

CSCI 105 - Introduction To Computers

Course Syllabus (Version 2.0.2) - TERM, YEAR

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Course Description

This course introduces the student to the basics of computers and shows how problem solving is a central theme in Computer Science. Today, many college and post-secondary students are already familiar with computers, the Internet and the World Wide Web. Thus, in this course we go beyond click-here-click-there: we teach the student to be confident, in-control *users* of Information Technology (IT). Students are taught to use IT to solve problems on their own and *apply* the power of IT to their everyday lives.

Topics include: data & program representation, the system unit, the CPU & memory, storage systems, input & output devices, the operating system & utility programs, networking and computer communications, the Internet & the World Wide Web, problem solving techniques, algorithms and basic programming.

Course Goals & Objectives

CSCI 105 is a general education course in natural science that emphasizes *literacy*, *critical thinking* and *individual accountability*. Readings, writings, assignments, class time and testing allow you to demonstrate mastery of these goals by:

- Effectively communicating, through writing and problem solving solutions, your ability to be an effective user of IT.
- Applying logic and reasoning, through writing and problem solving solutions, your ability solve problems.
- Understanding what a responsible choice is, through course deadlines and D2L submissions, that one's present education and lifelong learning is a personal responsibility.

This course has three main goals. Students will demonstrate proficiency with each of the three goals by being able to perform the objectives listed below.

Goal 1 - Students will become effective users of IT. Students will have mastered this course material when they can :

- *Objective 1.1:* Define a computer and describe its primary operations.
- *Objective 1.2:* Describe the three main functional hardware systems of a computer.
- *Objective 1.3:* Describe the two main software systems of a computer.
- *Objective 1.4:* Define a network and describe its primary operations.
- *Objective 1.5:* Describe the main components of a computer network.
- *Objective 1.6:* Define the World Wide Web and describe its primary operations.
- *Objective 1.7:* Describe how Web pages are authored, stored and transferred.
- *Objective 1.8:* Show how to apply the previous objectives to their personal lives.

Goal 2 - Students will improve their problem solving ability. Students will have mastered this course material when they can :

- *Objective 2.1:* Describe why problem solving is important in their everyday lives.

- *Objective 2.2:* Define and properly perform problem-solving tools.
- *Objective 2.3:* Define and write a natural language algorithm.
- *Objective 2.4:* Define and design a flowchart.

Goal 3 - *Students will understand how to apply IT knowledge and problem solving.* Students will have mastered this course material when they can :

- *Objective 3.1:* Define and author a Web page.
- *Objective 3.2:* Describe the basic syntax and semantics of a specific computer language.
- *Objective 3.3:* Show how a specific computer language is used to solve problems.
- *Objective 3.4:* Define how variables are used to generalize data and describe how a specific computer language implements variables.
- *Objective 3.5:* Define how conditionals are used to ask questions about data and describe how a specific computer language implements conditionals.
- *Objective 3.6:* Define how repetition is used to repeatedly perform a task and describe how a specific computer language implements repetition.
- *Objective 3.7:* Define how functions are used to abstract a task and describe how a specific computer language implements functions.

Prerequisites

Officially, there are no prerequisites for this class. However, practically there are a few things that are assumed:

- You should be able to perform basic operations like turning your computer on and off, typing and mouse movement.
- You should be able to *use* your computer at a basic level. In other words, this is not a class on how to use Windows, Word, Excel or Power Point; CSCI 101 is for this purpose.
- You should be able use the Web at a basic level. You should know the basics of your Web browser.
- We will be using Microsoft Word for our writing assignments. You should to be able to use Word.

This is a class about computers and how they work and is not a class on how to use your computer.

Required Text & Materials

Morley & Parker. *Understanding Computers Today and Tomorrow*, 14th Edition (Introductory). Cengage. ISBN-10: 1133190251, ISBN-13: 978-1133190257. Older editions are not appropriate. *Students must purchase their own textbook: textbooks cannot be shared.*

Also, *students must have an electronic means of saving course work and class files.* There are many different options for doing this: USB Flash drive, campus H: drive, your own laptop, Google drive or Dropbox.

At a minimum, you can always use your student storage area on the campus H: drive to store you files. However, if you want to work off campus, you will still need a to move the files from campus to home.

Course Overview

Each class will begin with a question/answer period. This is where students can ask questions regarding the previous assignment or any other issues that may have arisen since the last class meeting. Of course, *you are encouraged to ask questions during class!*

Each week, *you will be expected to read the assigned reading material.* The reading material will be from the textbook as well as custom material not found in the textbook.

In addition, each week *you will be expected to attend course lectures*. The lecture will expand on and highlight material in the textbook as well as introduce the student to material not in the textbook. Thus, it is imperative that the student read the assigned material *before lecture* so that the student will be prepared for discussion. The lecture may or may not include all the material presented in the chapter(s). However, *students are responsible for all material within covered chapter(s) unless instructed otherwise*.

