

# CS 1101 Introduction to Computer Science

## Fall 2020 Syllabus

<b>Location and Time:</b> Blackboard (Virtual Lab) MW 10:30 am - 11:50 am
<b>Textbook: Same as the CS 1301 class book</b> <i>Programming in Java</i> , by Zybooks. 1. Sign in or create an account at <a href="https://learn.zybooks.com">learn.zybooks.com</a> 2. Enter zyBook code: <b>UTEPCS1301AkbarFall2020</b> 3. Subscribe
A subscription is \$58. Subscriptions will last until Jan 1, 2021.

**Instructor:** Monika Akbar (makbar@utep.edu)  
**Office:** CCSB 3.0422  
**Office Hours:** MW 2:00 – 3:00 pm or by appointment  
**Office Hours Location:** [MS Teams](#)

### Instructional Team:

Name	Email	Role
<a href="#">Erik Macik</a>	<a href="mailto:esmacik@miners.utep.edu">esmacik@miners.utep.edu</a>	<b>Teaching Assistant (TA) (Lab instructor)</b>
Ruth Trejo	<a href="mailto:rtrejo9@miners.utep.edu">rtrejo9@miners.utep.edu</a>	Instructional Assistant (IA)
William Croslen	<a href="mailto:wdcroslen@miners.utep.edu">wdcroslen@miners.utep.edu</a>	Instructional Assistant (IA)
Joshua Ramos	<a href="mailto:jaramos13@miners.utep.edu">jaramos13@miners.utep.edu</a>	Peer Leader (PL)

**Lab Objectives:** Students will learn the foundations of algorithmic thinking and algorithm development, and learn how to implement them in a variety of languages. They will also learn to be active learners. They will develop problem-solving skills and build team skills, critical-thinking skills, and professionalism.

**Note:** You should be enrolled in **one lab section**. **Your lab and class should have the same instructor**. Do not drop in on a lab or lecture section other than yours, without prior approval from your instructor.

**NOTE: When contacting the instructor, TA, or IA by email, please use the prefix [CS1101] in the subject.**

**Prerequisite:** MATH 1508 or MATH 1411 with a grade of C or better.

**Knowledge and Abilities Required Before Entering the Course:** Students entering the course are not required to have a background in Computer Science or programming. They should be familiar with topics from Pre-calculus, including algebraic functions, proofs, and base representations of numbers.

**Course materials:** All the course materials will be available through **Blackboard (Bb)**. Please check Bb regularly to stay updated with the lab. The labs will take place under the ‘**Virtual Lab**’ tab in Blackboard.

### [ABOUT USING YOUR PERSONAL LAPTOP COMPUTERS](#)

It is essential that you have a computer where you can install Java Development Kit (JDK) and be able to work on your lab assignments. The CS department can help you borrow laptops, if needed. Please contact the instructor if you need to borrow laptop. Please be ready to show your

work anytime during the lab sessions. To avoid complications with file access, you may use a cloud storage to backup your files (for example, dropbox.com on which you get extra free space based on your utep.edu address) and hence make sure that you can access your work from anywhere. Any option you pick, local storage and/or cloud, you should be able to produce your work at any time in the lab for our review and grading. **There will be no exception to this rule.**

## GRADING

Grades are turned in to students in a timely manner. It is the students' responsibility to keep track of their grades by compiling the grades they receive. Your semester grade will be based on a combination of lab assignments, pop quizzes, lab participation, and a final exam.

The approximate percentages for this lab are as follows:

- 70% Labs assignments (including regular labs, demos and comprehensive labs).
- 20% Lab participation (includes on-time attendance, participation in lab activities, any quizzes for attendance and survey purposes)
- 10% Homework (may include Zybook or other exercises).

The nominal percentage-score-to-letter-grade conversion for CS 1101 is as follows:

- 90% or higher is an A
- 80-89% is a B
- 70-79% is a C
- 60-69% is a D
- Below 60% is an F

**Note:** You must earn a C or better in each of these two courses, CS1301 and CS1101, to continue to the next course in this sequence, which is CS2401.

