

This course satisfies the Formal Communication Studies requirement.

This course is designed to introduce students to the ways in which information and ideas are expressed using a communication system other than English. Such courses should foster the student's ability to conceptualize and communicate in an orderly, rational manner. Characteristics of a communication system include: 1) possession of a grammar; 2) operation from an established set of rules; 3) reasoning properties such as deduction, inference drawing and problem solving. This includes courses in languages and those in which the central focus of the course is on statistics, computers or formal logic.

Some of you are taking this class as an easy way to meet the formal communications requirement. Let me set the record straight right now that "easy" is not an accurate way to describe CS120. There is nothing in the class that any of you cannot handle but you will have to do a lot of work! If you pass this class, you will know how to program in Java. If you are not interested in programming, I recommend you take CS101 which also satisfies the Formal Communication Studies requirement and is a lot "easier".

Required materials:

- **Text:** Java Software Solution, Lewis & Loftus, fifth edition.
- Your university Laptop computer or equivalent
- Pencil and eraser: REQUIRED for quizzes and tests. Do not use pens, especially red.

Attendance:

Attendance is required and will be checked daily. In case of an illness or other emergency that results in class absence, you are responsible for keeping up with assignments. Do not assume that I know you are ill. Documentation will be required for excused absences. Use e-mail or phone to let me know.

Assignments and Quizzes:

Exercises and programming assignments will be made regularly from the text. You will be instructed in class to email selected solutions to your homework and these will be graded at 10 points each. There also may be 10-point quizzes over the homework or reading assignments as noted on the grading system below. Most quizzes will one or two problems be taken exactly from your homework notebook. You will have no more than 5 minutes to copy your programming solution from your laptop to the quiz page! If you have not written the programs, you will not have time to do so during the quiz and thus cannot pass the quiz! No make-up quizzes will be given. If you have an excused absence, then the quiz will not count towards your grade.

Exams:

There will be about five (5) 100-point exams after each major section of material. Tests will cover the programming assignments in the text and any other assignments given out in class. No test scores will be dropped. You must take tests and quizzes at their scheduled times. No make-up is possible for any exam unless you have an excellent excuse (best if you notify me **before** test time). Grades on quizzes and tests are not "curved."

Class participation:

As noted above, if you want to succeed in this class, you need to do the work, attend class, and participate in class discussions. I will know those that are really trying and those that are not and it can affect your grade. If you are having trouble, I want you to ask for help and ask questions in class. **The only stupid question is the one you failed to ask and then missed a problem on a quiz or test!**

How to get a good grade:

The pace of this class is fast. You have no chance if you drop several days behind. Be willing to make the effort and do **all** problems assigned. You are paying a large sum of money to take this class so you might as well get the most out of it. Any job worth doing is worth doing well. If you do your best and ask for help when you are in trouble, I will guarantee that you will pass the class. Specifically, if you are trying and doing the work, I will commit to providing you whatever extra help is needed but you have to ask.

Also, if you are really trying hard, this will count in your favor as noted below in the grading system (attitude). **Truly, the more homework problems you do, the better grade you will make and the better prepared you will be for any future CS class or any class that specifies this class as a prerequisite.**

Programming exam with instructor

This may or may not happen depending upon the semester. However, the objective is for you to prove to me that you can write code with no aid from others or by cut-and-paste from prior assignments. We want you to be comfortable writing programs.

Approximate Grading System (there may be more or less quizzes and projects):

10 Homework assignments (10 points each)	100 points
5 quizzes (approximately) or program projects (10 points each)	50 points
5 Major Exams (100 points each)	500 points
Programming exam with instructor	50 points
Final Exam	200 points
Class participation, attitude, attendance and effort	<u>50 points</u>
Approximate Total:	850 points

Approximate Grading Scale (this may be adjusted at the end of the semester):

A: 93↑ A-: 90↑ B+: 88↑ B: 83↑ B-: 80↑ C+: 78↑ C: 73↑ C-: 70↑ D+: 68↑ D: 63↑ D:60↑ F:59↓

**** To pass the course you must take all tests and the final exam unless you are exempted from the exam.**

Final Exam Exemption:

At the instructor's discretion, you may be allowed to skip the final. To skip the final, you must miss no more than 3 hours of class (regardless of reason including excused absences) and maintain an 83 average or above after all quizzes and exams. You can then elect receive your current score as your grade in the class or you can take the final anyway. No exceptions to the requirements listed above will be granted.

Contact Information:

Email kculp@nmu.edu
Phone: 227-1841

Extra Help:

Office Hours (NSF 1005): MTWRF 10am - Noon
(Others by request)

Disability Services:

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office by: coming into the office at 2001 C. B. Hedgcock; calling 227-1700; or e-mailing disserv@nmu.edu. Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.

