## COURSE SYLLABUS

**ITSC-1425-93404 A+ Essentials**  
**Spring 2016**

**Arts, Business, Sports Science, & Technology**

T135, 972-273-3450  
8:00 a.m.- 6:00 p.m. Monday-Thursday, 8:00-4:30 Friday

This course syllabus is intended as a set of guidelines for A+ Essentials. Both North Lake College and your instructor reserve the right to make modifications in content, schedule, and requirements as necessary to promote the best education possible within prevailing conditions affecting this course.

### Instructor Information

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Renier Bester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Address:</td>
<td><a href="mailto:rbester@dccc.edu">rbester@dccc.edu</a></td>
</tr>
<tr>
<td>Office Phone:</td>
<td>972.273.3094 (to leave a message)</td>
</tr>
<tr>
<td>Office Location:</td>
<td>T135</td>
</tr>
<tr>
<td>Office Hours:</td>
<td>Online</td>
</tr>
</tbody>
</table>

### Course Information

<table>
<thead>
<tr>
<th>Course title:</th>
<th>A+ Essentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course number:</td>
<td>ITSC 1425</td>
</tr>
<tr>
<td>Section number:</td>
<td>93404</td>
</tr>
<tr>
<td>Credit hours:</td>
<td>4</td>
</tr>
<tr>
<td>Class dates:</td>
<td>1/20/2016 thru 3/13/2016</td>
</tr>
<tr>
<td>Class time:</td>
<td>Online</td>
</tr>
</tbody>
</table>

### Lab Hours (Room T225)

8:00 am - 5:00 pm Mon & Wed  
9:00 am - 6:00 pm Tues & Thurs  
8:00 am - 4:30 pm Friday

### Course Description

Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.

### Course prerequisites:

Proficiency using the Windows interface to locate, create, and manipulate files, folders, and to configure the desktop environment. One should have a general knowledge of the Internet, with above average skills in the use of the Internet. This course will require email and file attachment skills.

Additionally this course requires general knowledge of networking concepts, including network operating systems, server-client relationship, and local area networks. Working knowledge of software and hardware in PCs or demonstrated competency approved by the instructor.
Required or Recommended Textbooks and Materials
Instruction in this course is through a web-based interface called labsim that include video instruction, software and hardware demonstrations, written lessons, practice exams, and hands-on lab simulations that will give you real-world experience performing computer maintenance tasks.

You need to purchase the following activation code from the North Lake College bookstore in order to activate your materials on the labsim interface:

TITLE: TestOut PC Pro LabSim *(From North Lake Bookstore)*
AUTHOR: Testout
EDITION: A+ Content for 220-801 & 220-802
PUBLISHER: Testout
ISBN: 978-1-935080-42-8

After you have purchased your activation code, your instructor will email you your user name and password to log in to the interface at: [http://labsim.testout.com](http://labsim.testout.com)

The bookstore phone number is: 972-550-0509, or visit the bookstore online at: [http://www.nlcdcccd.bkstr.com](http://www.nlcdcccd.bkstr.com)

Course Objectives
The purpose of this course is to provide knowledge for success in industry and preparation for the COMPTIA A+ exam number 220-801. The A+ Essentials exam (220-801) covers details on setting up a new computer, identify system requirements when purchasing a new computer, understand the technology and specifications used to describe computer components, and make informed choices about which device characteristics are required for your situation, manage external devices, and troubleshoot common computer problems that can be resolved without replacing internal components.
## Specific Course Outline

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examine system board components, including: chipsets, expansion slots, I/O connections, various microprocessors, and RAM</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Examine socket specifications, clock speeds, power supplies, and fans</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Examine various RAM types, including CMOS, DRAM, and SDRAM</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Add and remove system board components</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Learn about system upgrading and optimizing</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Install and configure peripheral devices</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Install, configure, service, and troubleshoot printers</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Examine mass storage systems, disk drive operations, and upgrading and optimizing disk drives</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Examine LAN concepts, including topologies, installation, and configuration, and TCP/IP</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Install and configure modems</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
<tr>
<td>Examine portable computer systems</td>
<td>Lab exercises and exams (SCANS C1, C14, C18, C19, F1, F3, F4, F7, F8, F10, WORKPLACE SKILLS C6, C8, C30, C31)</td>
</tr>
</tbody>
</table>
**Performance Objectives**

