Exploring Computer Science

Lowndes County Career Tech Center
2024- 2025
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Remind Codes
ECS 1st Block bh6k493 ECS 5th Block 43hc87f
ECS 2nd Block d6ek48k

Department Philosophy: The **LCCTC CTE** Department believes that education's most important function is to provide all students with the skills needed for post-secondary and careers. This is accomplished by providing interest-based programs that meet industry standards.

Course Description: Computing is involved in nearly every field of study, career and industry today. Exploring Computer Science (ECS) is an introduction to the world of computer science. ECS is a Career Technical Education approved course. This course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems. The goal of Exploring Computer Science is to develop in students the computational practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today's students. Students will be required to complete Project Based Learning activities to help deepen their understanding of Computer Science content while working collaboratively on a complex real-world question. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.

Classroom Environment:
In this Career and Technical Education (CTE) course, the classroom culture will be that of a professional workplace, and students will be treated as responsible employees working together to produce quality products – their assignments and projects. Students will be taught business practices and given leadership roles in running the class; this will demonstrate the higher level of expectations and distributed management of a real workplace. Collaboration, innovation, and critical thinking as well as safe technology practices will be stressed to ensure students are developing solid 21st Century skills. Detailed classroom standards, procedures and rules will be established together, discussed and clearly posted. Leadership, employability, and technology skills will be appraised as part of this CTE class.

SkillsUSA Membership Fees: $25 Professional Organization: All computer science students are also encouraged to join SkillsUSA. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce.

Computer Science National Honor Society: (More details later)

Course Supplies:
●Chromebook
● Three-Ring Binder w/ Loose Leaf Paper
● Writing Utensils (Pencils and Black or Blue Ink Pens)

Units of Study:

- Unit 1: Human Computer Interaction
- Unit 2: Problem Solving
- Unit 3: Web Design
- Unit 4: Introduction to Programming
- Unit 5: Computing & Data Analysis
- Unit 6: Robotics

Assignments & Late Work:
For each unit you can expect: daily bell work, notes, videos and discussion questions, independent practice, hands-on and group activities, homework, laboratory work, quizzes, and tests. .

Homework will be an important element in our class to ensure we can maximize in-class activities. YOU MUST PREPARE FOR CLASS! Failure to complete homework will affect your ability to complete in class assignments.

Due dates will be noted on the board and stated verbally during class. Major assignments due dates will be posted on Schoology and discussed in class.

Late work is generally not accepted. However on rare occasions it may be necessary. In this instance the student will lose 10% of possible points for every day that the assignment is late unless the student has an excused absence.

Grading:
Almost everything given in class will be counted as a grade. These assignments will fall under the categories classwork/homework, or assessments. Grades will be recorded in the district online portal PowerSchool. Your final grade will be calculated using averaged quarterly grades (every 9 weeks).

Assignments will be weighted according to the following:

- **Classwork/Homework (25%)**
    - Daily Assignments = 100 points

    - Homework = 100 points
- **Assessments (75%)**
    - Notebook Checks = 100 points
    - Projects = 100 points

The grading scale will be:

- A = 90-100% A B = 80-89% C= 70-79% D = 60-69% F=59% and below

I will try to provide ample opportunities to receive **bonus points**. These opportunities are posted in class with instructions and requirements. I try to regularly update the assignments. Please contact me if you have any questions about how you can earn additional points.

Absences and Make-up Work:

If you are absent, it is your responsibility to make up for missed work! Additional assignments and teacher notes for each school day will be posted on Google Classroom. You will have two class days per day absent to submit make-up work.

Classroom Management:

I manage my classroom in a way that creates the best learning environment for every student. The contributions of each student will be valued and heard. In order to achieve these goals, a set of rules are enforced that I expect all my students to abide by in order to keep a safe and productive classroom.

Rules:

- Be in your seat and ready to begin on time.
- No cell phones or Ipads are allowed during class.
- Remain in your assigned seats at all times.
- There is a strict no eating or drinking policy.
- The Teacher will dismiss the class, not the time.
- Raise your hand for recognition to speak
- Follow instructions the FIRST time.

Consequences:

1. Warning
2. Conference
3. Parent Phone Call/Writing Assignment
4. Office Referral

Academic Misconduct

Academic dishonesty and misconduct includes, but is not limited to, acts of abetting, cheating, plagiarism, fabrication, and misrepresentation. You will receive a zero for any work found to violate any of the actions listed below.. Any time you use someone else's work you *must* give that source credit through academic citation. We will review how to cite sources in APA format. Academic misconduct includes the following acts:

- **Plagiarism:** Copying & pasting text from the internet or any other material without quoting and citing the source.
- **Cheating:** Copying another student's work, Chat GPT, etc.
- **Abetting:** Giving another student your work to copy.
- **Fabrication:** Creating false data or copying an idea directly from the internet when told to create your own work.

In this class using AI tools is not allowed. The main goal is to build critical thinking and problem-solving skills in students. This course teaches core computer science ideas like algorithms, programming, data analysis, and computational thinking. If students are allowed to use AI for answers, they miss learning from tough problems. This process is key for developing their minds and creativity. Coding exercises aim to do more than just get the right results. They help students learn how to debug errors and make algorithms better—skills that AI shortcuts can hurt.

I will scan EVERY piece of code, bellringer, exit slip, discussion , project , ETC through my AI Detector. Any work that is flagged for AI will result in a zero.

This syllabus is subject to be changed by the teacher at any time to fit the needs of the student.