IT101 Introduction to Information Technology

Course Description: This course introduces the students to the fundamentals of various aspects of Information Technology (IT). It provides a working knowledge to IT terminology, processes that use IT, and the components found in telecommunications and computer systems that are used by IT professionals. The course material is discussed in context to IT careers. For example, operating systems are introduced from the viewpoint of what a system administrator would need to know to improve performance verses what a computer science engineer would need to know to develop a new software algorithm.
Topics include: Computer fundamentals, computer architecture, digital storage and data representation, networking, database management systems, system and application software, Internet and World Wide Web, computer security.

Pre-requisites: None.

Instructor: Mark Nazzaro
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Office Hours: before and after class or by appointment

Text: *New Perspectives Computer Concepts 2018,* June Jamrich Parsons, McGraw Hill, 2018, ISBN-978-1-305-95149-5. **Note this is the "Complete" version and contains 11 Modules**.

Canvas: Additional material and resources are found on the class website in Canvas, (https://canvas.njit.edu/). It will be modified and updated as the course progresses and should contain the most recent information.

Schedule: **The following is a tentative schedule and subject to change. Refer to class web page for most recent information.**

Credits: 3

Week	Topics	Reading Due
1	Digital Content	Module 1
2	Digital Devices/Hardware	Module 2
3	Networks/OSI Model	Module 3
4	World Wide Web	Module 4
5	AFS/HTML	
6	Social Media	Module 5
7	Software	Module 6
8	**Mid-term**	**Study**
9	Digital Security	Module 7
10	The ICT (Information and Communications Technology) industry	Module 8
11	Information Systems	Module 9
12	Databases/Intro to SQL	Module 10
13	Programming	Module 11
14	Cloud Computing	
15	Presentations/Final Exam Review	
16	Final Exam	

Grades: Final grades will be based on:

Midterm	30%	300 points

Final	30%	300 points
Homework (5 assignments)	25%	250 points
Project & Presentation	15%	150 points

There is a total of 1000 possible points for the term. Grades are based solely on the points you earn.

A	900 -1000 points
B+	850 – 899 points
B	800 – 849 points
C+	750 – 799 points
C	700 – 749 points
D	600 – 699 points
F	0 - 599 points

I may curve up when assigning grades, but I will under no circumstances curve down. For example, you may earn an A if you have 898 points, but you will not earn lower than a B+ if you have 850 points. I will not assign incompletes unless there are extraordinary circumstances.

POLICIES:

Assignments (Homework and Project)

Homework for this class consists of 5 homework assignments. They are usually due about one week after being issued. Their purpose is to help you keep up with the material and assess your readiness for the midterm and final.

Homework is due before midnight (**11:55pm**) on the due date specified on the schedule. It is submitted via Canvas electronically. Late homework will not be accepted unless there is a reason beyond your control. In most cases I will grade homework online and return the results back to you electronically via Canvas with the grade posted in the comments section and additional comments included within the returned electronic document.

The final project is a technical research paper on one of the topics we've covered this semester in Intro to IT. Some sample topics are: networks, storage, flash memory, databases, cloud computing or HTML.

The report will contain a more in depth explanation of your topic, more than what we've covered in class. The report should be two pages long in MLA format. In addition, you are required to present your topic to the class using powerpoint slides (or an equivalent presentation editor) in a 5 minute presentation. The rubric is as follows:
Report: 90 points
Presentation: 60 points

In addition to your 2 page report, you should have a page citing your sources of information.

Your grade will be based on both the technical content and the quality of the report/presentation.

EXTRA CREDIT: In lieu of the above assignment, for 50 extra credit points, you can create a purpose built computer (using a raspberry pi) and write at 2 page report about your computer's purpose along with the process you followed to create your computer and give a 5 minute presentation on your raspberry pi.

Some purpose built raspberry PIs are a music player, a DVR, a gaming console, a portable computer or a security camera. You may want to consider including the advantages and disadvantages of building your own computer. If you'd prefer to build your own desktop computer you can but keep in mind that the cost will be at least $150+ unless you already have some parts.

Participation

I expect you to actively participate in class by asking questions and to come prepared to answer questions in class. It is important to have read the Chapter in advance of class. You will get more out of the class if you've spent some time thinking about the material in advance.

Class room participation will be taken into consideration when a student is on the cusp between grades.

Makeup Tests and Assignments

Requests for makeup tests and assignment changes must be made in advance with the instructor and will only be approved if the reason is beyond your control.

Note: Calculators are not necessary and are not permitted for exams in this course.

Academic Integrity Policy

"Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. ***Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university.*** *If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu"*

All of your assignments must constitute original work. These assignments may **NOT** be done in collaboration with anyone else (unless otherwise approved). No credit will be given for any assignment that is copied—in part or in its entirety—from another person. **Both people involved will receive no credit.**

Note, however, that you may "talk" about assignments with each other, but such discussions must remain at a conceptual level. In summary, keep in mind:

- Do NOT ask to see another person's assignment, particularly a finished assignment.
- Do NOT pass your assignment around to other members of the class.
- Do NOT submit duplicate assignments. Even partially duplicate assignments will NOT be accepted.
- If the instructor is at all **uncomfortable about the originality of your work**, no credit will be given.
- Do NOT submit an assignment used for previous assignments in this or other courses.

TURNITIN Policy

NJIT uses Turnitin.com, a service that helps prevent plagiarism on student papers. I will be using the Turnitin.com service at my discretion to determine the originality of student papers. If I submit your paper to Turnitin.com, it will be stored by Turnitin.com in their database as long as their service remains in existence. If you object to this storage of your paper, **you must let me know no later than two weeks after the start of this class.** If you object to the storage of your paper on Turnitin.com, I will utilize other services and techniques to check your work for plagiarism.