**SCANS Competencies**

The Secretary's Commission of Achieving Necessary Skills (SCANS), established in 1990, defined a common core of skills that constitute job readiness.

|-----------------|----------------|-----------------------------------------------------------------------------------------------|

**SCANS FOUNDATION SKILLS**

|------------------|---------------------|---------------------------------------------------------------|
**Workplace Skills**

1. Work ethics.
2. Implement responsibilities of job position including exhibition of dependability, demonstrating high confidentiality, and meeting of organizationally defined expectations.
3. Operate within scope of authority adhering to company rules, regulations, and policies as established including interpretation of employer/employee handbook and procedures.
5. Practice time management and follow work schedule.
6. Assume responsibility for own decisions and actions.
7. Exhibit pride and positive attitude.
8. Display initiative and enthusiasm in undertaking new tasks.
9. Show assertiveness appropriate to the situation.
10. Seek work challenges.
11. Understand and apply ethical principles to decision-making.
12. Understand the importance of providing good customer service (internal and external).
13. Exhibit ability to handle stress.
14. Participate in meetings in a positive and constructive manner.
15. Maintain state-of-the-art skills through participation in in-service or other training.
17. Interpersonal relationships.
18. Respect individual diversity.
19. Respond to praise or criticism.
20. Provide constructive criticism or praise.
21. Channel and control emotional reactions.
22. Resolve conflicts.
23. Display a positive attitude.
25. Employ appropriate skills for gathering and retaining information.
26. Interpret written, graphic, and oral instructions.
27. Identify problems.
28. Clarify individual and company purposes and goals.
29. Identify available solutions and their impact including evaluation of credibility of information, and location of information.
30. Evaluate options.
31. Set priorities.
32. Select/implement options/decisions including prediction of results of proposed action.
33. Organize personal workloads.
34. Participate in brainstorming sessions to generate new ideas and solve problems.


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**Student Learning Activities, Outcomes, and Assessments**

Provide a brief description of the learning activity.

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Learning Outcomes</th>
<th>Evaluation / Assessment</th>
<th>Scans Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Briefly list the specific learning outcomes/ objectives for the activity.</strong></td>
<td><strong>How will the activity be assessed?</strong></td>
<td>Foundation Skills</td>
<td></td>
</tr>
<tr>
<td><strong>Learning Activity:</strong> Hands on Exercise to identify hardware.</td>
<td>All students enrolled in ITSC 1425 will be able to demonstrate from a lab exam that they can identify computer hardware, including the different components of a motherboard, and various different types of expansion cards with a 70% achievement/proficiency level.</td>
<td>Online Lab Exam.</td>
<td>SCANS C1, C3, C7, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, F1, F5, F7, F8, F9, J0, F13 WORKPLACE SKILLS C2, C6, C8, C9, C12, C13, C24, C26, C27, C30, C31, C32, C33</td>
</tr>
<tr>
<td>Weekly Assignments to evaluate if students comprehend course material covered in the text, and lab manual.</td>
<td>All students enrolled in ITSC 1425 will define and explain the key terms related to Computer Hardware and Technology, such as Northbridge, Southbridge, processors, CMOS, DIMMS, WAN/LAN, Client Server or Peer to Peer networks, computer peripherals, Protocols, etc. with a 70% proficiency level from Weekly Assignments.</td>
<td>Online Exam.</td>
<td>SCANS C1, C3, C7, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, F1, F5, F7, F8, F9, J0, F13 WORKPLACE SKILLS C2, C6, C8, C9, C12, C13, C24, C26, C27, C30, C31, C32, C33</td>
</tr>
<tr>
<td>Exam will see if students are proficient in troubleshooting.</td>
<td>All students enrolled in ITSC 1425 will be able to demonstrate how to upgrade and troubleshoot Computer Hardware, such as Memory, hard drives, network adapters, and video with a 70% achievement/proficiency level from an exam.</td>
<td>Virtual Lab using LabSim.</td>
<td>SCANS C1, C3, C7, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, F1, F5, F7, F8, F9, J0, F13 WORKPLACE SKILLS C2, C6, C8, C9, C12, C13, C24, C26, C27, C30, C31, C32, C33</td>
</tr>
</tbody>
</table>
Means of Assessment

