BRANDMAN
University *Chapman University System*

COURSE NUMBER, TITLE AND CREDITS
CSCU 251   Introduction to Computing Systems Organization   (3 credits)

BULLETIN COURSE DESCRIPTION
Students learn the major components and their structure of the hardware and software of a computer and these of a networking system; and describe the mechanism of information processing, transfer, and control within a digital computing systems and networks.

LEARNING OUTCOMES and ASSESSMENT:
Learning Outcomes are statements that specify what learners will know, understand, or be able to demonstrate at the end of a learning experience.

Types of Learning Outcomes include:

- ✓ Course Learning Outcome – Result of finishing a course.
- ✓ Program Learning Outcome – Result of finishing a program.
- ✓ Institutional Learning Outcome – Result of finishing a degree at an institution, reflecting the core learning values and experiences of all graduates.

A <u>Signature Assignment</u> is an assignment used to measure a student's mastery of a program or institutional learning outcome.   If a course you are taking includes a Signature Assignment, it will be clearly marked (**SIGNATURE ASSIGNMENT**).

Access the following link(s) for information on the Program Learning Outcomes (PLOs) and Curriculum Map related to this course:
Click Here for BS, Computer Technology - PLO

Access the following link(s) for information on the Institutional Learning Outcomes (ILOs) and Curriculum Map related to this course:
Click Here for Learning Outcomes

PREREQUISITES: None

RESTRICTIONS: None

COURSE LEARNING OBJECTIVES
By the end of the course you should be able to:

1. Describe the fundamental concepts of computer systems architecture
2. Convert numbers between different number systems and number systems with different bases
3. Describe data representations

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4. Enumerate the structure and functions of computer Central Processing Unit (CPU)
5. Evaluate the structure and functions of computer Memory
6. Evaluate computer Input and Output (I/O) processing and peripheral units
7. Compare and contrast computer networks and data communications
8. Examine various computer Operating Systems (OS)
9. Recognize and describe the File Management of an OS
10. Analyze and describe the internal design of an OS

MAJOR STUDY UNITS

1. Computer Organization and System Architecture

2. Number systems and data representation

3. Assembly-like instructions using Little-man computer model

4. CPU and Memory Design

5. Input and Output Peripherals

6. Networks and Data Communications

7. Operating systems structure and design

8. File Management Subsystems

9. Operating Systems Internal Structure

REQUIRED TEXTS

TestOut PC Pro ISBN: 978-1-935080-42-8
* Please note that this item is only available for purchase through the Brandman bookstore.

Brandman On-Line Bookstore: http://www.brandman.bkstr.com

INSTRUCTIONAL STRATEGIES

The fully **online** version of this course, if offered requires that each student take personal responsibility for completing all required readings and assignments independently, as well as actively participating in online discussions and collaborative activities each week throughout the 8-week term. Online instructional strategies through Blackboard may include threaded discussions, journals, wikis, blogs, readings, videos, links to web research and resources, and the use of audio/video synchronous and asynchronous multimedia tools.

ESSENTIAL EQUIPMENT AND FACILITIES

To successfully complete this course, you will need access to a computer with reliable internet access and appropriate system and software to support the Blackboard learning platform. Typical technical requirements for users are:

Windows Users	Mac Users
Windows 7, XP or Vista	Mac OS X or Higher
64 MB Ram	32 MB Ram
28.8 kbps Modem	28.8 kbps Modem
Soundcard & Speakers	Soundcard & Speakers
Firefox 13 or Higher	Firefox 13 or Higher
Microsoft Office Suite version 2007 or later and Adobe Acrobat Reader.	

ATTENDANCE AND OTHER CLASS POLICIES

Requirements for students' attendance and participation will be defined by each instructor based on the following policy:

- Monday of the first week is considered the first day of class for online and blended instruction. This includes instruction for fully online classes and online instruction supporting blended classes.
- Regular onsite attendance is expected for student success. If a student misses more than one onsite class or one week of engagement in an online class, the student may, at the discretion of the instructor, fail the course. Students are expected to attend all classes, particularly the first night of class.
- Students should consider withdrawing from a course if they will be absent more than once. Instructors may, but are not obligated to, accommodate students under extraordinary circumstances, but the student must request accommodation and provide requested supporting documentation. Students enrolled in blended courses must attend at least one class during the first two weeks of classes.
- If a student misses a portion (e.g., arriving late or leaving early) of an onsite course, the student's grade may be adversely affected. Students who are not in attendance for at least 75 percent of any scheduled class may be considered absent for that class. Students should discuss missing portions of a class with their instructor to determine how their grade may be affected.
- Regular online attendance/participation and engagement is expected for student success in both fully online and blended courses. Online participation is evident through posting to a discussion board, blog, completing assignments including journal entries, or taking quizzes and exams.
- Schools and programs may have different attendance policies. Refer to school and program specific information for additional attendance policies.

NETIQUETTE FOR ONLINE COURSE

- Be polite and respectful of one another.
- Avoid personal attacks. Keep dialogue friendly and supportive, even when you disagree or wish to present a controversial idea or response.

- Be careful with the use of humor and sarcasm. Emotion is difficult to sense through text.
- Be helpful and share your expertise. Foster community communication and collaboration.
- Contribute constructively and completely to each discussion. Avoid short repetitive "I agree" responses and don't make everyone else do the work.
- Consider carefully what you write. Re-read all e-mail and discussion before sending or posting.
- Remember that e-mail is considered a permanent record that may be forwarded to others.
- Be brief and succinct. Don't use up other people's time or bandwidth.
- Use descriptive subject headings for each e-mail message.
- Respect privacy. Don't forward a personal message without permission.
- Cite references. Include web addresses, authors, names of articles, date of publication, etc.
- Keep responses professional and educational. Do not advertise or send chain letters.
- Do not send large attachments unless you have been requested to do so or have permission from all parties.
- Two word postings (e.g.: I agree, Oh yeah, No way, Me too) do not "count" as postings.

BRANDMAN UNIVERSITY ACADEMIC WRITING STANDARDS

Specific writing standards differ from discipline to discipline, and learning to write persuasively in any genre is a complex process, both individual and social, that takes place over time with continued practice and guidance. Nonetheless, Brandman University has identified some common assumptions and practices that apply to most academic writing done at the university level. These generally understood elements are articulated here to help students see how they can best express their ideas effectively, regardless of their discipline or any particular writing assignment.

Venues for writing include the widespread use of e-mail, electronic chat spaces and interactive blackboards. Brandman University is committed to guaranteeing that students can expect all electronic communication to meet Federal and State regulations concerning harassment or other "hate" speech. Individual integrity and social decency require common courtesies and a mutual understanding that writing--in all its educational configurations--is an attempt to share information, knowledge, opinions and insights in fruitful ways.

Academic writing (as commonly understood in the university) always aims at correct Standard English grammar, punctuation, and spelling.

The following details are meant to give students accurate, useful, and practical assistance for writing across the curriculum of Brandman University.

Students can assume that successful collegiate writing will generally:

- Delineate the relationships among writer, purpose and audience by means of a clear focus (thesis statements, hypotheses or instructor-posed questions are examples of such focusing methods, but are by no means the only ones) and a topic that's managed and developed appropriately for the specific task.
- Display a familiarity with and understanding of the particular discourse styles of the discipline and/or particular assignment.
- Demonstrate the analytical skills of the writer rather than just repeating what others have said by summarizing or paraphrasing
- Substantiate abstractions, judgments, and assertions with evidence specifically applicable for the occasion whether illustrations, quotations, or relevant data.
- Draw upon contextualized research whenever necessary, properly acknowledging the explicit work or intellectual property of others.
- Require more than one carefully proofread and documented draft, typed or computer printed unless otherwise specified.

DOCUMENTATION

Any material not original to the student must be cited in APA documentation format. Deliberate use of information or material from outside sources without proper citation is considered plagiarism and can be grounds for disciplinary action. See the explanation of Academic Integrity below.

ACADEMIC INTEGRITY

As a learning community of scholars, Brandman University emphasizes the ethical responsibility of all its members to seek knowledge honestly and in good faith. Students are responsible for doing their own work, and academic dishonesty of any kind will not be tolerated. "Violations of academic integrity include, but are not limited to, cheating, plagiarism, or misrepresentation of information in oral or written form. Such violations will be dealt with severely by the instructor, the dean/center director, and the standards committee. Plagiarism means presenting someone else's idea or writing as if it were your own. If you use someone else's idea or writing, be sure the source is clearly documented." Other guidelines for acceptable student behavior are specified in the Brandman University Catalog.

Plagiarism: Plagiarism consists of using another author's words without proper identification and documentation of that author. Plagiarism takes the form of direct quotation without the use of quotation marks and/or documentation, or paraphrasing without proper identification and documentation. The fabrication of sources, or the act, deliberately or unconsciously, of passing another author's work off as your own are also considered to be plagiarism.

Falsification: Falsification consists of deliberately changing results, statistics, or any other kind of factual information to make it suit your needs. It also consists of deliberately changing a source's intent by misquoting or taking out of context.

Multiple Submissions: If you wish to turn in the same work or use the same research, in whole or in part, for more than one course, you must obtain permission to do so from all professors involved. Failure to obtain this permission constitutes academic

dishonesty. "Recycled work" must contain significant work as related to the current course topic, meeting the standards for the current assignment.

AMERICANS WITH DISABILITIES ACT STATEMENT

According to the Americans with Disabilities Act (ADA) of 1990, an individual with disability is defined as having functional limitations resulting from a diagnosed disability and applies to an individual who has a physical or mental impairment that substantially limits one or more of the individual's major life activities; has a record of such an impairment; or is regarded as having such an impairment. In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that may impair or impact their ability to successfully complete assignments, tasks or satisfy course criteria are requested to notify their Campus Advisor or Campus Director in order to understand how to apply for Student Disability Services. If and when, the Director of ADA Services grants the student formal approval, both the student and professor will be notified. It is highly suggested that the student contact their professor to discuss the accommodations during the first week of the session. The granting of accommodations will not be retroactive and cannot jeopardize the academic standards or integrity of the course.

BRANDMAN ON-LINE LIBRARY RESOURCES
http://www1.brandman.edu/library/centers/

Additional course information regarding student performance requirements, methods of evaluation, and a Course-at-a-Glance is posted in Blackboard.