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The course introduces important concepts and principles in programming and lays the foundation for achieving advanced programming skills. The course covers various concepts in procedural programming including procedural decomposition and parameterization, variables, arrays, conditional execution, loops, recursion, as well as file processing.  This is a required course in the CS and IT program and satisfies a subset of the Across-the-Curriculum outcomes of the General Education program  (www.desu.edu/general-education) | | |  |  | | --- | --- | | **Outcome** |  | | 1. Apply the systematic and algorithmic approach to problem solving. 2. Utilize basic computer programming paradigms such as: procedural decomposition and parameterization, conditional execution, loops, as well as any combinations thereof to implement developed solutions. 3. Construct computer programs that solve various challenging problems from mathematics, science, and technology using the python programming language. 4. Design a solution to a challenge within diversified groups and communicate the design challenge solution effectively in both oral and written form. | | |  |  | | --- | --- | | **Schedule** |  | | The following topics will be covered:   Introduction to Python   Primitive data types and expressions   Simple conditional execution Functions with parameters and return values   Iteration   Strings  Lists, Tuples, and Dictionaries File processing   Advanced topics in Python (if time permits) | | |  |  | | --- | --- | | **Prerequisite** |  | | Algebra/MTSC-121 | | |  |  | | --- | --- | | **Evaluations** |  | | Reading 20% Class Quizzes 20% Homework 20% Middle Exam 20% Final Exam 20% | | |  |  | | --- | --- | | **Assessment** |  | | Class quizzes Programming projects Exams | | |  |  | | --- | --- | | **Policy** |  | | Attendance Policy Attendance is mandatory.  Attendance will be taken by a class monitor and will be provided to the instructor.  Should there be an issue with attendance, you will need to discuss it with your instructor.  You are allowed two unexcused absence.  Any unexcused absence beyond that will result in a   point deduction from your final grade.  An excused absence is one that is accepted by Ningbo University as valid.    Test Taking Policy During a scheduled exam or quiz, you are required to have your webcam on.  If this will be an issue for you, please talk to your instructor.  Further instructions will be provided at prior to exams.  Video Taping  The courseware and delivery of lectures are intellectual property of the instructor.  The instructor will record, edit, and provide a link to all sessions for your review; however, you may not record the instructor using any screen casting or video capture software.    Cheating and Collaboration Policy Collaboration is a healthy and constructive way to learn and accomplish tasks.  Unfortunately, many students often do not realize that what they believe to be collaboration is actually cheating.  Cheating on assignments or projects does not benefit anyone, especially you, and undermines our trust.  Delaware State University is an academic community with high scholarly standards of which we are proud.  Our community also holds dear certain ethical principles to which we are deeply committed.  We believe it is contrary to justice, academic integrity, and the spirit of intellectual inquiry to submit statements or ideas of work of others as one抯 own.  To do so is plagiarism or cheating1.  Anyone caught cheating or plagiarizing work will receive at a zero (0) on the work, a failing grade in the course, or a judicial complaint that may result in expulsion. Because the line between collaboration and cheating can get confusing for students, especially those not exposed to proper collaboration behavior, you are asked to carefully consider what is discussed in this section; however, the rule of thumb should always be that when in doubt about whether a particular action can be considered cheating, ask your instructor. In this course, engaging directly with one another on assignments and projects can only enhance the learning process.  But how you engage is very important.  Discussing assignments and projects at a conceptual level, helping with conceptual bugs in code, or discussing lecture and text material is acceptable.  When you turn in individual assignments, the content must be completely yours!  Exceptions occur when your instructor allows you to use material in the public domain; however, you will be required to reference the work. For the purpose of this course, using snippet of code from classmates accomplishes nothing!  In the end, it is about what you have learned.  Your grade means absolutely nothing to anyone once they figure out you cannot program.  In the same token, helping someone by looking at their code, more often than none, leads to copying at some level.  Please note that this is not the same as looking at someone else抯 code to learn to become a better programmer.  In general, you are better off asking your instructor prior to looking at another classmate’s code. | |  |
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