Also each week, you will be given an assignment that parallels the lecture material. The assignment is based on the custom course material not found in the textbook.

Finally each week, you will be *required to take a D2L on-line quiz* that deals with the textbook material as well as any additional reading material that was assigned.

Course Specifics

Communication. All course communication will be accomplished in one of two ways: announcements during lecture and electronic communication.

- Missing a lecture is not an excuse for missing an announcement. See “Attendance & Absences” below.
- *Email* is the best way to communicate with your instructor outside of class. When using email, please include the following marker in the subject line: CSCI105. This marker shows that the email is from this class and will help me fight spam. If you do not include the marker, *I may delete the email without looking at it!* Also, I will not reply to general emails regarding the assignments; it is simply too difficult to do this without looking at your work. If you need assistance with your homework, come to the open lab period or come to your instructor’s office hours.
- *Desire2Learn* (D2L) is used in this class as a course management tool. All course material can be found at the courses D2L Web site.

Course Schedule. The course schedule shows you *exactly what material will be covered* for any particular week during the semester. It shows the lecture topics as well as assignments and due dates. It is recommended that you print the Course Schedule and keep it in your book or in a folder for quick reference. *The Course Schedule is your weekly starting point!*

Lecture

Attendance & Absences. Attendance to lectures is *mandatory and expected*. If you miss a lecture due to some unforeseen circumstance, *it is your responsibility to make up the missed material*. You should attend the lecture section for which you registered. However, you may occasionally attend one of the other lecture sections if you have an appointment that conflicts with your lecture section.

Examinations. There will be 1 midterm exam approximately halfway through the class. In addition, there will be a final exam conducted during finals week (Fall & Spring) or the last day of class (Summer).

Exams cannot be “made-up”. If you miss an exam without prior approval by the instructor, you will receive a grade of 0 (zero). If you miss the exam due to an emergency, you must provide *written documentation* supporting your emergency claim in order to be excused. If you are excused for an exam absence, *the exam must be made up before the exam is discussed in class*; this is usually the next lecture period. You lose the right to take the exam if you do not make-up the exam before the next class period. The schedule has the exact dates for the exams.

In order to take the exam, you must have a valid and activated RangerCard. If your exam bubble sheet is printed without a pre-filled in student ID, you must fill it in yourself with a valid and activated student ID. If the computer automated scoring rejects your bubble sheet because of an invalid or inactivated student ID, you will receive an exam grade of 0. NO EXCEPTIONS! It is your responsibility to ensure this does not happen.

Laboratory

The laboratory for this course is in an “Open Lab” format - this means that you are not required to attend the lab unless you need help and or instruction. One of the computer labs in Molinaro Hall has been reserved for this class during a specified time period. You may attend lab at any time during this reserved time period and expect an instructor(s) and/or a lab assistant(s) to be present for assistance. See D2L for the specific lecture and lab times. *This is your time where you have individual access to the instructors of this course - use this time wisely.*

Assignments

You will have assignments each week. In general, reading assignments are to be completed before the next lecture and Activities are to be completed by the due date. *All homework will be submitted via D2L unless instructed to do otherwise.*

Late assignments will not be accepted. Extensions may be granted in rare cases when extenuating circumstances (like serious illness or disability, a death in the family, an accident, etc.) exist, *and are supported by written documentation.* There will be no extension of assignment deadlines if computing facilities are down close to the due date unless the downtime exceeds 24 hours. **NO EXCEPTIONS!**

Assignments will require a written discussion and/or documentation. Written material is required to be in digital form. *Handwritten submissions are not acceptable unless specified in the assignment.* All written assignments must be submitted as a Portable Document Format (PDF) (.pdf). All word processors today have an option to generate a PDF. This is the only acceptable format for which submission will be accepted unless stated otherwise in the assignment description.

Activities. The Activity document (AD) is a guide that walks you step-by-step through your assignment for the week shown in the schedule. The AD tells you exactly what you need to do in order to complete your weekly assignment. The schedule will show you the activity you should be working on for that particular week. The schedule will also tell you when your activities are due. The activities generally consist of three items: reading homework, activity homework and quizzes. Each is discussed below.

