# **Biomol Separation & Analysis**



#### **Instructor Information**

### **Course Description**

Students are taught how to apply purification and analysis techniques to biologically active substances. The class emphasizes applying electrophoretic and chromatographic technologies to protein purification and kinetic analysis of enzymes.

Prerequisite: BTEC 1300 with a B or better.

Semester: All

#### **Course Student Learning Outcomes**

- Explain the four levels of protein structure.
- Express a protein of interest.
- · Separate molecules using chromatography.
- Separate proteins using SDS-PAGE.

• Determine the turnover rate of an enzyme in particular conditions.

### **Communication Plan**

I will respond to email within two business days. I will offer feedback on major assignments within seven days. The best way to contact me is via the Canvas Inbox.

# Brief Description of Assignments/Exams

2020 assignments

# **Assignment Schedule**

Due Date	Assignment Name	Assignment Type	Points
	Any Questions?	Discussion	0
	Any Questions?	Discussion	0
	Biotech student survey - Summer 2021	Quiz	0
	Biotech student survey - Summer 2021	Quiz	0
	Final Exam Form A	Quiz	32
	Final Exam Form A	Quiz	32
	Final Exam Form B	Quiz	32
	Final Exam Form B	Quiz	32
	Graded Lab: BgIA Expression, Purification, and Kinetics	Assignment	65

Due Date	Assignment Name	Assignment Type	Points
	Graded Lab: BgIA Expression, Purification, and Kinetics	Assignment	65
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	15
	Introduce Yourself	Discussion	15
	Lab: Bradford Assay	Assignment	100
	Lab: Bradford Assay	Assignment	100
	Lab: Purify Small Molecules Via Chromatography	Assignment	25
	Lab: Purify Small  Molecules Via  Chromatography	Assignment	25
	Milestone Lab: Completing an SDS- PAGE	Assignment	100
	Milestone Lab: Completing an SDS- PAGE	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
	Milestone Lab: Trypsin Kinetics	Assignment	100
	Milestone Lab: <u>Trypsin Kinetics</u>	Assignment	100
	Quiz: Chromatography	Quiz	15
	Quiz: Chromatography	Quiz	15
	Quiz: Enzyme Kinetics	Quiz	30
	Quiz: Enzyme Kinetics	Quiz	30
	Quiz: Pouring SDS- PAGE Gels	Quiz	15
	Quiz: Pouring SDS- PAGE Gels	Quiz	15
	Quiz: Protein Structure	Quiz	16
	Quiz: Protein Structure	Quiz	16
	Quiz: SDS-PAGE	Quiz	25
	Quiz: SDS-PAGE	Quiz	25
	Quiz: What Factors Influence Protein Migration?	Quiz	20
	Quiz: What Factors Influence Protein Migration?	Quiz	20

### **Grading Scale**

**Bradford** assay

### How to Navigate to Canvas

#### **Institutional Policies**

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: <a href="https://slcc.instructure.com/courses/530981/pages/institutional-syllabus">https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</a>

### **Learning Support and Tutoring Services**

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: <a href="https://slcc.instructure.com/courses/530981/pages/institutional-syllabus">https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</a>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

### Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <a href="https://slcc.instructure.com/courses/530981/pages/institutional-syllabus">https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</a>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

#### Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar