

Programming: Senior Developer

Career Cluster: Information Technology

Program of Study: Computer Programming & Interactive Media

Course Description: This course focuses primarily on developing the students' qualifications for entering the Software Development industry. Students are expected to be proactive and solve problems using skills developed in prerequisite courses.

⚠️ ⚠️ ⚠️ PARENTS, MUST READ! ⚠️ ⚠️ ⚠️

I understand that you are receiving many of these Syllabi to read, sign and return. Unfortunately, many parents do not take the time to do so. *If you are in a hurry, you may read only the important details outlined in boxes such as these.*

Student Outcomes/Objectives:

By the end of this course, students will be able to: (examples below)

1. Pass the Nocti Computer Programming Exam and receive certification
2. Obtain at least one additional certification in software development
3. Mentor Junior Developers in the class
4. Organize and participate in complex development projects, and communicate effectively
5. Develop new software for use in the classroom by teachers and students of the school

Course Details: This course is approximately 400 hours of in-class time (one Year). It is intended for 12th grade students. This course requires Programming: Junior Developer. Expertise in other academic subjects will improve a student's success in this course.

Equipment and Supplies:

Everything required for this class will be made accessible on the students' school laptop. If the student cannot access the software or account needed for an assignment, they did not follow an instruction given in class.

Equipment will be provided to complete the work in class, including a laptop or lab machine capable of running a web browser, any text editor, NodeJS, and has access to a command line terminal. *All assignments can be completed using the school-provided student laptops, as we have worked with IT to make sure the appropriate software is installed and configured.*

Evaluation Strategy: The majority of grading will be done by "Documentation Packets". Please see the "DocPac System Explanation" document for more details. Occasionally, traditional exams and test will be given to ensure progress is being made in achieving Nocti and certification expertise.

Parents

Data has shown that the parent involvement is the leading factor in student success. If you have any concerns, please contact me via email or phone to discuss your student's success in my class.

Christopher Smith, Computer Programming Instructor

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Classroom Policies:

Cell Phones:

No.

Cell phones must be in a backpack. Do not text or call your child in class. No exceptions.

- All cell phones are to remain in the student's backpack during class time.
- If you must contact your student, please call the main office to have the message relayed as per the school policy, or wait for your student's lunch break. Do not text your student in class
- The teacher may designate "breaks" during class, in which the teacher will explicitly state whether the students are permitted to use their phones.
- Students can earn rewards by placing their phone in a charging box in the front of the class.
- Repeated cell phone use will result in disciplinary action.

Personal Devices and Software / Lab Equipment:

Please leave personal devices at home. Do not alter or customize lab machines.

- Students are not permitted to bring **any** personal devices to the class without prior permission.
- Students may not download or run personal software on lab equipment without prior permission.
- Students are not permitted to connect personal devices to lab equipment or electrical outlets, except flash drives to back up their school-related data *only*.

No Food / Sealed Drinks Only:

The IT classrooms are filled with equipment that is fragile and difficult to replace.

- No food is allowed in the classroom
- Drinks must have a sealable lid that prevents spillage.
- Students are given sufficient time to eat breakfast and lunch in the cafeteria

Shop Dress Code:

Students' clothing meet the criteria below. This is above and beyond the normal dress code.

- Students' clothing must be in good condition (no holes or customization).
- No open-toed shoes.
- Zip-up hoodies must remain zipped and pullovers must remain on, unless student is wearing York Tech approved gear beneath.
- No significant branding, images, or messaging should be visible.

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Grading Policy:

Students are responsible for communicating with teacher in writing to receive extension on late work.
Past due assignments without an extension are marked as 0's. No exceptions.

- Students may request an extension on a due date *before* the due date
- If a student is absent on the due date, they automatically have an extension for the number of days they were absent, per the Student Handbook. They may also request a further extension during this time.
- Students must request extensions in writing (such as Teams, Schoology, or email) to ensure a receipt of the request.
- Any assignment turned in after the due date plus any extension are marked as 0's with no further negotiation.

Rewards System:

Students may earn custom plastic "Pogs" (yes, the toy from the 1990's) for completing tasks at the teacher's discretion. They may spend these on rewards.

- Earning rewards may include:
 - Turning in assignments on time
 - Taking time to turn in excellent quality assignments
 - Helping other students succeed
 - Random school uniform checks
 - Doing well in class activities
 - Completing personal projects and participating in extracurriculars
 - Fixing bugs and assisting teacher
 - Earning certificates or reaching career-building milestones
- Students may spend these "Pogs" to earn special privileges. These may include:
 - Bypassing classroom restrictions (Food and devices in class)
 - Allowed to use the class Gaming station (Virtual Reality, Retro games, etc.)
 - Use of the classroom 3d printers
 - Special user account privileges on the lab machines
 - Use of special chairs and workstations
 - Personal / Class wide "Game Days", where no work is required that day

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Senior Expectations:

Our primary mission as technical instructors is to ensure that young adults are able to transition into a sustainable career. In this course, a very high expectation of behavior and engagement is placed on Seniors. Seniors will be expected to develop the following over the course of the year:

- Become role models to younger students by maintaining professional and mature behavior in the classroom.
- Mentor Junior developers in their studies.
- Obtaining certifications, passing the NOCTI, and completing the Program Task List.
- Begin developing a career by networking/taking advantage of opportunities presented to them by instructors in class.
- Begin developing a portfolio by developing software for use in the classroom/school by other students.
- Begin developing a resume by accumulating and accurately documenting accolades.

Mock Companies:

Some seniors, after displaying competency, may be selected to participate in a mock company in the classroom. In this case, they will be excused from the regular coursework and given different assignments. These assignments will be more freeform and will involve developing software with a team. This software will be used by the classroom and school to solve problems. Failure to perform in these teams will result in mock termination, and the student will be placed back onto the regular coursework. If a project is complete or loses viability, they may be mock laid-off and returned to the regular coursework.

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Syllabus Acknowledgement



Do not sign below if you have not read the information in the highlighted boxes.

By signing below, the parties acknowledge they have been given a copy of the syllabus for the class they are enrolled in within Computer Programming & Interactive Media. They also acknowledge that the attending student is responsible for completing the stated objectives in the syllabus, which will be tracked by Program Task List and Syllabus Learning Objectives. Students may obtain a copy of the Program Task List or the Syllabus at any time. The student is also bound to the Classroom Policies outlined in the syllabus.

Parent Name

Parent Signature

Date

Student Name

Student Signature

Date