

Instructor: Ms. Straub
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Office Hours: Friday Refuel
Rm: C105

IT FUNDAMENTALS FALL 2024

- I. Course Description:** This is an introductory level course that covers the fundamentals of software, hardware, security, and networking, as well as basic IT skills such as workstation set-up, operating system navigation, simple support services, backup protocols, and safety. Upon completion of the course, students will understand the essential functions of IT professionals and be better positioned to make decisions about a career in information technology.

- II. Prerequisite:** None

- III. Course Objectives:** Students will:
 - A. Gain foundational knowledge on the fundamentals of IT
 - B. Apply that knowledge in developing IT skills through hands-on activities
 - C. Expand the ability to effectively communicate IT knowledge to all audiences

- IV. Classroom Rules and Consequences:**
 - (1) Treat every person, their space, and their things respectfully.
 - (2) Be in your seat, with your needed class materials, before the bell.
 - (3) Follow directions and stay on task.
 - (4) Engage with technology courteously and responsibly.
 - (5) Follow all school rules.

- V. Cell Phones:** Cell phones and earbuds/headphones will not be allowed to be used during classroom instruction time. Phones and earbuds/headphones will be put away in a location designated by the teacher and placed in silent mode. In secondary schools, students will have access to their phones and earbuds/headphones outside of classroom instruction time such as between classes and lunch. Failure to follow these procedures will result in a disciplinary referral to the office.

- VI. Accommodations:** Requests for accommodations for this course or any school event are welcomed from students and parents.

- VII. Turnitin Notice:** The majority of writing assignments in this course will be submitted to Turnitin via the Schoology learning platform. The primary focus of this software is to help students become better writers and scholars. Turnitin generates a report on the originality of student writing by comparing it with a database of periodicals, books, online content, student papers, and other published work. This program will help students discern when they are using sources fairly, citing properly, and paraphrasing effectively - skills essential to all academic work. Students will have the opportunity to review their Turnitin originality report and will have the opportunity to make revisions before submitting their work for grading. Once their work is submitted, teachers have the opportunity to view the student's originality report and grade accordingly.
- VIII. Grading Policy:** Test grades will account for 70% of the 9-weeks grade, with the remaining 30% being determined by quiz/daily grades. The grading scale is as follows: A (90-100%), B (80-89), C (70-79), D (65-69), and F (below 65). Grades will be a reflection of mastery of the standards. Make sure all absences are excused as class work can be made up and graded for excused absences only. The final exam counts for 20% of the final grade.
- IX. Make-Up Work Policy:** If you miss a class, test, or assignment, it is your responsibility to see what you have missed (weekly assignments will be posted on schoology). All work missed on the day(s) of the excused absence(s) must be made up within three school days after returning to school. It is your responsibility to turn this work in to me by the third day. If you do not turn in the work within 3 days then it will become a zero. If you missed a test or quiz, you must communicate this with me ahead of time. We will schedule a time together to make-up the test or quiz.
- X. Course Materials:** School issued chromebook, notebook paper and Pencil/Pen.
- XI. Available Industry Recognized Standards:** TestOut Fundamentals Pro Certification and CompTIA ITF+
- XII. Embedded numeracy and literacy:** This course will require the application of a variety of mathematical concepts and skills. This includes basic algebra and working with the binary and hexadecimal number systems. This course will require the application of a variety of technical writing concepts and skills.
- XIII. CTSO Integration:** Consider joining SkillsUSA or TSA.
- XIV. Texts:** Testout.com online training, Fundamentals Pro
- XV. Use of AI:** Students are prohibited from using AI or any AI-generated content to complete assignments, exams, projects, or any other form of academic work unless expressly permitted by the instructor. Use of AI not authorized will result in a zero.

XVI. Tentative Schedule:

WEEK 1	Introduction to IT Fundamentals, History of Computer, Career Paths
WEEK 2	Unit 1 Infrastructure: Binary, Internal Computing Components
WEEK 3	Unit 1 Infrastructure: Input/Output Devices, Troubleshooting Procedures, PC Tools and Maintenance
WEEK 4	Unit 2 Applications & Software: Operating Systems
WEEK 5	Unit 2 Applications & Software: Applications, Storage & Productivity Software
WEEK 6	Unit 2: PC Project
WEEK 7	Unit 3 The Internet: Fundamentals of the Internet and Browser Management
WEEK 8	Unit 4: Database Fundamentals: Introduction to Databases
WEEK 9	Unit 4: Database Fundamentals: Database Project
WEEK 10	Unit 5 Networking: Introduction to Networking, Common devices and concepts
WEEK 11	Unit 5 Networking: Internet Service Infrastructure & Wireless Network Project
WEEK 12	Unit 5 Networking: Network Storage and Security
WEEK 13	Unit 6 Security: Introduction to Cybersecurity, Passwords, Best Practices
WEEK 14	Unit 6 Security: Threats - Email and online safety, Social Engineering
WEEK 15	Unit 6 Security: Threats - Malware, Encryption, Physical Security
WEEK 16	Unit 7 Software Development: Introduction to Programming Languages & Terminology
WEEK 17	Unit 7 Software Development: Block Programming Project
WEEK 18	Finals
Winter Break	

* The syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions, or substitutions. For any necessary changes, adequate notice will be provided to the students

IT FUNDAMENTALS
FALL 2024

Dear Parent/Guardian,

This is my third year at James Clemens High School and I am committed to making this a successful and enjoyable class. I feel privileged to have your JCHS student in my class and hope that you will contact me should you have any concerns about the progress of your JCHS student. A complete syllabus for this course is located on Schoology and on the JCHS website for your review. Below you will find the TLDR highlights.

- ★ Check Schoology for course materials and Powerschool for grades.
- ★ Per a new district policy, students will not be allowed access to the cell phones during instructional time.
- ★ Your student will have the opportunity to attempt two certification exams this semester.

With your JCHS student, please read the course syllabus, then sign and date this signature page. Please provide a current email address and phone number at which I can contact you should the need arise. I look forward to a great semester!

Thank you,
Ms. Straub

My child and I have read and discussed the classroom syllabus and agree to follow all policies. Please fill out and return this page only to Ms. Straub by **MONDAY AUGUST, 5, 2024**.

Student Name (Print) _____

Student Signature _____

Parent/Guardian Name (Print) _____

Parent/Guardian Signature _____

Email Address(es) _____

Phone number(s) _____

Please provide me with any important information about your child that I will need to know: