

2025 Fall BIOL 1209

Quiz 06

Name: _____

Section: _____

Date: _____

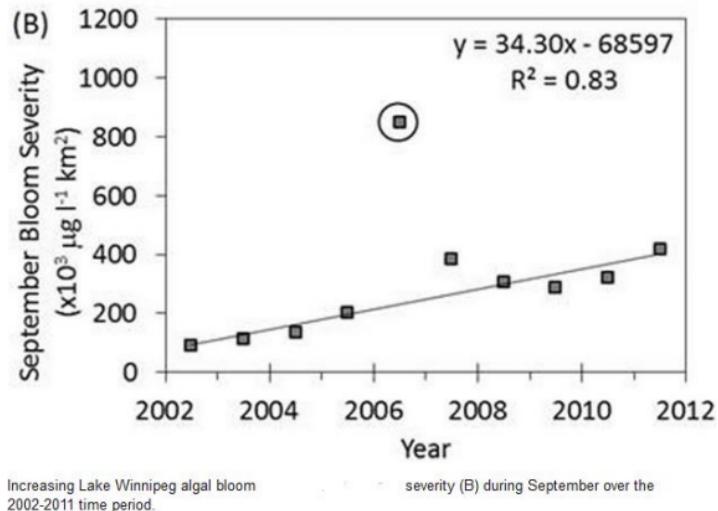
Time: 10 min

Max. points: 10

1. Suppose your hypothesis is that time passing from year to year will change the severity of the algal bloom, and this will be tested using regression analysis with threshold $R^2 = 0.35$. Using the results in the graph below:

a. Do you accept or reject your hypothesis? Explain your reasoning. (2 pt)

b. What is your prediction (approximate numerical value) for algal bloom severity in 2013? (1 pt)



2. List three reasons why living organisms need nitrogen and phosphates. (3 pt)

3. During lake sampling, a bug was trapped in the dissolved oxygen bottle. It was in the bottle for two hours before the assay was performed. Would this affect the dissolved oxygen reading? Explain your reasoning. (2 pt)

4. Is phosphate a biotic or an abiotic factor? Mention a potential human source of phosphate in the lake. (2 pt)