

BCHE 4510/6510

Biochemical Engineering

Instructor: Mark A. Eiteman
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Office hours: Riverbend South 021
MW before class in Driftmier
By chance or by appointment

Text: M. L. Shuler, F. Kargi
Bioprocess Engineering: Basic Concepts
2nd edition
Prentice-Hall, 2001

<http://cmbe.engr.uga.edu/bche4510>

Biochemical Engineering...

Supplement Texts: P. F. Stanbury, A. Whitaker, S. J. Hall
Principles of Fermentation Technology
2nd edition
Pergamon Press, 1995

B. K. Lydersen, N. A. D'Elia, K. L. Nelson, eds.
Bioprocess Engineering: Systems, Equipment and Facilities
John Wiley & Sons, 1994

Biochemical Engineering...

Topics Covered:

- History of bioprocessing
- Biology from engineering perspective
- Enzymes and enzyme kinetics
- Cellular functions
- Biochemistry
- Cell growth
- Fermentor and process design

Biochemical Engineering...

Prerequisite: ENGR 3520
Mass Transport/Rate Phenomena

Co/Prerequisites:

MIBO 3500
Microbiology

BCMB 3100
Biochemistry

Biochemical Engineering...

		<u>ugrad</u>	<u>grad</u>
Grading:	Homework	12	12
	Test #1	16	14
	Test #2	16	14
	Test #3	16	14
	Final	20	18
	Paper	12	12
	Attendance	10	8
	Article Reviews (6)	0	8
	Total	100	100