Course Syllabus: BIOL 4450/6450: Spring 2014

Theory and Practice of Scanning Electron Microscopy

CRN 21966 **and** 21990**; MW 1:00 – 1:50 p.m. (BC 1202), MW 2:00 – 3:50 p.m. (BC 1075)**

B (**Instructor:** Dr. Russ Celesk- 2014 2

BIOL 3200 and 3250 or consent of the instructor (**for 6450**: admission into the graduate program).
General principles of scanning electron microscopy operation and theory with comparison to light and TEM optics in a laboratory intensive environment. Topics includ4.3(vi)7(n)4 (tics.8( )]T)3.7(n)4t e5m02r/.7(u)4(vi)pr1.7(p.3(d4.artics.8( )9(n)4t

approximately 1/3 of the lecture material but each exam is comprehensive and can ask questions from any

the class on April 30, 2014 during the lecture period. A paper copy containing a Title, Abstract, and References section will be required for hand-in at this time also.

Attendance: Students who miss class (lecture or laboratory) will lose points toward their final grade. Don't miss class.

Grading: The final grades will be based on a percentage of your cumulative points relative to the total points possible: Guaranteed grade distribution is as follows (Max. pts = 650 for BIOL 4450; 750 for BIOL 6450):

A = 90-100%
B = 80-89%
C = 70-79%
D = 60-69%
F = ≤ 59%

Points available: **BIOL 4450**:

Lecture Exams:	300 pts
Basic Check-Out:	50
Oral Proficiency Exam:	100
Lab Image Portfolio:	200
Total:	650 pts

Points available: **BIOL 6450**:

Lecture Exams:	300 pts
Basic Check-Out:	50
Oral Proficiency Exam:	100
Lab Image Portfolio:	200
Research Proposal	25
Research Presentation:	75 pts
Total:	750 pts

Tentative **EXAM SCHEDULE:**

Tentative Lecture and Laboratory Schedule:

		Lecture:		Laboratory:
Week	**Date:**	Topic:	**Day**	**Exercise**
1.	13 Jan.	Introduction and history of microscopy. Biological		