

General Microbiology (BioSci 383) Spring 2023

Instructor: Sonia Bardy
Pronouns: she/her/hers
Office: Lapham 464
Phone: 414-229-6415
Class Hours: M/W/F 10:30-11:20 Lapham 160

Student Support Hours: Tuesday 9:00-10:00am (Canvas)
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Text: Prescott's Principles of Microbiology. Willey and Sandman, 2nd edition. ISBN: 9781260259032. You are welcome to rent, but a purchase is strongly recommended for Microbiology majors.

Lab Texts: Custom Laboratory Supplement

Purpose of the course: To provide students with a foundation in microbiology that will serve as a basis for further studies in biological sciences or for professional training in health sciences. An understanding of genetics is assumed. This course addresses the following program objectives;

- 1) Apply scientific method to biological questions
- 2) Demonstrate an understanding of Microbiology, including understanding fundamental principles, microbial genetics, and applications.

Course prerequisites: Genetics (Biosci 325). A grade of C or better is required. If Genetics (BioSci325) is taken after this course is completed Genetics may **not** carry credit towards to Biological Sciences Major.

Course Schedule:

Date	Session	Topic	Reading Assignment
Jan 23	1	Introduction	Chapter 1
Jan 25	2	Chemicals of Life/Microscopy	Chapter 2, Appendix 1
Jan 27	3	Prokaryotic Cell Structure	Chapter 3
Jan 30	4	Prokaryotic Cell Structure	Chapter 3
Feb 1	5	Prokaryotic Cell Structure	Chapter 3
Feb 3	6	Eukaryotic Cell Structure	Chapter 4
Feb 6	7	Metabolism	Chapter 6
Feb 8	8	Metabolism	Chapter 6
Feb 10	9	Metabolism	Chapter 7
Feb 13	10	Metabolism	Chapter 7
Feb 15	11	Metabolism	Chapter 7
Feb 17	12	EXAM 1	
Feb 20	13	Microbial Growth	Chapter 5
Feb 22	14	Basic Molecular Biology	Chapter 9
Feb 24	15	Basic Molecular Biology	Chapter 9
Feb 27	16	Basic Molecular Biology	Chapter 10
Mar 1	17	Regulation of Gene Expression	Chapter 11
Mar 3	18	Regulation of Gene Expression	Chapter 11
Mar 6	19	Regulation of Gene Expression	Chapter 11
Mar 8	20	Genetics, Gene transfer	Chapter 12
Mar 10	21	Genetics, Gene transfer	Chapter 12

Mar 13	22	Genetics, Gene transfer	Chapter 12
Mar 15	23	EXAM 2	
Mar 17	24	Recombinant DNA	Chapter 32
Mar 20-24		Spring Break	
Mar 27	25	Genomics	Chapter 32
Mar 29	26	Viruses	Chapter 18
Mar 31	27	Viruses	Chapter 18
Apr 3	28	Viruses	Chapter 18
Apr 5	29	Viruses	Chapter 18
Apr 7	30	Viruses	Chapter 18
Apr 10	31	Pathogenicity	Chapter 25
Apr 12	32	Pathogenicity	Chapter 25
Apr 14	33	Proteobacteria	Chapter 14
Apr 17	34	EXAM 3	
Apr 19	35	Proteobacteria	Chapter 14
Apr 21	36	Proteobacteria	Chapter 14
Apr 24	37	Proteobacteria	Chapter 14
Apr 26	38	Other Bacteria	Chapter 15
Apr 28	39	Gram Positive Bacteria	Chapter 13
May 1	40	Gram Positive Bacteria	Chapter 13
May 3	41	Gram Positive Bacteria	Chapter 13
May 5	42	Archaea	
May 8	43	Eukaryotic Microorganisms	Chapter 17
May 10	44		

Evaluation: Midterm exams will be held on specified dates. Exams will be offered on Canvas, during regularly scheduled class times. Exams will be a combination of multiple choice, matching, True/False questions. Exam questions will come from lecture material, and related material in the text. The final exam will be held as scheduled by the registrar. Grades will be calculated on the basis of 3 lecture exams, one final exam, quiz results, and the laboratory work. Your final grade will be determined using the following points system.

Lecture Exam 1	100 pts
Lecture Exam 2	100 pts
Lecture Exam 3	100 pts
Quizzes	50 pts
Laboratory	150 pts
Final Exam	100 pts
Total possible points	600 pts

At the end of the semester your total points will be divided by 6 to determine your final % grade for the course.

Letter grades will be assigned based on the final % grade. The exact conversion of % score to a letter grade will be decided at the end of the semester (and will be determined to some extent by the difficulty of the exams) but will not be more stringent than the scale shown below (that is, if your final % grade is 87.00 you will not receive less than an B+, but you might receive an A- or A depending on the final course curve).

A 93-100% B 83-86% C 73-76% D 63-66%

A- 90-92%	B- 80-82%	C- 70-72%	D- 60-62%
B+ 87-89%	C+ 77-79%	D+ 67-69%	F 0-59%

Final Examination: Monday December 20, 2021 (12:30-2:30pm). The final exam will be semi-cumulative. As dictated by UWM policy students should arrange their classes to avoid Final Exam conflicts and overly demanding schedules.

Campus Credit Hour Policy: This four-credit course meets for 3 hours of lecture and 4 hours of lab per week during the semester. For 3 bonus points please email me a picture of an orangutang by Feb 1 at 11:59pm. Students are expected to put in 5-6 hours per week studying and working on assignments to achieve the learning goals of this course.

Laboratory: Attendance in laboratory is required unless you are retaking the course and you performed satisfactorily in the lab previously. If you wish to be excused from the lab for this reason consult with Dr. Bardy no later than the first week of the semester. Registered students not attending Lab during the first week of the semester may be dropped unless they contact their instructor and lab TA. (See 'Administrative Drop for Non-Attendance' policy under 'Course Restrictions' in the Schedule of Classes).

<http://www4.uwm.edu/academics/reg-policies.cfm>)

Registration: As per UWM policy, the last day to drop the class is April 9, 2023 (with a W, Feb 17 without W). See the following website for this and other important dates to remember. Select Spring 2023 (regular session) from the drop-down menu.

<https://uwm.edu/onestop/dates-and-deadlines/important-dates-by-term/>

This course may not be taken with an audit or credit/no credit status. In the event of excess enrollment, priority will be given to students who are registering for the first time.

Canvas: This course has a 'Canvas' website. Course syllabus, lectures, announcements regarding material to be covered on exams, quizzes, and grades will be posted on this site. If you need help with the Canvas site please follow the help for students link on the following page: <https://uwm.edu/canvas/>

Students with disabilities: If you will need accommodations in order to meet any of the requirements of this course, please contact me as soon as possible. Also contact the Accessibility Resource Center (Mitchell Hall Room 115, 229-6287, <https://uwm.edu/arc/>).

Preferred Name & Preferred Gender Pronouns: Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of your preference so that I may make appropriate changes to my records. You may contact me either in person or by email or phone.

Academic misconduct. Cheating on exams or plagiarism are violations of the academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University.

'Academic misconduct is an act in which a student seeks to claim credit for the work or efforts of another without authorization or citation, uses unauthorized materials or fabricated data in any academic exercise,

forges or falsifies academic documents or records, intentionally impedes or damages the academic work of others, engages in conduct aimed at making false representation of a student's academic performance, or assists other students in any of these acts.

Prohibited conduct includes cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally ***assisting another student*** in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.'

(http://www4.uwm.edu/acad_aff/policy/academicmisconduct.cfm).

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