

Experimental Biology Laboratory (BIOL 300L)

Syllabus

Summer 2014

Day:

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| 7/8 | Orientation; Scientific Misconduct/Academic Integrity |
| 7/10 | Determination of Protein Concentration |
| 7/15 | Solutions and Dilutions |
| 7/17 | Enzymes I: pH and Temperature |
| 7/22 | Enzymes II: Kinetics |
| 7/24 | Enzymes III: Data Analysis and Interpretation |
| 7/29 | Alpha Amylase |
| 7/31 | Bacterial Gene Transfer (Week 1) |
| 8/5 | Microscopy I; Bacterial Gene Transfer (Week 2) |
| 8/7 | Microscopy II; Bacterial Gene Transfer (Week 3) |
| 8/12 | Practical Skills Exam |
| 8/14 | Exam |

Instructor: Dr. Whitworth
Office: BS469 and #:410-455-3278

Email: whitworth@umbc.edu

BIOL300L Extended Syllabus- Summer 2014

You will be required to prepare for lab each week by reading the lab manual and completing the Blackboard Activities listed in the table below (in the order that they are given) before coming to class.

All due dates for the notebook checks are also listed below.

| | Lab: | Activities on Blackboard (Bb) | Activities in Class | Notebook due that day in class: |
|--------------------------|---|---|---|--|
| Tuesday 7/8 | Orientation; Scientific Misconduct/ Academic Integrity | 1) Print and Read "Truth and Consequences" PDF on Bb | <ul style="list-style-type: none"> •Course Announcements •Discussion of Scientific misconduct | |
| Thursday 7/10 | Determination of Protein Concentration | 1) Syllabus Quiz 2) Lab Safety Rules Quiz 3) Bb Lecture 4) Bb Quiz 5) Print Data Sheet and bring to class | <ul style="list-style-type: none"> •Quiz (Scientific Misconduct/Academic Integrity) •Lab Exercise •Bring Laptop to complete graph in class | |
| Tuesday 7/15 | Solutions and Dilutions | 1) Bb Lecture 2) Bb Quiz 3) Print Data Sheet and bring to class | <ul style="list-style-type: none"> •Quiz (Protein Concentration) •Lab Exercise | <ul style="list-style-type: none"> •Protein Concentration •Solutions and Dilutions |
| Thursday 7/17 | Enzymes I | 1) Bb Lecture 2) Bb Quiz 3) Print Lab Protocol and Data Sheet and bring to class | <ul style="list-style-type: none"> •Quiz (Solutions and Dilutions) •Lab Exercise | |
| Tuesday 7/22 | Enzymes II | 1) Bb Lecture 2) Bb Quiz 3) Print Lab Protocol and Data Sheet and bring to class | <ul style="list-style-type: none"> •Quiz (Enzymes I) •Lab Exercise | •Enzymes I |
| Thursday 7/24 | Enzymes III | 1) Read instructions on Abstract 2) Bb Quiz | <ul style="list-style-type: none"> •Quiz (Enzymes II) •Lab Exercise | •Enzymes II |
| Tuesday 7/29 | Alpha Amylase | 1) Bb Lecture 2) Bb Quiz 3) Print Data Sheet and bring to class | •Lab Exercise | •Enzymes III |
| Thursday | Bacterial Gene | 1) Bb Lecture | •Quiz (Alpha Amylase) | |

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| 7/31 | Transfer (week 1) | 2) Bb Quiz 3) Print Beer's Law and Dilutions Problem Sets and bring to class | •Lab Exercise •Work on Beer's Law and Dilutions Problem Sets | |
| Tuesday 8/5 | Microscopy I; Bacterial Gene Transfer (week 2) | 1) Bb Lecture 2) Bb Quiz 3) Print Plate Layout and Data Sheets and bring to class | •Quiz (Bacterial Gene Transfer – Week 1) •Lab Exercises | •Microscopy I |
| Thursday 8/7 | Microscopy II; Bacterial Gene Transfer (week 3) | 1) Bb Lecture 2) Bb Quiz 3) Print Data Sheets and bring to class | •Quiz (Microscopy and Bacterial Gene Transfer – Week 2) •Lab Exercises | •Alpha Amylase •Microscopy II |
| Tuesday 8/12 | Practical Skills Exam | | Practical Skills Exam will cover techniques from entire course | |
| Thursday 8/14 | Exam | | Exam will cover entire course | •Bacterial Gene Transfer |

