



Principles of Information Technology (PIT)

Syllabus, TEKS, & Class Expectations

BBIA • B201 • Mr. Johnson

Contact Information – Instructor: Mr. Ron Johnson

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Welcome & Course Information

Welcome. I am very happy to have you in class during this course that meets on A-Days during this semester.

- ❑ Please feel free to email me (above) if you or your parents have any questions.
- ❑ My conference/planning time at Ben Barber is from 10:05 to 10:20 a.m.
- ❑ Grades may be viewed at <http://mansfieldisd.org/skyward.htm>.
- ❑ Students will access assignments as directed in their shared [PIT] Google Drive folder (i.e., they share with Mr. Johnson).
- ❑ Students will create and share a PDE Google Drive folder with Mr. Johnson (myronjohnson@misdmail.net). Name the folder **PIT#[YourLastname]**.
- ❑ Students will access assignments in their Block's PIT Google Classroom.
- ❑ Google Classroom Codes: **PIT1 (Blocks 1/2) = k36n1ay**
- ❑ The classes Google Classroom is where the student will submit their work for credit. All work must have the correct filename (**###-Lastname**).

Course Description & Objectives

- ❑ **Prerequisite:** None (9-12). **Course Credit:** 1.
- ❑ **Next Course Options:** *Digital Media* (offered Spring 2020), *Computer Maintenance*, and/or *Computer Programming* (all offered at BBIA).
- ❑ **Certification:** At present, there are no certifications earned during this course. Certification possibilities outside of the course will be presented to the students.
- ❑ **Students will have the opportunity to . . .**
 - ⇒ Develop computer literacy skills to adapt to emerging technologies used in the global marketplace;
 - ⇒ Implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment;
 - ⇒ Enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment;
 - ⇒ Create a variety of projects to present the new technology skills learned;
 - ⇒ Experience a variety of IT concepts including computer software, computer hardware, careers in IT, and how to prepare and give presentations; and
 - ⇒ Learn beginning skills in computer programming by using a visual programming environment.

Required Materials

- Assigned iMac and MISD Google Drive storage account.

Texts, Exams/Quizzes, & Portfolios

- ❑ Students will use a variety of texts and resource (all provided and accessible on PIT Google Classroom).
- ❑ Quizzes and final exam materials will be taken from notes, readings, and course assignments/projects.
- ❑ Students will produce a *PIT Electronic Portfolio (three unit sections – 01 [1-5], 02 [6-12] & 03 [13-17])*.
- ❑ **Benchmark assessments** will be taken at the end of the first (1st) and second (2nd) six (6) weeks of the course.
- ❑ **End of Course Final Exam** = PIT students will receive a review for the PIT course comprehensive test or final project.

Course Content

* The following is tentative and subject to change by the instructor/teacher and affected by student progress.

COURSE INTRODUCTIONS – Welcome; Syllabus & TEKS; Expectations; Essential Work Ethics & 21 st Century Employment Skills, and Employability Assessment; Ethics – Copyright; and Presentation Guidelines.
INTRO TO INFO TECH – Computers Are Everywhere; Computers in the Workplace; and Challenges of a Digital Society.
SOFTWARE – Language of Computers; System Software; Application Software.
FILE MANAGEMENT – File and Folder Names; Locating Files and Folders; Organizing Files and Folders; and File Utilities.
PURCHASING, MAINTAINING & TROUBLESHOOTING – Purchasing a System; Basic Maintenance; and Troubleshooting Basics.
COMMON OFFICE APPLICATION FEATURES – Starting Word, Excel, and PowerPoint; Saving, Printing, and Opening Documents; Editing and Formatting; Document Views, Options, and Help.
WORD PROCESSING SOFTWARE – Creating a Document; Proofing Text.
FORMAL DOCUMENTS – Creating a Business Letter; Creating a Report; Ethical Practices for Intellectual Property.
PRESENTATION SOFTWARE – Creating a Professional Presentation; Adding Transitions and Animations; Charts, Tables, and Handouts.
SPREADSHEET SOFTWARE – Introduction to Spreadsheets; Managing Data in Spreadsheets.
ADVANCED SPREADSHEETS – Calculating with Functions; Visual Enhancements of Data.
DATABASE SOFTWARE – Introduction to Databases; Importing and Viewing Data; Queries.
INTERNET & THE WORLD WIDE WEB – Internet and the World Wide Web; Creating for the Web.
COMMUNICATION NETWORKS – Network Fundamentals; Network Topologies; Network Security.
ELECTRONIC COMMUNICATION & COLLABORATION – Electronic Mail; Real-Time Communication; Good Communication Practices.
SECURITY, PRIVACY, and SAFETY – Preventing Computer Threats; Identity Protection and Ethical Behavior; Restricting Access to Personal Information.
PROGRAMMING BASICS – Introduction to Basic Programming (featuring video game programming concepts).
CAREERS IN INFO TECH – Career Fields in Information Technology; Starting a Career in IT.
FINAL PROJECT – IT Professionals Presentation Project

Assessment Policy

According to **MISD District Policy**, a semester’s grading periods – three six weeks – will be averaged together for **80% of the overall grade (actual percentage of semester course grades)**.

- Daily Work: Engineering Notebook & Participation** (Teamwork) 60% (= 48%)
- Projects & Tests** (District Policy).....40% (= 32%)
- NOTE:** Each semester will include a **Quality Assessment (Final Project)** that is **required (no exemptions)** and takes the place of a Final Exam, representing **20% of the student’s overall semester grade**.

The MISD high schools use a weighted grading system. * The following chart reflects the MISD grading system for grades 9-12:

A	B	C	F
90 – 100	80 – 89	70 – 79	Below 70

Semester Exams

Each semester, specific exam schedules are designed for MISD high school and dual credit courses. These schedules must be followed. Neither mid-term nor final exams are given early. If a student is absent on the day of an exam he/she will take the exam at a date/time designated by the school.

The Semester Final Exam due date is the last testing date for this course that a student can submit their work to receive a passing (70 and above) grade. It is paramount that the student’s work be submitted, even if you have not completed all the work on the Semester Final Exam. Failure to submit is an automatic “0” and will reduce the student’s semester grade by 20%.

A **PIT Notebook** is provided and is required to be kept up-to-date by the student and will hold the following in an organized manner: Class notes, handouts, and course work including project documentation. On some occasions you will be allowed to use the notebook materials on a quiz and/or test. The student's PIT Notebook will include the Final Quality Assessment Project that will determine to what degree the student is both "competent" and advances "quality work."

Late Work

- The Teacher designates due date and time for assignment (Beginning of class period, End of class period, designated time of day).
- If student fails to meet the due date and time, then the student has until the next class period or block (next A day or B day) to turn in assignment to be considered one day late.
- Students will be assessed a penalty of 30% points for up to one class period late.
- Score of a zero may be given for work turned in after one day late.

Make-Up Work / Quiz & Test Retakes (because of absence for any class missed)

- The Teacher assigns the student makeup work based on the instructional objectives for the subject or course and the needs of the individual student in mastering the essential knowledge and skills or in meeting subject or course requirements.
- A student will be responsible for obtaining and completing the makeup work in a satisfactory manner and within the time specified by the teacher. When absent, the student is afforded the number of days missed plus one additional day to turn in makeup work.

A/B Block Example: A student misses Monday and Tuesday of the week and he/she returns on Wednesday of that same week. Student work from Monday's absence is considered late after Friday, and student work from Tuesday's absent is considered late after the following Monday (or the second time the course meets).

- A student who does not make up assigned work within the time allotted by the teacher will receive a grade of zero (0) for the assignment.
- A student is encouraged to speak with his/her teacher if that student knows of an absence ahead of time, including absences for extracurricular activities, so that the teacher and student may plan any work that can be completed before or shortly after the absence.
- A student will be permitted to make up tests and turn in project(s) due in any class missed because of absence. Teachers may assign a late penalty to any long-term project in accordance with time lines approved by the principal and previously communicated to students.
- See UIL Eligibility ("Np Pass/No Play") guidelines for additional information related to grades and UIL Eligibility.

Conduct Expectations

Respect plays out in many ways, including paying attention, doing quality work, being ready to learn and participate and supporting each other. Here is where we can hone our individual and team skills. This is your opportunity to act in the intention of helping each other grow. Give your best effort. Do the quality work. And let's inspire each other to greater heights of personal satisfaction and achievement.

- **Be respectful of oneself** – Come to class prepared with your materials and assignments; be dressed and groomed in accordance to school codes.
- **Be respectful of others** – The focus of the class is on learning. Distracting behavior is not acceptable.
- **Be respectful of property and equipment** – Clean up after yourself and take care of items that are placed in your care.
- **Be responsible** – Take care of your assignments and other business at appropriate times.
- **Be reliable** – Be prepared and on time for class.
- **Be a team player** – You will have plenty of opportunities to team up with others in this class. Do your part, carry your part of the load, and do it with a good attitude.

Classroom Rules & Expectations

- **No food allowed in the B201 iMac Lab** (Gum must not be seen or heard; when you've finished with your gum, thank you for disposing of it in the classroom trash can).
- **Drinks with a screw on CAP only!** No drinks with a plastic lid that pops off will be allowed in B201.
- **No perfume, or makeup** be used/applied in the classroom or computer lab.
- **ID's** are to be worn at all times.
- **Backpacks and purses** may be placed on the floor.
- **Chairs** must be pushed in before leaving B201. No rolling chairs. Feet on the floor.
- No sitting or putting feet up on tables.
- **Computers** are to be left in the same configuration as found. Leave desktop as is. No changes.
- As in the "workplace," cell phone use and texting during class is inappropriate and not allowed (per B201 Policy – See B201 walls for details).
- **Use of earbuds are not allowed in B201** unless permission is given by the teacher. Otherwise they are to be put away.
- **Please raise hand before asking a question** so the question may be answered. No talking while the teacher is talking.
- **No profane language** will be used or tolerated in B201.
- Before the end of class – All materials, books, must be put back in their proper place.
- Do not work on other assignments when given a class / lab assignment.
- Do not put head down or sleep while in class.
- Participation in class discussion / activities are required for full activity credit.

Academic Honesty & Integrity

Honesty is extremely important. Please, give the teacher no reason to suspect any form of cheating on work that is done in this course. While working with others on homework/projects is allowed & encouraged, it is considered copying all or part of any assignment to be cheating – both parties to blame, whether the student(s) is/are currently enrolled in this course or not. Consequences include a zero (0) on the assignment, parent contact, and a referral to your assistant principal as delineated in the **MISD Student Code of Conduct**.

Academic Dishonesty

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Academic dishonesty – cheating or plagiarism – is not acceptable. Cheating includes the copying of another student's work, homework, class work, test answers, etc. as one's own. Plagiarism is the use of another person's original ideas or writing without giving credit to the true author. A student found to have engaged in academic dishonesty will be subject to loss of credit for the work in question, as well as disciplinary penalties, according to the Student Code of Conduct.

Computer Rules Policy

The student and parent must sign the computer rules policy provided by the Mansfield ISD. All district and campus policies will be followed and enforced in this classroom. This is not our opinion; it is our responsibility.

Cell Phones & Electronic Devices

Both MISD and MHS policy will be followed in relationship to cell phones and electronic devices in the classroom.

TEKS

PIT • Principles of Information Technology

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TEXAS ESSENTIAL KNOWLEDGE AND SKILLS (TEKS)

§130.302. PRINCIPLES OF INFORMATION TECHNOLOGY (*One Credit*), Adopted 2015.