- Weekly hands on exercises will be conducted and will re-enforce topics presented. Students are expected to complete the hands-on exercises and engage the class in technical online conversation about the exercise through the eCampus discussion board.

- LabSim will be used in conjunction with the week’s lesson.

- At the end of each week lesson and lab you will be given a practice exam through LabSim to determine your understanding of the information covered that week.

- This course will have 1 comprehensive final exam, 52 quizzes, and 53 labs to ascertain your retention of course content.
**Evaluation Procedures**

4 segments will determine your final grade. The first segment will be 52 LabSim quizzes that will be worth 100 points. The second segment will be 53 labSim labs that will be worth 100 points. The third segment will be 1 comprehensive final exam on LabSim that will be worth 100 points. The fourth segment will be 5 weekly discussion board topics on eCampus that will be worth 15 points. To calculate your LabSim quiz or LabSim lab points, add all the 52 Quizzes or 53 Lab percentages together, and divide the total by 52 (quizzes) or 53 (labs). That will give you your points for that segment out of 100.

For example, if you want to determine how many points you have out of 100 for the LabSim quiz segment; add all the 52 percentages together of all your LabSim quizzes. Let’s say you added all 52 quiz percentages together and got a total of 3642. Here is the formula to use: 3642/52 = 70 out of 100.

Let’s look at another example. You want to determine how many points out of 100 you got for the LabSim lab segment. There are a total of 53 LabSim labs. Add all the percentages of the 53 labs together and divide by 53. Let’s say you added all 53 lab percentages together and got a total of 2900. Here is the formula: 2900/53 = 55 out of 100.

I will pull all results from LabSim the day after the class officially ends and use those results to calculate the final grade. All segments add up to 315 total points. Here for example is how you calculate your final grade. Let’s say you got a 73 for the 52 LabSim Quiz segment, a 75 for the 53 LabSim lab segment, an 86 on the final exam, and a 15 for the 5 Weekly Discussion Board Topics segment. That equals: 73+75+86+15 = 249. To determine your final grade use the following formula 249/315 = 0.79 x 100 = 79 which is a C.

**Exams and Assignments**

See "Grading Scale" Below

**Grading Scale**

*Your understanding of the course material and your grade will be determined as follows:

<table>
<thead>
<tr>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
<th>GRADING SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 LabSim Quizzes</td>
<td>100</td>
<td>90 – 100 = A</td>
</tr>
<tr>
<td>53 LabSim Labs</td>
<td>100</td>
<td>80 – 90 = B</td>
</tr>
<tr>
<td>1 LabSim Comprehensive Exam</td>
<td>100</td>
<td>70 – 80 = C</td>
</tr>
<tr>
<td>5 Weekly Discussion Board Topics</td>
<td></td>
<td>60 – 70 = D</td>
</tr>
<tr>
<td>(Worth 3 points each)</td>
<td>15</td>
<td>&lt; 60 = F</td>
</tr>
<tr>
<td>TOTAL</td>
<td>315</td>
<td></td>
</tr>
</tbody>
</table>

**Course Policies**

The last day of class is 3/13/2016. The last day to withdraw from a class is 2/29/2016. All coursework is due on or before 3/13/2016. Work turned in after this date will receive a grade of zero (0).
DCCCD EMERGENCY OPERATING PROCEDURES
EMERGENCY OPERATING PROCEDURES
INSTITUTIONAL POLICIES

ACADEMIC DISHONESTY
The Student Code of Conduct prohibits academic dishonesty and prescribes penalties for violations. According to this code, which is printed in the college catalog, "academic dishonesty", includes (but is not limited to) cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion".

