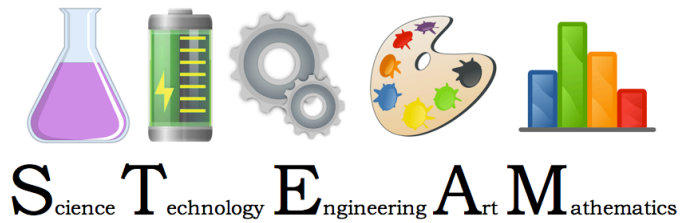


Programming I

Mr. Smoyer

Course Syllabus

Northwestern Lehigh High School



Course Description

Computer programming is one of the essential skills for today's Science, Technology, Engineering, Art, and Mathematics (STEAM) student. Open-source software and hardware is making programming an essential skill in all aspects of STEAM and is no longer confined to computer science majors.

Students will be introduced to computer programming by learning the basics of programming using C++. Topics will include elementary data types and data operations, functions and parameter passing, looping, selection, arrays, structures, file I/O, and more.

Students will also be exposed to microcontrollers and hardware as a way to demonstrate the usefulness of computer programming in multiple disciplines and to set the stage for future STEAM courses.

Notes/Notebooks

Notes will be given as needed. Students should bring their notebook to class daily as a reference. You never know when we will be taking notes, you will need to look up a command, or will want to make an outline or sketch of a program or hardware layout. Good note taking and organization is essential to long-term success.

Use of Technology

Students will be expected to abide by the **Use of Technology** policy found in the student/parent handbook at all times!! Daily access to computers does not mean that playing games or misuse of technology will be permitted. Students violating this policy will face disciplinary action and will lose privileges.

Programs

One of the main aspects of grading for the course will be the successful creation of programs. Students will need to budget their time and resources effectively especially with major programs. Programs that do not compile or run will be substantially docked points. Students need to be sure to be organized in their workflow and see me immediately if they are struggling to complete a program. DO NOT come to me the day it is due and expect me to fix it or extend the deadline at the last minute.

Website/Email

I maintain an extensive website that houses all relevant information for my courses. On each course page you can find a calendar, handouts, solution sets, and additional resources. I EXPECT students to make use of these tools.

I check my email several times a day. I will do my best to answer promptly. Do not wait to the last minute if you have questions or concerns. I can't promise I will answer my email all the time.

<http://www.myteacherpages.com/webpages/JSmoyer/smoyerj@nwlehighsd.org>

Academic Honesty

Students at the high school level are already starting to become members of a larger academic community and they are expected to conduct themselves as such. Failure of students to conduct themselves in an honest manner WILL be reported and can affect grades as well as future/current enrollment in honor societies. Violations include but are not limited to:

- Providing or receiving unauthorized assistance on assignments both in and out of class.
- Use of unauthorized resources during assessments.
- Plagiarizing the work of others and/or representing it as your own.

Tests/Quizzes

In addition to programs students will also be given tests and quizzes to assess their level of understanding of key concepts of computer programming.

Grading

Grades will be given out twice for each course. If at any time you (or your parents) wish to know your grade please don't hesitate to contact me or use the Sapphire Community Portal.

Grades will be given out based on the following scale:

| 1st Semester (40% of Final Grade) | | 2nd Semester (40% of Final Grade) | |
|-----------------------------------------------------|-----|-----------------------------------------------------|-----|
| Major Programs/Exams | 60% | Major Programs/Exams | 60% |
| Minor Programs/Quizzes | 20% | Minor Programs/Quizzes | 20% |
| Hardware Labs/Classwork | 20% | Hardware Labs/Classwork | 20% |

Final Exam/Program (20% of Final Grade)
Cumulative

Lateness

Make-up privileges will be granted by teachers to any student who has been legally absent providing the student requests the privilege within three days after returning to school. Teachers may request students to take tests and make up class work immediately upon returning to school if circumstances dictate.

Programs will be assigned in advance. Late programs will either not be accepted or will be at a severe penalty at the teacher's discretion. Students are expected to see me BEFORE the due date if they think they are going to have trouble meeting a deadline.

Student Absence/Missed Work

It is the responsibility of each student to be organized and a responsible participant in their learning. Students that know they are going to be absent should notify the teacher BEFORE their absence. A student should use the resources available to find out what work is missed. Do NOT simply come in the following class and ask, "What did I miss?"

Course Prerequisite

In order to be successful in this course, students should have completed **Algebra I** at a minimum.