L [at] math [dot] ucla [dot] edu, *p*: 310-825-3049

LECTURE TIME/LOCATION: M/W/F 8:00-8:50 in Kinsey 1240 B

SECTION WEBSITE: <u>www.math.ucla.edu/~mikel/teaching/pic10a</u>

- Includes homeworks, weekly lecture notes, general info, etc.

CCLE: https://ccle.ucla.edu/

- For homework submission, class discussion forums

UPDATES: Check your email! Also see section site and/or Twitter: mpic10a ucla

TEXTBOOK: Big C++, Horstmann & Budd, 2nd Edition

PREREQUISITES: None – but hopefully an interest in programming and science!

TUTORIALS: T/R 8:00-8:50 (C–MS 5148 & B-Geology 4645) or 9:00-9:50 (A-MS 5148)

TAS: Michael Puthawala, e: M P U T H A W A L A [at] ucla [dot] edu

Danny Nguyen, e: L D N G U Y E N [at] math [dot] ucla [dot] edu

Eric Kim, e: ERICKIM555 [at] gmail [dot] com

TA OFFICE HOURS (MS 2000): Danny: T 10:30-12:30, R 10:00 – 11:00

Eric: M 15:00-17:00, T 15:30 - 16:30

TA OFFICE HOURS (MS 2330): Michael: M 10:30-11:30

SUPPORT: You are highly encouraged to <u>form study groups</u>, share notes, collaborate, etc. And don't forget about <u>CCLE discussion forums</u> and <u>office hours</u> (TAs/official/unofficial)!

The purpose of office hours and CCLE discussions are primarily to discuss/clarify course concepts and for homework-related hints on how to approach a problem.

GRADING SCHEME:

Grading is <u>performance based</u> and <u>not based on a curve</u>. In particular, there is no limit to the number of A's that can be assigned! Regardless of your programming background, if you demonstrate mastery of the material, <u>you can get an A!</u>

Grades are computed <u>first as a percentage</u> and then <u>mapped to letter grades</u>. If your grade as a percentage is X then your <u>actual final grade</u> will be <u>at least as good</u> as yielded by the following mappings:

| 98 < X ≤ 100 → A+ | 95 < X ≤ 98 → A | 92 < X ≤ 95 → A - | |
|--------------------------|------------------------|-------------------------------|--------------------------------|
| 89 < X ≤ 92 → B+ | 86 < X ≤ 89 → B | 83 < X ≤ 86 → B - | |
| 80 < X ≤ 83 → C + | 77 < X ≤ 80 → C | $74 < X ≤ 77 \rightarrow C$ - | |
| 71 < X ≤ 74 → D+ | 68 < X ≤ 71 → D | $65 < X ≤ 68 \rightarrow D$ - | $0 \le X \le 65 \rightarrow F$ |

[~]UCLA describes letter grades and their interpretation in the following ways: A is "superior"; B is "good"; C is "fair"; and D is "poor." The precise cutoffs will be determined at the end of the term but they will be no higher than prescribed above. For example, with a percentage of 92.01%, you are guaranteed an A- or better no matter what, but it's possible that in the end an 86.80% would earn an A-, just as a hypothetical example.

Your percentage is computed based on the <u>best of three</u> schemes. Scheme I is more participatory; scheme II is very test-heavy; and scheme III is for "emergency" situations only. <u>Scheme I is highly</u> recommended.

I: Class Participation – 15% II: Class Participation – 0% III#: Class Participation - 0%

 Homework* - 30%
 Homework* - 30%
 Homework - 0%

 Quizzes** - 20%
 Quizzes** - 0%
 Quizzes - 0%

 Midterm - 10%
 Midterm - 15%
 Midterm - 0%

Final Exam – 25% Final Exam – 55% Final Exam (Minus 10%) - 100%

Class Participation: Using any internet-enabled device you have, you will submit responses to problems that will be asked during class via a simple web form at www.math.ucla.edu/~mikel/teaching/pic10a/php/InputPage.html

If having access to such a device is a problem, you must notify the instructor by January 6!

Scoring: you earn 4 points for any response and 1 extra point for correctness. Full marks are earned for earning 72% of all points, i.e., if you respond to every single question given but you are somehow wrong on all of them (unlikely!) then you will still earn $80/72 \rightarrow 100\%$ here. On the other hand, if you score less than 72% of all points, your mark here will be the fraction of 72% of points you earned so earning 36% of all points (fraction 0.5 of 72) would amount to 50% for a participation mark. This is really about participation and thinking in-class, and not a serious form of assessment!