- The Vice-President of Academic & Student Affairs may initiate disciplinary proceedings against a student accused of academic dishonesty.
- Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.
- Cheating on a test includes:
  - Copying from another student’s test paper;
  - Using, during a test, materials not authorized by the person giving the test;
  - Collaborating with another student during a test without permission to do so;
  - Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test.
  - Substituting for another student, or permitting another student to substitute for you to take a test; and
  - Bribing another person to obtain an unadministered test or information about an unadministered test.
- "Plagiarism" means the appropriation of another’s work (ideas and/or words) and the unacknowledged incorporation of that work in one’s written work offered for credit. Quotes not identified as quotes constitute a form of plagiarism even if the borrowed ideas are documented.
- "Collusion" means an unauthorized collaboration with another person in preparing written work offered for credit.

Academic dishonesty may result in the following sanctions, including, but not limited to:
1. A grade of zero or a lowered grade on the assignment or course.
2. A reprimand.
3. Suspension from the college.

NOTIFICATION OF ABSENCE DUE TO RELIGIOUS HOLY DAY(S)
Students who will be absent from class for the observance of a religious holiday must notify the instructor in advance. Please refer to the Student Obligations section of the college catalog for more explanation. You are required to complete any assignments or take any examinations missed as a result of the absence within the time frame specified by your instructor.

REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (A430)
North Lake College provides academic accommodations to students with disabilities, as defined under ADA law. It is the student's choice and responsibility to initiate any request for accommodations. If you are a student with a disability who requires such ADA accommodations, please contact North Lake College's Disability Services Office in person (A430) or by phone at 972-273-3165.
http://www.northlakecollege.edu/resources/disability.html

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974 (FERPA)
In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

ADMINISTRATIVE WITHDRAWAL
Students with valid extenuating circumstances may be eligible for an administrative withdrawal by the Dean of the Division in which the course or courses are taught. An administrative withdrawal will not be awarded to students who simply fail to withdraw prior to the last day to receive a "W." The request for an administrative withdrawal must be made in writing to the Dean of the Division with any supporting documentation attached. This must occur before the last official day of the semester.

DROP POLICY
If you are unable to complete this course, you must officially withdraw by 2/29/2016. Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you. All Dallas County Community Colleges charge a higher tuition rate to students registering the third time for a course. This rule applies to the majority of credit and Continuing Education / Workforce Training courses. Developmental Studies and some other courses are not charged a higher tuition rate. Third attempts include courses taken at any DCCCD college since the fall 2002 semester. For further information, go online to:
http://www.DCCCD.edu/thirdcourseattempt

STOP BEFORE YOU DROP
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a "W". Therefore, please exercise caution when dropping courses in an open public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: https://www1.dcccd.edu/coursedrops
FINANCIAL AID STATEMENT

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate are also subject to this policy.

To apply for financial aid in the DCCCD, students must complete FAFSA (Free Application for Federal Student Aid) on the web at: http://www.fafsa.ed.gov

INSTITUTIONAL POLICIES (Continued)

COUNSELING SERVICES (A430)

Counseling services for personal issues are provided to all students currently enrolled at North Lake College. These services are provided by licensed professionals who are bound by confidentiality (within ethical parameters) at no charge. With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills. To make an appointment call 972-273-3333 or visit A 430.