## EXPECTATIONS

**Lab Assignments:** Lab assignments are designed to allow you to practice the topics that constitute the outcomes of this course. Assignments will be a mix of:

- Problems to be solved without computers to practice problem-solving and algorithm design.
- Programming assignments.

**Deadlines for lab assignments will be specified in the description of each assignment. Assignments turned in up to three days late will have scores reduced by 10% for each day of lateness.**

When assessing labs, TAs **may** spend 5 to 10 minutes with each student asking probing questions about the topics covered in the assignments: these questions will be asked regardless of whether you completed the assignment or not. This allows you flexibility, in case something happened, and you were not able to complete an assignment, to make up for some points. So, please submit.

**Comprehensive labs** are comprehensive programming assignments. Typically, there would be 3 comprehensive labs. These labs require more time to complete. The deadline for a comprehensive lab is usually longer than the usual labs. Take some time to read these labs and requirements.

**Lab Participation:** Attendance at and participation in all lab sessions are mandatory and critical factors of your success in this lab course.

Students should be **on time** for all scheduled sessions and **attend the entire session**. Programming activities assigned by the TA will count towards lab participation. Students should **notify the TA before missing a session** if at all possible, and certainly right after if earlier was not possible. The TA will allow two unexcused absences per semester before having the option to deduct points from the final grade (5 points per subsequent unexcused absence).

It is the student's responsibility to obtain the content covered during missed labs. Participation points may also include completing post-labs online quizzes (when applicable) that are administered as surveys to monitor students' overall progress and potential struggles.

## RESOURCES

**Special Accommodations:** If you have a disability and need classroom accommodations, please contact the Center for Accommodations and Support Services (CASS) at 747-5148 or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit [Center for Accommodations and Support Services](#). CASS assists students with ADA-related accommodations for coursework, housing, and internships. CASS' staff are the only individuals who can validate and authorize accommodations for students with disabilities.

**Help Desk:** Please contact UTEP [Help Desk](#) if you are experiencing technological challenges (email, Blackboard, software, etc.), and submit a digital ticket for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

### Individual Resources

- [Military Student Success Center](#): Assists personnel in any branch of service.
- [Counseling and Psychological Services](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

**Scholastic Dishonesty:** Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but not limited to cheating, plagiarism, collusion, submission for credit of any work or materials that are attributable to another person.

**Cheating** is:

- Copying from the test paper of another student
- Communicating with another student during a test to be taken individually
- Giving or seeking aid from another student during a test to be taken individually
- Possession and/or use of unauthorized materials during tests (i.e. crib notes, class notes, books, etc.)
- Substituting for another person to take a test
- Falsifying research data, reports, academic work offered for credit

**Plagiarism** is:

- Using someone's work in your assignments without the proper citations
- Submitting the same paper or assignment from a different course, without direct permission of instructors

To avoid plagiarism, see: [https://www.utep.edu/student-affairs/osccr/\\_Files/docs/Avoiding-Plagiarism.pdf](https://www.utep.edu/student-affairs/osccr/_Files/docs/Avoiding-Plagiarism.pdf)

**Collusion** is: Unauthorized collaboration with another person in preparing academic assignments.

**Important!** When in doubt on any of the above, please contact your instructor to check if you are following authorized procedures.

Please talk to the TA, IA, or Instructor anytime you have questions, concerns, or want to discuss anything. Reach out as often and as frequently as you need, so that we can help you succeed in this course.

