**BP16\_Python Programming 2**

**Syllabus**

This course is designed for experienced Python programmers. Building on the concepts learned in Python Programming I, the course gives students the opportunity to use advanced programming techniques and introduces students to higher level object oriented programming concepts. This course provides student opportunities to participate in project-based learning activities.

No special software is required to complete this course. Course materials will be accessed through the Cisco Networking Academy (each student will create an account), as well as Canvas. The course includes video content, practice labs, and coding projects. Students will be graded on a combination of lesson activities, projects, quizzes and tests.

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| **Obj. #** | **Essential Standards and Objective/Indicator Statements** |
| 1.00 | Understand basic methods of formatting and outputting data |
| 2.00 | Understand Boolean values to compare and control execution |
| 3.00 | Apply the definition and use of functions |
| 4.00 | Utilize Python modules |
| 5.00 | Apply fundamentals of OOP (Object Oriented Programming) |
| 6.00 | Understand the meaning and impact of Digital Transformation |
| 7.00 | Apply basic programming to support IoT devices |
| 8.00 | Understand how data provides value to digital business and society |
| 9.00 | Understand the need for enhanced security in the digitized world |

**Course Requirements/Materials:** pen and/or pencil, a folder, and notebook paper. A home computer and Internet access is required. Optional: USB flash drive.

**Grading Standards:** Each quarter grade is based on a combination of “assessments” and “classwork.” Assessments (tests, quizzes, projects) make up 50% of your grade, and classwork (daily assignments, activities, worksheets, etc.) make up the other 50%. The semester and final grades are illustrated in the following table:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Final Grade** | = | 1st  6-weeks  (25%) | + | 2nd  6-weeks  (25%) | + | 3rd  6-weeks  (25%) | + | Final Exam (25%) |

**Rules and Procedures:**

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| --- | --- |
| 1. | Respect the instructor’s right to teach students. |
| 2. | Respect the students’ right to learn. |
| 3.  4.  5. | Respect equipment and classroom furnishings.  The “3 BP’s”: Be prompt, be polite, and be productive.  Don’t do anything foolish. |

**Pet Peeves**

|  |  |
| --- | --- |
| 1. | Honesty at all times. |
| 2. | Be prepared and on time. |
| 3.  4.  5. | Sleeping means standing.  No profanity. Disney-rules in school.  Food or drink (other than water) is prohibited in the lab. |

**Communication:** Best form of communication for me is through email: [jason.zak@ucps.k12.nc.us](mailto:jason.zak@ucps.k12.nc.us).

**Honor Code**: ANY PLAGIARISM (i.e. CUT AND PASTE) OR COPYING OFF A STUDENT WILL RESULT IN A “0” for BOTH parties and possible discipline referral and/or phone call home.

**Cell Phone Use:** Cell Phones are not permitted during instruction unless otherwise authorized by Coach Zak and need to be placed in the classroom phone-holders or student’s book bag. If the student is found to have violated this policy, they risk having their phone taken until the end of day. Further discipline will be handed out for repeat offenders.

**Daily Agenda:** Will be posted on Canvas in the “Announcements” tab on the left-hand side. This will help us stay organized. This is where directions for each assignment will be located daily.

**Make-Up Work**: If a student misses a day due to sickness or a school-related activity, said student has two days in which to make up the work he or she missed.

**Students:** I have read and understand the rules and procedures, and will honor them while in school.

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Student signature Date

**Parents/Guardian:** My child has discussed the classroom discipline plan with me and I support it.

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Parent/Guardian signature Date