1. **Reading Homework.** The AD will list the reading homework for that week. You will be expected to *read the assigned material prior to lecture.* By doing this, you will be prepared for the discussion covered during the lecture and the activities presented in lab. The end of each chapter contains “Review Activities” which you are expected to complete. Do the “Key Term Matching”, “Self Quiz” and “Exercises” activities. The answers to the “Review Activities” are in the study guides for each chapter. *The completed “Review Activities” will not be handed in.* However, this material tends to show up on exams. It is very important to complete these assignments as they demonstrate proficiency with the material discussion in the section.
2. **Problem Solving Activity Homework.** Problem Solving Activity Homework’s are things you *do* based on the reading(s) and the lectures. In general, these activities consist of a reading followed by some activity to perform. Problem Solving Activity Homework’s usually consist of writing and/or problem solving exercises. You should be prepared to submit your completed Problem Solving Activity Homework *on the date and time shown in the schedule.* You will then be expected to submit your Problem Solving Activity Homework to the *proper D2L dropbox before the time shown in the schedule* unless directed to do otherwise.
3. **Quizzes.** (Almost) Every week you will take a quiz on the lecture, reading and assignment material. Quizzes are open book (you are *encouraged* to use the book and readings!) with no time limit (other than the due date) but you are allowed only one submission. This quiz is to be completed before the due date shown in the schedule. Quizzes cannot be “made-up”. If you miss a quiz without prior approval by the instructor, you will receive a grade of 0 (zero). **NO EXCEPTIONS!**

New York Times. In addition to the regularly scheduled reading assignments, your instructors may ask you to read an article in the *New York Times*. The *New York Times* can be found on line at <http://www.nytimes.com/>.

Study Guides. Study guides are available for students. These guides provide chapter objectives, key chapter terms and give the answers to all the “Review Activities” at the end of the chapter. These documents are very helpful; use them to your advantage.

Academic Performance

Accomplishment Levels. Your level of accomplishment will be recognized at the end of the course with a letter grade. Individual accomplishment is measured against course standards and not against the performance of other students.

Letter Grades. At the end of the course, letter grades (including plus/minus) will be assigned based upon your cumulative score percentages as follows:

Letter Grade	+	Grade	-
A		93.3% - above	90.0 - 93.2%
B	86.6 - 89.9%	83.3 - 86.5%	80.0 - 83.2%
C	76.6 - 79.9%	73.3 - 76.5%	70.0 - 73.2%
D	66.6 - 69.9%	63.3 - 66.5%	60.0 - 63.2%
F		Below 60%	

Weighting Distribution. The following weighting distribution will be used to compute your final grade:

Quizzes:	20%
Assignments:	40%
Midterm examination:	20%
Comprehensive final examination:	20%

Point Scores. Your final grade will be determined as a weighted average of your averages for assignments and exams. The weighting distribution is described in “Weighting Distribution” above. Each of the averages that are used for the weighted average is calculated as: number of points earned / total number of points x 100.

For example, if you earn 65 points out of a total of 80 points that it is possible for you to earn on laboratories, your laboratory average would be: $65/80 \times 100 = 81.25$. That final percentage is then weighted to produce a final, weighted percentage.

Extra Credit. No *special arrangements* will be made for extra credit for improving grades: there are ample opportunities for you to perform well with the assigned activities. However, there may be opportunities during the semester where I will give extra credit for attending special events.

Assessment. Your writing and programming assignments will be assessed using the writing and programming rubrics described in “Appendix - Assessment Rubrics” at the end of this document. Individual assignments may also have their own assessment rubrics. If this is the case, the assessment rubrics will be given to the student as part of the assignment. Please read and understand these rubrics as they describe the expectations for assignments as well as describe exactly how the assignments will be graded.

General

Grading questions. If you have a question about a grade, you should see me within one week of the day the graded work is returned to you (via D2L). *You lose the right to re-grading after that.*

Incompletes. Incompletes (a grade of “I”) *are rarely granted.* The University has strict policies regarding grades of incomplete. These policies will be enforced. Incompletes are not to be used as a shelter from potentially low grades.

Computer Facilities. This class is scheduled to use the computer lab located in *MOLN 115* for labs. The computers located there as well as those located in *MOLN 117, 124 and WYLL D 150* may be used to complete assignments, labs or practice. Note that during the summer, access to the MOLN computer labs is quite limited. The library is your best bet.

Other Available Computers. It is not recommended to use computer systems outside of the campus systems. The campus systems have the correct software, are properly configured and do not contain viruses. Should you choose to use computer systems other than the campus systems, you do so at your own risk. No support will be provided for non-campus systems and missing deadlines due to non-campus systems is unexcused.

Academic Misconduct and Cheating. In this course, you are encouraged to study and prepare for lecture and labs with other students. However, when taking examinations, quizzes or working on individual assignments, you are to work alone. I will tell you if you are to work as a team. *University regulations are very explicit concerning academic misconduct and cheating.* These regulations will be fully enforced. During examinations, we will apply a “Code of Honor” under which you are to work; you should neither give nor receive help from other sources. You are also expected to help enforce this code.

