

Engineering/Physics/Technology Department
NASSAU COMMUNITY COLLEGE

CRT201-M1, CRN 11183, Equipment Servicing 1--Fall 2023; 4 credits

Instructor: Prof. Donald Wade, E-mail: WadeD@ncc.edu

Departmental Office: room B-3028, phone 516-572-7383

Class Hours (5): Monday, 2:00 - 4:45 PM; room C117; Wednesday, 2:00 – 3:50 PM, room C120

NOTE: Monday, 9/24/23, NCC classes do not meet. **Tuesday, 9/25/23**, day NCC classes are on a Monday schedule, **We will meet on a Monday schedule.**

Prerequisites: Basic Requirements in English and Math

Text: Jean Andrews, Joy Dark, Jill West *A+ Core 1 Exam Guide to Computing Infrastructure, 10th Edition*. Cengage, 2020, ISBN-13: 9780357108291. (**Note: This textbook is included as an e-book when you subscribe to Cengage Mind-Tap.**) www.cengage.com (Course: MTPQXG73G5ZP)

Materials Required:

subscription to Cengage Mind-Tap. www.cengage.com (Course Key: MTPQXG73G5ZP)

PC Repair Toolkit

USB Drive (at least 4GB)

Scientific Calculator (app)

Laptop (8 GB RAM and 500 GB Hard Drive)

Web Information: Prof Wade's general web information page is: <http://donwade.us>

Assignment lists are available through the information page or directly at <http://donwade.us/201>

Cell Phones, Beepers, etc.:

Please set all cell phones, etc. to "silent". If it is necessary to talk on a cell phone, please leave the room; do not hold conversations in the class room.

Class Absences/lateness: It is the student's responsibility to find out assignments given during missed classes, make up the work, and hand in the report in a timely manner. Absences or excessive lateness will cause a reduction in grade. Missed quizzes will have a grade of zero.

The official college policy is: "Students are expected to attend all classes. Absences due to illness or for other serious reasons may be excused by the instructor. Students are advised that absences in excess of 10% of the total class meetings may result in the student being dropped from the course. Some departments may have additional attendance guidelines and related grading policies. The instructor shall detail the specific attendance policy for his/her class. Students are responsible for all course work missed.

Quizzes may be given at any time.

Reports and on line labs are due as assigned and are due at the start of class on the assigned date and time. Reports and labs not handed in will be given a grade of zero.

Grading Procedure: 40% of the grade is based on Reports and online labs (Cengage MindTap). You will need to subscribe to Cengage MindTap in order to gain access to the online labs and e-books. 30% of the grade is based on in-class exams and quizzes. The final examination is cumulative and given in a varied format.

20% of the grade is based on in-class labs. No make-up of labs will be allowed.

Withdrawal: Permission will be given by the instructor at any time before the final class (even after the withdrawal deadline in the administrative calendar) if asked for. Withdrawal without proper notification will result in a grade of F.

Cheating will result in a failing grade.

Attribution: The use of Internet derived or any other materials in reports without proper attribution will be considered plagiarism and will be treated accordingly.

Course Description:

This course is the first of a two-course sequence designed to provide the skills required to install, service and maintain personal computers and their peripheral devices. Topics include microcomputer fundamentals; PC hardware; the addition or replacement of field replaceable modules; installation and configuration procedure for various devices; common problems associated with each module and troubleshooting techniques. Microprocessor support systems, memory systems, on-board I/O, expansion slots, system board upgrading, and troubleshooting conclude the course. Department computer facility will be used for all laboratory work

Course Objectives:

Students will gain a complete, step-by-step approach for learning the fundamentals of supporting a computing infrastructure. This course maps to CompTIA's latest A+ 220-1101 (Core 1) Exam objectives.

Specific topic coverage includes:

1. Taking a Computer Apart and Putting It Back Together
2. All About Motherboards
3. Supporting Processors and Upgrading Memory
4. Supporting the Power System and Troubleshooting Computers
5. Supporting Hard Drives and Other Storage Devices
6. Supporting I/O Devices
7. Setting Up a Local Network
8. Network Infrastructure and Troubleshooting
9. Supporting Mobile Devices
10. Virtualization, Cloud Computing, and Printers

Web Resources: This is a list of some recommended websites. You should add other useful sites as you find them and share the information with your classmates

McGraw-Hill Technology Education website: mhtechd.com or mikemeyersaplus.com

CompTIA website: www.comptia.org

Total Seminars (Mike Meyers) website: www.totalsem.com

PC Guide website: www.pcguide.com

Computer dictionary: www.webopedia.com

Microsoft Technical support site: www.microsoft.com/technet

Major CPU manufacturers: www.intel.com, www.amd.com

PC Tech Guide website: www.pctechguide.com

Kingston Ultimate Memory Guide site: www.kingston.com/tools/umg/default.asp

Major PC manufacturers sites: www.dell.com, www.hp.com, www.gateway.com

Major BIOS manufacturers sites: www.award.com, www.megatrends.com

PC parts websites: www.pricewatch.com, www.newegg.com

Hardware sites, especially for new components: www.tomshardware.com, www.anandtech.com

COVID precautions: The school has listed, on www.ncc.edu/nccnext, procedures which must be followed. Students who are not in compliance will be asked to leave the classroom.

Disabilities Statement: If you have a physical, psychological, medical, or learning disability that may impact on your ability to carry out the assigned coursework, you are urged to contact the staff at the Center for Students with Disabilities (CSD), Building U, (516) 572-7241, TTY (516) 572-7617. The counselors at CSD will review your concerns and determine to what reasonable accommodations you are entitled as covered by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. Information and documentation pertaining to personal disabilities is kept confidential.

Food Insecurity Statement: If you are having a difficult time affording groceries or accessing sufficient food to eat or if you lack the basic necessities and believe this may affect your performance in the course, you are urged to contact The NEST@NCC food pantry. The NEST provides free groceries and personal care items to all NCC students and their families and can assist you in accessing many other necessary resources. Visit the NEST's website for further information: <http://nestncc.weebly.com>.

CRT201--November 3, 2023