Final Commitment:

You and I are a team in this class with the same objective – for you to learn the material and to receive a passing grade in the class. However we must work together as a team. Your job on our team effort is to code every programming assignment and to study the exercises assigned. Give all assignments your very best effort **AND** ask for help when needed. My job is to insure that you learn the material. Do you part as noted above and I commit that you will pass.

However, don't take my commitment as meaning you can pass with minimum effort; it won't happen. You are responsible for you and no one else. If you do not succeed, you can blame no one but yourself. Therefore, make a commitment to yourself at this very moment that this class is worth passing and that you will give it your best effort! **Together, as a team, you can expect an A!**

CS120 Topics

Section	Programming Projects*	Remarks and Notes
Syllabus; install Java and Textpad; 1.4	1.1, 1.2, 1.3	Lincoln. Students create and follow along.
1.5, 1.6, 2.1, 2.2	2.1	OOP overview, Stings, Variables
2.3, 2.4, 2.5, 2.6	2.3-2.5, 2.8	Data Types, Expressions, Conversion
3.1, 3.2, 3.3, 3.4, 3.5	3.4, 3.5, 3.6, 3.3*	Creating Objects, <i>string</i> , packages
3.4 & 3.5 review	Compute hypotenuse of triangle; request 2 sides. Use 3 decimal places.	Random, Math classes, formatting output
3.6, (skip 3.7) 3.8		Enumerations, wrapper classes (brief; not tested)
Review		Exercises: 1.16, 1.18, 2.1-2.7, 2.10, 2.11, 2.12, 3.1-3.7 Projects: 1.16, 1.17, 1.18, 2.1-2.7, 3.1-3.4.
Lab		
Exam: Chapter 2, 3		
4.1, 4.2	4.1, 4.2, 4.3, 4.7	Classes: Creation and structure; instance data, encapsulation, methods, constructors
4.3, 4.4	To 4.3 add method to return volume of box (no parms).	
Review 4.1-4.4	Add static method to Box class of 4.3 to return volume of box when passed 3 sides (use int's)	Static variables/methods (Slogan Counter, 1 more)
6.2, 6.3		
6.4 (skip Rational)	6.1, 6.2, 6.3*	Aggregation: Student Body example
Review, Lab		Exercises: 4.1, 4.2, 4.5-4.9, 6.2-6.8 Projects: 4.1, 6.1, 6.2, 6.4, 6.5
Exam: Chapter 4, 6		
5.1, 5.2 (no Cond. Op)	Write program asking for 2 numbers; return largest. Then do for 3 numbers. 5.8*	Conditional expressions/operators; <i>if</i> statement.
5.1/5.2 review, 5.3		Comparing objects and <i>compareTo</i> visited.
5.3 review, 5.4	5.3, 5.4, 5.5	
5.4, 5.5, 5.7 (Skip 5.6)		While, switch, while, do-while, infinite loops.
5.8	5.10, 5.11, 5.13*,	for loop and comparison of loops
Lab	5.15*	
Review		Exercises: 5.1-5.13 Projects: 5.1-5.5, 5.10-5.14, 5.17, 5.23
Exam: Chapter 5		
The following section may be eliminated based on progress through the above sections.		
Peterson: 1.1-1.3; p 2-9; pages 2-12 to 2-14	2.2. Method to draw smiley faces given an x, y position, a color, and a size. Draw 3 smiling faces. Create a Face class that takes a Graphics object on constructor & has paint method.	Applets, GUI, Graphics; debugging with console
2.5 (using app directory), 2.6		Applets: PanelApplet.html, MyPanel.java PanelApplet.java, EventPanel. Apps add: PanelApplication, adjustingFrame
Peterson: 3.1, 3.3, 3.6	To be determined	pub\cs120\ClassPrograms\Interaction: ManyBoxes, MovingPointerX, ButtonsX
Peterson: 3.6, 3.7		
Peterson: 3.8, 3.9	To be determined	Text Fields; number conversion routines
Peterson: 4.2		AButton class
Applet Review		
Lab		
Exam: Applets		
7.1	7.1, 7.2, 7.3*, 7.5 (Stat class with 2 static methods: Mean, StdDev. Both take array of values; boundary checks!)	Overview; bounds checking; initializers; <i>.length</i>
7.2; examples		ReverseOrder, LetterCount
7.3		Object arrays: GradeRange
7.3 Review, Lab	7.7*	Tunes
7.4, (Skip 7.5), 7.6		Command Line arguments; 2-d arrays
7.7	7.10*	ArrayList
Review		
Lab		
Exam: Chapter 7		Exercises: 7.1-7.10 Projects: 7.1, 7.4, 7.5, 7.6
Review		
Review		
Final Exam		

*Extra credit problems. Solve, bring in and show during office hours.