

Dobbins CTE High School Lesson Plan

Teacher: Ms. Kai Flowers

Grade: 10

Subject: Biotechnology I

Week of

CTE Standards Addressed (list):

100 Good Work Habits

101 Demonstrate Professional Work Habits

302 Use Computer applications to present data

Planning Elements					Day 5
<p>Objective Performance based objectives are composed in the know and do format. The “know” refers to the content whereas the “do” is always linked to a common core standard and/or a higher order thinking school.</p>	<p>Objective: I will be able to use Python to analyze Absorbance Data IOT utilize computer applications to present Data</p>	<p>Objective: I will be able to discuss the benefits and drawbacks of changing the DNA of an organism</p>	<p>Objective: I will be able to discuss the benefits and drawbacks of changing the DNA of an organism</p>	<p>Objective: I will detect Genetically Modified Foods using PCR</p>	<p>Objective: I will detect Genetically Modified Foods using PCR acquisition process</p>
The HOW.....	Activities:	Activities:	Activities:		Activities:

<p>How will I teach the objectives? What activities will I use? How will I involve the students? (Teacher Model/Guided Practice/Cooperative Practice/Independent Practice) What materials or text references will be needed?</p>	<p>Do Now: Explain why do you think we would want to use a computer program to analyze our Lab Data?</p> <p>Utilize CoLab with Student Absorbance data values imported from Sheets to manipulate.</p> <pre>wavelengths = np.arange(400, 621) absorbance = np.array(absorbance_values) plt.plot(wavelengths, absorbance) plt.xlabel('Wavelength (nm)')</pre>	<p>Do Now: There are _____ types of nitrogen bases that make up the “rungs” of the DNA molecule?</p> <p>Temple HCC</p> <p>Breakout rooms and work on Short Answer questions. Students will work on questions with their partners and report out when we rejoin the main room.</p>	<p>Nearpod Lesson on Scientific Methodology in research</p> <p>Materials: Zoom Platform Google Classroom Nearpod YouTube video</p>		<p>Soft Skills-Activity 1</p> <p>Materials: slide presentation and charts to complete</p>
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	<pre>plt.ylabel('Absorbance') plt.title('Absorbance Spectrum of the Green Solution') plt.show()</pre>				
<p>The WHAT...What will tell me that my students have mastered this objective? What assessments will I use?</p>	exit Ticket-	Answer Exit Ticket with 70 % accuracy	Answer Exit Ticket with 70 % accuracy		
<p>Daily Homework Assignments</p>			Review Vocabulary Terms Answer Section 1.4 review Questions for homework.		