(a) **General requirements.** This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
- (2) The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.
- (3) In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

- (1) **The student demonstrates professional standards/employability skills as required by business and industry.** The student is expected to:
 - (A) identify and demonstrate work behaviors and qualities that enhance employability and job advancement such as regular attendance, attention to proper attire, maintenance of a clean and safe work environment, pride in work, flexibility, and initiative;
 - (B) employ effective verbal and nonverbal communication skills;
 - (C) employ effective reading and writing skills;
 - (D) solve problems and think critically;
 - (E) demonstrate leadership skills and function effectively as a team member;
 - (F) identify and implement proper safety procedures; and
 - (G) demonstrate planning and time-management skills such as storyboarding and project management, including initiating, planning, executing, monitoring and controlling, and closing a project.
- (2) **The student identifies various employment opportunities in the IT field.** The student is expected to:
 - (A) identify job opportunities and accompanying job duties and tasks;
 - (B) research careers of personal interest along with the education, job skills, and experience required to achieve personal career goals; and
 - (C) describe the functions of resumes and portfolios.
- (3) **The student uses evolving and emerging technologies to exchange information.** The student is expected to:
 - (A) identify and describe functions of various evolving and emerging technologies;
 - (B) send and receive text information and file attachments using electronic methods such as email, electronic bulletin boards, and instant message services;
 - (C) demonstrate effective Internet search strategies, including keywords and Boolean logic, using various available search engines;
 - (D) identify the various components of a Uniform Resource Locator;
 - (E) demonstrate ability to effectively test acquired information from the Internet for accuracy, relevance, and validity;
 - (F) explain issues concerning computer-based threats such as computer viruses, malware, and hacking; and
 - (G) explain issues concerning Internet safety such as identity theft, online predators, cyber-bullying, and phishing.
- (4) **The student demonstrates knowledge of the hardware components associated with information systems.** The student is expected to:
 - (A) identify major hardware components and their functions;
 - (B) use available reference tools as appropriate; and
 - (C) connect and use a variety of peripheral devices such as mouse, keyboard, microphone, digital camera, and printer.
- (5) **The student demonstrates knowledge of the different software associated with information systems.** The student is expected to:
 - (A) differentiate between systems and application software;
 - (B) identify and explain major operating system fundamentals and components such as disk operations, graphical user interface components, and hardware drivers;
 - (C) explain the purpose of file types across software products;
 - (D) demonstrate use of computer numbering systems and internal data representation such as identifying the hexadecimal value of a color;