## DETAILED LEARNING OUTCOMES

**Level 1: Knowledge and Comprehension.** Level 1 outcomes are those in which the student has been exposed to the terms and concepts at a basic level and can supply basic definitions. On successful completion of this course, students will be able to describe, at a high level:

1. Computer representation of simple data types and operations, including operations with binary numbers
2. Technical aspects of computing, including memory, operating systems, editors, interpreters, compilers, debuggers, and virtual machine
3. Differences among programming languages
4. The purpose and use of exceptions
5. Pseudocode and implementation in a programming language of the use of Multi-D arrays
6. Pseudocode and implementation in a programming language of the use of Linked lists

**Level 2: Application and Analysis.** Level 2 outcomes are those in which the student can apply the material in familiar situations, e.g., can work a problem of familiar structure with minor changes in the details. Upon successful completion of this course, students will be able:

1. To analyze problems and express solution algorithms in pseudocode
2. To implement pseudocode algorithms in a high-level language, including the correct use of:
  - a. Arithmetic and logical expressions
  - b. Simple I/O operations
  - c. User-defined subprograms, including recursive methods
  - d. User-defined types
3. To use testing and debugging strategies, including black-box and white-box testing, test drivers, stubs and test suites, to identify software faults
4. Use teamwork roles and methods in the classroom

**Level 3: Synthesis and Evaluation.** Level 3 outcomes are those in which the student can apply the material in new situations. This is the highest level of mastery. On successful completion of this course, students will be able to use the syntax and semantics of a higher-level language to express solutions to programming problems, including the correct use of:

1. Basic variable types such as integer, real number, character, string, 1-D array
2. Assignment, arithmetic, and logical operations
3. Basic control structures: if-then, for-loop, while-loop

## VIRTUAL LAB AND HOW TO BE SUCCESSFUL

### **BLACKBOARD COLLABORATE SESSIONS (also known as Virtual Lab)**

This lab requires that you participate in scheduled Blackboard **Virtual Lab** sessions. The purpose of these sessions are for you to view live demonstrations of the course material and/or to participate in small discussion groups with your classmates.

Students are expected to, at least occasionally, participate in these sessions with a *webcam and microphone*. The sessions will be recorded and provided so that they can be reviewed by

classmates at a later time. **Students should not record the sessions and post them to any sites outside of Blackboard.** If you are unable to attend a Virtual lab, please let me know as soon as possible so that accommodations can be made when appropriate.

### **ATTENDANCE AND PARTICIPATION**

Attendance in the course is determined by participation in the learning activities of the course. Your participation in the course is important not only for your learning and success but also to create a community of learners. Participation is determined by completion of the following activities:

- Reading/Viewing all course materials to ensure understanding of assignment requirements
- Participating in engaging discussion with your peers on the discussion boards
- Participating in scheduled Blackboard Virtual Lab sessions
- Other activities as indicated in the lab.

Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

### **LAB RECORDINGS**

The use of recordings will enable you to have access to lab lectures, group discussions, and so on in the event you miss a synchronous or in-person lab meeting due to illness or other extenuating circumstance. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA) and UTEP's acceptable-use policy. A recording of lab sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies.

Your instructor will not share the recordings of your lab activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a lab session. **You may not share recordings outside of this course.** Doing so may result in disciplinary action.

### **COMMUNICATION**

Because this is an online lab, we won't see each other in the ways you may be accustomed to: during lab time, small group meetings, and office hours. However, there are a number of ways we can keep the communication channels open:

- **Office Hours:** We will not be able to meet on campus, but we will still have office hours for your questions and comments about the course. We will post our office hours and virtual office hour locations on Blackboard. Please check Blackboard.
- **Email:** When e-mailing us, be sure to email from your UTEP student account and please put the course number in the subject line. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name, and your university identification number.
- **Discussion Board:** If you have a question that you believe other students may also have, please post it in the discussion boards inside of Blackboard. Please respond to other students' questions if you have a helpful response.
- **Announcements:** Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

### **NETIQUETTE**

As we know, sometimes communication online can be challenging. It's possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of

body language and immediate feedback. Therefore, please keep these netiquette (network etiquette) guidelines in mind. Failure to observe them may result in disciplinary action.

- Always consider the audience. This is a college-level course; therefore, all communication should reflect polite consideration of other's ideas.
- Respect and courtesy must be provided to classmates and to the instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the **ideas**, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space.