The class policy on cheating is simple: if your work is turned in by another student, or if you turn in the work of another person or persons, all students involved will receive a zero on that assignment. Should you cheat again, I will fail you for the entire class. I take academic dishonesty very seriously and I expect you to take it just as seriously. UWS 14.03 defines what academic misconduct is and what the penalties can be for academic misconduct. Please see

“University of Wisconsin-Parkside Misconduct Policy, Policy #28”,
<http://www.uwp.edu/explore/offices/governance/policy28.cfm> for details.

The bottom line: Do your own work. If you have any doubts, please talk to me - before you do anything you might regret.

Students with a Disability. Anyone who has special needs that must be accommodated to fulfill the course requirements should notify the *instructor and Renee Kirby* in the Office of the Educational and Career Development (WLLC D175, 595-2610). The University has many resources available to assist students with their academic studies.

Accommodation of Religious Observances. UW Parkside Senate policy requires that this institution make reasonable accommodations for a student’s religious beliefs. *Please notify your instructor within the first two weeks* of class about any scheduled class date(s) that conflict with a religious observance.

Food and Drink in Class. Beverages and food are allowed in class as long as I do not have clean up after you. This is a privilege that I will revoke if I end up having to be your mother. Please practice a “carry in - carry out” policy.

Cellular Telephones and Pagers in Class. I find it very distracting, and quite frankly rude (as I’m sure other students do), when a ring tone goes off during class. As a courtesy to the instructor and other students, please either turn your cellular telephone or pager off or disable the ring tone during lecture and lab. If you must use the phone, please leave the classroom or lab and go to a place that will not disturb other students: use your cellular phone courteously.

Illnesses. If you are sick, please stay home. You are able to get all of your course materials on-line and you are able to turn in assignments on-line. So, if you are sick, there is no reason to be at school increasing others chances of getting sick. However, see ***Attendance & Absences and Examinations*** above.

Weapons. Weapons are prohibited in UW-Parkside buildings and all outdoor events. Anyone found in violation will be subject to immediate removal in addition to academic and/or legal sanctions. If you have a concern regarding weapons at this university, please contact the University Police (595-2455).

The instructor reserves the right to modify this syllabus at any time, as deemed necessary

Appendix - Assessment Rubrics

Writing Rubrics. The following rubrics will be used to assess student writing homework.

Trait	Below Expectations	Satisfactory	Exemplary
Grammar & Mechanics	Inadequate use of Standard English. Frequent errors in spelling, capitalization, and usage. Serious and frequent punctuation errors. (0-2)	Decent and consistent command of Standard English. Few spelling, capitalization, and usage errors. Some errors in punctuation. (3-4)	Sophisticated and consistent command of Standard English. No spelling, capitalization, and usage errors. Few, if any, errors in punctuation. (5)
Organization	Ideas are not developed. Focus on topic not sustained. Piece is not complete. (0-2)	Ideas are relatively well developed. Focus on topic sustained reasonably well. Piece is moderately complete. (3-4)	Well-developed ideas or narrative. Logical flow of ideas or events. A sense of completeness. (5)
Content	The content is inaccurate or overly general. Student does not understand the question. (0-13)	The content is generally accurate, but incomplete. Student does not completely understand the question. (14-17)	The content is accurate and complete. Student fully understands the question. (18-20)
Analysis & Evaluation	Fails to draw conclusions. Overlooks differences. Repeats data. Misinterprets issues. Draws faulty conclusions. (0-5)	Identifies some conclusions. Identifies some differences. Paraphrases data. Generalizes issues. Presents few options. (6-8)	Formulates conclusions. Notices differences. Evaluates data. Identifies issues. Suggests solutions. (9-10)

Programming Rubrics. The following rubrics will be used to assess student programming homework.

Trait	Below Expectations	Satisfactory	Exemplary
Functionality	The program does not run at all or most of the functionality is missing. (0-9)	The program runs but some, mostly minor operations are missing. (10-13)	The program runs with few (if any) missing behaviors. (14-15)
Specifications	The program does not follow the assignment description. (0-5)	The program follows some of the assignment description. (6-8)	The program follows the assignment description. (9-10)
Logic in Problem Solving	Unable to determine a methodology to solve the problem. (0-5)	Able to determine an incorrect or inefficient methodology to solve the problem. Did not use required methods to solve the problem. (6-8)	Able to determine a correct and/or efficient methodology to solve the problem. Program flows nicely. (9-10)
Readability	The program code is unorganized and difficult to read. All code lined up on the left side of the page or indentation was inconsistent. (0-2)	The program code is somewhat organized and relatively easy to follow. Most lines of code are indented properly. Indentation is, for the most part, consistent. (3-4)	The program code is well organized and easy to follow. Lines of code are indented properly. Indentation is consistent. (5)

The instructor reserves the right to adjust the scoring rubrics as is deemed necessary. The instructor also reserves the right to modify the number of and point totals of exams and/or labs.