- (E) compare and contrast open source and proprietary software;
 - (F) explain use of system management tools;
 - (G) apply proper file management techniques such as creating, naming, organizing, copying, moving, and deleting files;
 - (H) use appropriate file protection and security; and
 - (I) explain the process for discovering, quarantining, and removing viruses from a computer system.
- (6) **The student analyzes network systems.** The student is expected to:
- (A) identify hardware associated with telecommunications and data networking such as servers, routers, switches, and network connectors;
 - (B) identify and describe various types of networks such as peer-to-peer, local area networks, wide area networks, wireless, and Ethernet;
 - (C) identify functions of network operating systems; and
 - (D) explain troubleshooting techniques for various network connection issues.
- (7) **The student applies word-processing technology.** The student is expected to:
- (A) identify the terminology associated with word-processing software;
 - (B) edit a variety of text documents using functions such as pagination, appropriate white space, tab settings, and font style, size, and color; and
 - (C) create professional documents such as memorandums, technical manuals, or proposals using advanced word-processing features.
- (8) **The student applies spreadsheet technology.** The student is expected to:
- (A) identify the terminology associated with spreadsheet software;
 - (B) use numerical content to perform mathematical calculations;
 - (C) use student-created and preprogrammed functions to produce documents such as budget, payroll, statistical tables, and personal checkbook register;
 - (D) identify, generate, and describe the function of comma separated value files;
 - (E) create and analyze spreadsheets incorporating advanced features such as lookup tables, nested IF statements, subtotals, cell protection conditional formatting, charts, and graphs; and
 - (F) perform sorting, searching, and data filtering in documents.
- (9) **The student explores computer programming concepts.** The student is expected to:
- (A) identify the function of compilers and interpreters;
 - (B) explain the difference between the operation of compilers and interpreters;
 - (C) identify various computer languages and how the languages are used in software development;
 - (D) recognize data representation in software development such as string, numeric, character, integer, and date;
 - (E) identify and explain the concept of algorithms; and
 - (F) describe the flow of a structured algorithm, including linear and iterative instructions such as using a flow chart.
- (10) **The student explores database technology.** The student is expected to:
- (A) identify the terminology associated with database software and database functions;
 - (B) explore the application of databases;
 - (C) identify and explain the purpose and elements of a query language;
 - (D) identify and explain the purpose of fields and records; and
 - (E) describe the process of constructing a query, including multiple search parameters.
- (11) **The student applies presentation management technology.** The student is expected to:
- (A) identify the terminology and functions of presentation software; and
 - (B) create, save, edit, and produce presentations incorporating advanced features such as links, hyperlinks, audio, and graphics.
- (12) **The student applies design and web publishing techniques.** The student is expected to:
- (A) identify the terminology associated with web page development and interactive media;
 - (B) identify and explain design elements such as typeface, color, shape, texture, space, and form;
 - (C) identify and explain design principles such as unity, harmony, balance, scale, and contrast;
 - (D) identify and explain common elements of Hyper Text Markup Language (HTML) such as tags, stylesheets, and hyperlinks; and
 - (E) create a web page containing links, graphics, and text using appropriate design principles.
- (13) **The student understands and demonstrates legal and ethical procedures as they apply to the use of information technology.**
The student is expected to:
- (A) explain and demonstrate ethical use of technology and online resources;
 - (B) adhere to intellectual property laws;
 - (C) explain the concept of intellectual property laws, including copyright, trademarks, and patents and consequences of violating each type of law;
 - (D) examine the consequences of plagiarism;
 - (E) identify and explain unethical practices such as hacking, online piracy, and data vandalism; and
 - (F) demonstrate ethical use of online resources, including citation of source.

Source: <http://ritter.tea.state.tx.us/rules/tac/chapter130/ch130k.html>

The provisions of this §130.302 adopted to be effective August 28, 2017, 40 TexReg 9123.

Student Agreement: Classroom Expectations & Procedures

1.	<input type="checkbox"/>	I understand that cell phones are <u>not</u> allowed during PIT class (per District Policy) unless approved by Mr. Johnson. My cell phone and headphones are to be put away when I enter BBIA B201 iMac Lab .
2.	<input type="checkbox"/>	I understand that it is my responsibility to sign-in on attendance clipboard each class. This is how attendance will be verified daily.
3.	<input type="checkbox"/>	I will be ready to begin working on the day's assignment(s) (i.e., detailed on white board) when the class bell rings.
4.	<input type="checkbox"/>	I will place my personal items (i.e., backpack, purse, and other large item) out of walking areas (i.e., under lab table, CPU station, etc.).
5.	<input type="checkbox"/>	I understand that the assigned computer that I use in BBIA B201 iMac Lab is to be left in the same configuration as I find it. I am to make no changes to the screen, administrative, and/or file storage settings.
6.	<input type="checkbox"/>	I understand that headphones/headsets are to be used <u>only</u> when an assignment requires their usage. Classroom headsets are available.
7.	<input type="checkbox"/>	I will follow all established classroom and equipment usage rules.
8.	<input type="checkbox"/>	Before the end of class bell rings, I will: <ol style="list-style-type: none"> a. Return all material(s) being used to its designated place. b. Sign off the computer and push the chair back under the desk. <i>Last period PIT students will shut down the iMac at the end of their class.</i> c. Make sure completed assignments/work is turned into the designated area.

Sign below and submit to Mr. Johnson.

Date: _____

Verification: I, _____, have read, understand, and will do my best to adhere to the expectations, standards, and requirements found in the Ben Barber Innovation Academy's (Mr. Ron Johnson • **B201**) Principles of Information Technology (PIT) course Syllabus, TEKS, and Classroom Expectations & Procedures.