Quizzes: You will be given a total of <u>five 10-minute quizzes</u>. Quizzes will focus on material since the previous quiz. Each quiz will be <u>11 points</u>.

Scoring: there will be two one-liners (2 points each) and one short-answer problem (7 points).

Homework: There will be <u>roughly weekly homework</u> assignments to submit on CCLE. The assignments will be <u>posted on the course webpage</u>. Most of your learning will take place in doing the assignments.

<u>Visual Studio 2013</u>, available for download here as Visual Studio 2013 Express (
https://www.microsoft.com/en-us/download/details.aspx?id=44914) and provided in the PIC Lab, is the course standard for homework submissions.

<u>Homeworks</u> will be graded according to <u>this software alone</u>. If your code does not compile or operate correctly on Visual Studio 2013, <u>marks</u> will be <u>deducted</u> as though it does <u>not compile or operate</u> <u>correctly, regardless of whether it works on other software!</u>

Homeworks will be scored out of 6 points as below:

^{*} three lowest scores dropped (out of 9 homeworks)

^{**} two lowest scores dropped (out of 5 quizzes)

[#] only applies if homework score or participation score exceed 50%

Scoring:

| Compiles | Output Code organization, logic, commenting and programming practice displayed | | Score |
|----------|--------------------------------------------------------------------------------|-------------|-------|
| Yes | Correct | Spectacular | 6 |
| Yes | Correct | Reasonable | 5 |
| Yes | Correct | Poor | 4 |
| Yes | Incorrect | Spectacular | 4 |
| Yes | Incorrect | Reasonable | 3 |
| Yes | Incorrect | Poor | 2 |
| No | N/A | Spectacular | 2 |
| No | N/A | Reasonable | 1 |
| No | N/A | Poor | 0 |

Midterm: There will be a midterm exam. The midterm will be <u>two-staged</u>. You will have <u>30 minutes</u> to complete the exam <u>individually</u> and then <u>15 minutes</u> to complete the exam in <u>teams of four</u>.

<u>Scoring:</u> <u>If</u> your <u>team score is higher</u> than your individual score, your mark will be <u>85% individual</u> and 15% group. If your individual score is the highest of the two, your mark will be 100% individual.

Final Examination: There will be a final exam covering all the material from the course on <u>Friday, March 18 at 11:30 am</u>. The policies are TBD.

FORMAL POLICIES:

Missing Work: If you <u>miss the midterm</u> for a <u>valid reason</u>, your <u>final exam</u> grade will count <u>in its stead</u>. If the <u>final exam</u> is <u>missed</u> for a <u>valid reason</u>, you will be given an <u>oral final exam</u>. University policy states that <u>you cannot pass</u> the course <u>unless you take the final exam</u>.

<u>Valid reasons</u> include one of the following: (a) prior notice of a valid, <u>documented absence</u> (e.g. out-of-town varsity athletic commitment), (b) notification to the instructor <u>within one week</u> due to a <u>medical condition</u> or (c) an <u>emergency</u>. <u>All reasons require written documentation</u>, for example a <u>doctor's or counselor's note stating</u> the student was <u>medically/psychologically unfit</u> to be in school, a copy of a <u>death certificate</u>, or a <u>letter from a coach</u>. A <u>score of zero</u> will otherwise be assigned.

Because the two lowest quizzes and three lowest homeworks are dropped, <u>none of these grades will be excused no matter what</u>, even for a valid, documented absence. Every score will count, but the dropped scores might be zeros.

Collaboration Policy: You must identify all collaborators on your assignments and you <u>must do your own</u> work and typing!

Students with Disabilities: If you have a <u>documented disability</u>, please <u>contact the Office of Student Disabilities and have them consult with your instructor</u> to ensure you are accommodated. It is <u>your responsibility</u> to do this in a timely manner. Special <u>exam accommodations</u> will <u>not</u> be <u>provided by the instructor or TAs.</u>

Regrading: All <u>tests</u> will be <u>returned at the discussion sections</u>. You will then <u>have until the end</u> of that discussion section to <u>request a regrading</u>. To request a regrading:

- (i) you must <u>write</u> a note on a <u>separate piece of paper from your exam</u>, outlining why you are requesting a regrading;
- (ii) you may not write anything extra on your exam;
- (iii) and you must <u>submit</u> your regrading <u>request to your TA by the end of the discussion</u> section in which the test is returned. <u>Once</u> you <u>leave the discussion room with your exam</u>, the <u>grade is final</u>.

Work will <u>not</u> be <u>regraded</u> if items (i)-(iii) are not all satisfied.

If you <u>miss</u> the <u>discussion</u> section, you must <u>collect your test from the instructor's office hours within 5</u> <u>business days of the original return date</u> and then the <u>same policies apply</u>: once you <u>leave the office with</u> your test, the grade is final.

With a regrading, <u>your work in its entirety will be regraded</u> by the instructor, not just the single question(s) you are asking about: your mark could stay the same, go up, or (in rare cases) go down.

If you catch an <u>addition error</u>, you still must <u>return your work in the times listed above</u>, but <u>none of your test will be regraded</u> – the total will simply be checked and corrected if necessary.

For <u>homework</u>, <u>similar policies</u> apply: you must <u>request a regrading via email within 5 business days</u> of the homework grade release date.

Cheating: If a student is <u>suspected of cheating</u> (on a midterm, quiz, assignment, etc.), the department will be notified immediately and <u>severe academic disciplinary action may follow</u>. This could include expulsion from the university!

<u>Copying</u> the work of another student or allowing another student to copy from you <u>is cheating</u>. <u>Homeworks</u> will be <u>screened for instances of plagiarism/copying</u>. A <u>random selection</u> of midterms and quizzes will be <u>photocopied before being returned</u>. Adjusting answers after a test and asking for a regrading is cheating. Not attending class but getting a classmate to respond to participation problems or activities on their behalf is also cheating.

Emails and Course Forums: Homework-specific or conceptual questions should be posted on the online discussions at CCLE instead of an individual email to the instructor or TAs. This way, everyone can benefit from the discussion. In general, the only emails that will receive responses are emails pertaining to individual, personal performance in the course or emails to set up appointments.

Instructor Discretion: The final course marks <u>may</u> be <u>shifted and scaled</u>, and the instructor reserves the right to revise <u>any mark</u>. This syllabus is also subject to change.

GENERAL:

Discussion sections: The <u>discussions</u> are <u>extremely important</u>! The lectures serve to introduce topics, ideas, and build motivation; in the discussions, you will get vital practice and review.

Lateness and Talking: If you do arrive <u>late</u>, please <u>enter with your notebook/laptop</u>, <u>pen</u>, <u>etc. ready</u> and be as quiet as possible to avoid interrupting others. Conversations are best had outside of the classroom... <u>It's disruptive</u> if you chat during a lecture.

Electronic Devices and Distractions: Please <u>turn off</u> the <u>noise</u> on any cell phones, etc. If you may be tempted to use your laptop for non-class activities, be considerate of your classmates and sit towards the back to <u>avoid distracting others</u>.

Participation: You are encouraged to <u>get involved</u> in the material, to <u>answer questions</u> in class and on the forums, and to <u>ask questions</u> when you're unclear of what's going on. Don't be afraid to ask questions! To better engage with classroom discussion, <u>please try to sit next to at least one classmate</u> to discuss in-class problems.

Surveys: Throughout the term you will be given online surveys to fill out. They will be <u>anonymous</u> and will give you the opportunity to express how things are going in the course and to <u>address any concerns</u> you may have.

Review: There will be at least one review session prior to the midterm and the final exam, possibly more.

Succeeding: There is no rule that anyone has to fail! <u>There is absolutely no reason you cannot excel in</u> this course if you work for it!

SUCCESS TIPS:

- Attend class. Hearing information live, doing problems, and being able to ask your own questions is important and correlates strongly with exam performance.
- Do the practice problems: ideally, most of your study time should be spent doing problems rather than reading information.
- Attend your discussion sections. Lecture time is very limited: there is reason why there is almost an equal number of hours scheduled for this course outside of lectures.
- Do not get behind: like mathematics, once there is a topic you are weak with, it could very well
 prevent your understanding subsequent topics. The material does build.
- Beware the "familiarity fallacy": just because you've seen a topic before, doesn't mean that you have mastered it.
- Make use of office hours and discussion forums.
- Don't be afraid to speak with your instructor: you are not just a number!