THE ACADEMIC SKILLS CENTER (ASC)

The ASC is designed to provide the following assistance to students:

- An ESOL lab with computer access.
- Free tutoring for students enrolled in foreign language courses.
- The iRead Lab offers individual and small group tutoring, as well as workshops, to help current students improve their reading, study, and test taking skills.
- The Writing Center to help students clarify writing tasks, understand instructors’ requirements, develop and organize papers, explore revision options, detect grammar and punctuation errors, properly use and document sources, and improve their writing skills.
- The Online Writing Lab (OWL) allows students to submit papers to our writing tutors electronically and get feedback within 24-72 hours. The OWL can be accessed through eCampus.
  - After logging on to eCampus, click on the Community Tab at the top.
  - Type “OWL” in the search field and click “Go.”
  - Next, click on the double drop-down arrows next to “NLC-OWL2,” and then click on “Enroll.”
  - Once enrolled, students can receive services from the OWL.
- The Blazer Internet Lounge with 12 computers, additional open seating, and WiFi Internet access.

For more information or to schedule a tutoring appointment, come by A-332 or call 972-273-3089.

TESTING CENTER (A 425)

- Monday-Thursday: 8:30 a.m. - 8:00 p.m.
  No tests will be issued after 7:00 p.m.
  Other cut-off times may be in effect for specific exams by the instructor’s direction.
  All exams collected at 8:00 p.m.
- Friday-Saturday: 8:30 a.m.-3:30 p.m.
  No tests will be issued after 2:30 p.m.
  Other cut-off times may be in effect for specific exams by the instructor’s direction.
  All exams collected at 3:30 p.m.
- Sunday - CLOSED

If you instructor requires you to complete an exam in the Testing Center, be sure to have the following information when you request you test:

1. Instructor’s name
2. Subject, course number, and section number (exp: Speech 1311.7011)
3. Exam number (1st, 2nd, 3rd, etc.)
4. Exam deadline (Get this information from your instructor. The testing staff cannot look up this information on computers).

You should also bring the following supplies:

1. Pencil
2. Scantron answer sheet
3. A Test Request Form must be completed before entering the Testing Center.
5. Government or school issued photo identification is required & enforced.

Please show courteous and cooperative behavior while using the services provided by the Testing Center.

DO NOT bring children to the Testing Center. You must make arrangements for the care of your children prior to your exam date. The police department will be notified of any unattended children.

DO NOT take any testing materials with you when you leave the Testing Center. This includes the test, answers, charts, scratch paper. These items will be attached to your test.

Questions? Please visit the Testing Center (A 425) or call 972-273-3160.

COURSE ONLINE COMPONENT

As this is a class with an online component, there are required online study materials and activities that are available on eCampus for the entire semester and accessible almost 24/7. Therefore, access to a computer with Internet access and updated software (available free from Adobe.com) are required. If a student does not have a home computer or Internet, such options as the Student Resource Center located in the North Lake Library or at a local public library are available. Students may also search for other locations with such services.
Course Schedule
This class begins on 1/20/2016 and ends on 3/13/2016. The last day to withdraw from class is 2/29/2016. Please see your instructor before withdrawing.

Class will not meet due to the following holidays:

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LabSim activation and complete LabSim section 1.0 – Computing overview</td>
</tr>
<tr>
<td>2</td>
<td>Complete LabSim section 2.0 – PC Technician</td>
</tr>
<tr>
<td>3</td>
<td>Complete LabSim section 3.0 – System Components</td>
</tr>
<tr>
<td>4</td>
<td>Complete LabSim section 4.0 – Peripheral Devices</td>
</tr>
<tr>
<td>5</td>
<td>Complete LabSim section 5.0 – Storage</td>
</tr>
<tr>
<td>6</td>
<td>Complete LabSim section 6.0 – Networking</td>
</tr>
<tr>
<td>7</td>
<td>Complete LabSim section 7.0 – Printing</td>
</tr>
<tr>
<td>8</td>
<td>Take comprehensive final on LabSim (Covers LabSim sections 1.0 – 7.0) (Worth 100 points)</td>
</tr>
</tbody>
</table>
Grade Sheet
Student Name: __________________________
Section: __________________________