

**BCH 162 Laboratory Report Rubric
Experiment #7A&B: Kinetic Characterization of LDH**

Student Name (Last, First): _____

Date Received: _____

Points received/points possible: ____ / 45 points.

I. Title Page: ____ / 2.5 pts

II. Objective:

General overview of experiments and their purpose

____ / 1.5 pts Kinetic Characterization

____ / 1.5 pts Inhibition

III. Procedures

A. Expt. 7A Kinetic Characterization

____ / 1.5 pts Determination of K_m , V_{max} , K_{cat} w/lactate

____ / 1.5 pts Determination of precision of K_m , V_{max} , K_{cat}

B. Expt. 7B Kinetic Characterization/Inhibition

____ / 1.5 pts assuming oxalate is a competitive inhibitor, determine the K_m^{app} and V_{max}^{app} of LDH, and the K_i of oxalate.

____ / 1.5 pts Determination of precision (standard error) of the K_m^{app} , V_{max}^{app} , K_i determinations.

IV. Results/data:

A. Kinetic Characterization

____ / 2 pts Raw data plots

____ / 2 pts Tables of S_0 and V_0 values w/ and w/o inhibitor

____ / 2 pts Direct linear plots

____ / 6 pts Estimates of K_m , V_{max} , K_{cat} , K_m^{app} , V_{max}^{app} , K_i with precisions (SE).

____ / 2 pts Line-weaver-Burk plots

V. Discussion _____ / 19.5 pts