



Computer Science Discoveries 2018-19

Mr. Jordan Lander

Room 472

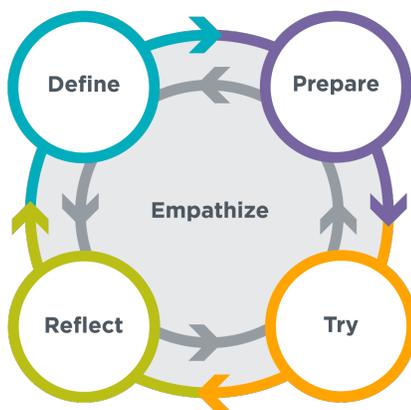
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Email: jlander@eriesd.org

JOIN REMIND! TEXT the message: @landercsd with the at “@” sign to 81010.

What Is CS Discoveries? Design a computer application. Publish your own website. Create your own animations and games for computers and phone apps. We are learning how to solve problems in real life using computers. Computer Science Discoveries (CS Discoveries) is an introductory computer science course that empowers students to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun. This one semester course will focus on the aspects of exploration and expression.

How Will I Learn CS Discoveries? The course primarily relies on the Problem Solving Process:



We focus on these five core principles:

1. *Problem Solving*
2. *Persistence*
3. *Creativity*
4. *Collaboration*
5. *Communication*

Our objectives of the semester are to apply the CSTA K-12 Computer Science Standards, core concepts that bridge disciplinary boundaries, uniting ideas throughout the fields of computer science and engineering practices.

By the end of the course, the students will be able to:

1. Foster an inclusive computing culture.
2. Create computational artifacts.
3. Collaborate around computing.
4. Test and refine computational artifacts.
5. Recognize and define computational problems.
6. Communicate about computing.
7. Develop and use abstractions.

Topics: Problem Solving, Web Development, and Animations and Games/Apps. CSD Unit 1 - Problem Solving

Unit 1 is a highly interactive and collaborative introduction to the field of computer science, as framed within the broader pursuit of solving problems. You'll practice using a problem solving process to address a series of puzzles, challenges, and real world scenarios. Next, you'll learn how computers input, output, store, and process information to help humans solve problems. The unit concludes with a project in which you **design an application** that helps solve a problem of your choosing.

CSD Unit 2 - Web Development

In Unit 2, you'll learn how to create and share the content on your own web pages. After deciding what content you want to share with the world, you'll learn how to structure and style your pages using HTML and CSS. You'll also practice valuable programming skills such as debugging and commenting. By the end of the unit, you'll **have a personal website** that you can publish to the Internet.

CSD Unit 3 - Animations and Games

In Unit 3, you'll build on your coding experience as you program animations, interactive art, and games in Game Lab. The unit starts off with simple shapes and builds up to more sophisticated sprite-based games, using the same programming concepts and the design process computer scientists use daily. In the final project, you'll **develop a personalized, interactive program**.

If time allows: CSD Unit 4 - The Design Process

Unit 4 introduces the broader social impacts of computing. Through a series of design challenges, you will learn how to better understand the needs of others while developing a solution to a problem. The second half of the unit consists of an iterative team project, during which teams have the opportunity to identify a need that they care about, prototype solutions both on paper and in App Lab, and test solutions with real users to get feedback and drive further iteration.

I. How Will I Be Graded?

Unit 1 Problem Solving = 25%

Unit 2 Web Development = 25%

Unit 3 Interactive Programming = 25%

Unit 4 Design/Core Principles = 20%

Behavior/Homework = 5%

Grading Scale:

95-100 = A

75-79 = C

94-90 = A-

70-74 = C-

85-89 = B

66-69 = D

80-84 = B-

65 and below = F

II. How Can I Be Successful?

- Enter the room quietly, retrieve your science folder, and begin your warm-up (science starter).
- If you are not sitting in your assigned seat at the sound of the bell, you will be marked tardy—3 tardies = referral.
- Participate in the class.
- Check infinite campus and the website often. Remind will be used for text reminders, as well.
- After an absence, you are responsible for making up your work. If it is an excused absence, late work will be accepted up until a week after return.
- Cheating, plagiarism, and other dishonest behavior will result in a zero for the assignment, assessment, or unit, and parent contact.
- Check online for ongoing changes to the syllabus.

III. Classroom Rules

EXPECTATIONS	Classroom Activities				
	Class-Wide	Arrival	Cooperative Learning Groups	Independent Seat Work	Whole Group
	Attention Signal: <i>Peace - Quiet! When I say, "Peace", you say "Quiet"</i>				
Be Respectful 	<ul style="list-style-type: none"> Use kind words & actions Use appropriate voice level 	<ul style="list-style-type: none"> Enter/exit classroom prepared (pencil sharpened, get your binder) Use inside voice 	<ul style="list-style-type: none"> Listen to others Accept differences Encourage Others Speak when it's your turn. 	<ul style="list-style-type: none"> Use quiet voice Keep your materials in your work area. Ask to share 	<ul style="list-style-type: none"> Eyes/ears on speaker Raise hand to speak Contribute to learning
Be Responsible 	<ul style="list-style-type: none"> Follow adult directions Take care of materials & equipment 	<ul style="list-style-type: none"> Place materials in correct area Begin warm-up or bell-ringer promptly 	<ul style="list-style-type: none"> Use Time Wisely Contribute Complete your part Help others 	<ul style="list-style-type: none"> Be a TASK master Use your neighbor 	<ul style="list-style-type: none"> Take notes Meet your goals
Be Safe 	<ul style="list-style-type: none"> Keep hands, feet & objects to self Use all equipment & materials appropriately 	<ul style="list-style-type: none"> Walk 	<ul style="list-style-type: none"> Use Materials Carefully Stay in your designated area 	<ul style="list-style-type: none"> Keep 6 feet on the floor Keep track of your materials 	<ul style="list-style-type: none"> Stay at seat unless given permission Put all materials not in use in desk or in your binder

IV. Classroom Consequences. The following below is a general pattern of consequences. Variations to this pattern may occur based on the type and severity of the behavior, history of student behavior, and situational considerations. Most of the time you will get two verbal warnings and the third time we jump to consequence 4. Steps 2 and 3 are at the instructor's discretion.

1. Verbal Warning... note any discussion of inappropriate behavior with a student is considered a verbal warning
2. Written Detention (write an apology/reflection form)
3. Classroom Detention (with parent contact and completing the apology/reflection form front and back)
4. Documentation to the Office

We will review classroom routines. Please see me with questions.
CS Discoveries SY 2018-2019 Student Agreement

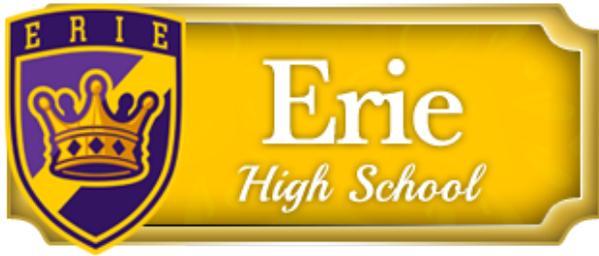
By signing below, I am indicating I have received the syllabus. We have reviewed the syllabus in class including how to be successful and contact the teacher. I have been given an opportunity for questions to clarify any confusion. Joining Remind is essential for communication in this class, which I understand I am responsible to do.

Student printed name: _____

Student cell phone number: _____

Student signature: _____





CS Discoveries SY 2018-19 Student Agreement

Dear Parent/Guardian of

_____ (student's printed name):

Welcome to your SY 2018-19 class! My name is

Mr. Jordan Lander and I will be your student's CS Discoveries teacher. I can be contacted by email: jlander@eriesd.org and my teacher webpage is located at: <https://www.eriesd.org/Page/15878>. I can be reached by this email and after school if you need information or your student is in need of extra help. For your convenience, this parent letter, syllabus, calendars, etc. can also be found on my teacher website or Remind App.

I am looking forward to a great year at Erie High School. I know we will have a successful and productive time in room 472. In order for your student to be successful, I have reviewed this plan with him/her in class:

- Enter the room quietly, retrieve your science folder, and begin your catalyst (science starter).
- If you are not sitting in your assigned seat at the sound of the bell, you will be marked tardy—
3 tardies = detention.
- Participate in the class and do work outside of class when applicable. Study for any exams.
- Check infinite campus and the website often. Remind will be used for text reminders, as well.
- After an absence, you are responsible for making up your work. If it is an excused absence, late work will be accepted up until a week after return.
- Cheating, plagiarism, and other dishonest behavior will result in a zero for the assignment, assessment, or unit, and parent contact.

When a student chooses to ignore these policies, this process will be used to help get back on track:

1. Verbal Warning... note any discussion of inappropriate behavior with a student is considered a verbal warning
2. Written Detention (write an apology/reflection form)
3. Classroom Detention (with parent contact and completing the apology/reflection form front and back)
4. Documentation to the Office

In addition to these resources, parents please enroll in Remind to receive text or email reminders. To enroll, please give your email address and/or cell phone number or simply TEXT the message: **@landercsd** with the at "@” sign to 81010.

Also you can add the class on remind.com/join with the class code @landercsd.

Email: _____

Cell phone number: _____

I look forward to working with you and your student this semester! Please print and sign your name and return to Mr. Lander by 9/15/2018.

RETURNING THIS DOCUMENT IS YOUR STUDENT'S FIRST HOMEWORK GRADE!

Printed Parent/Guardian Name

Parent/Guardian Signature and Date