INTRODUCTION:
Welcome to PRE-NURSING MICROBIOLOGY! This course is designed to provide the pre-nursing students with a fundamental understanding of medical microbiology with a focus on those microorganisms that cause disease.

My name is Dr. Rebecca Parr. I am an Assistant Professor in Biology. My undergraduate degree (McNeese State University) was a B.S. in MT/ASCP and I am A.S.C.P. Medical Technology board certified. I trained and worked at Charity Hospital of New Orleans in Microbiology, Parasitology and TB/Mycology. For my M.S. degree in Veterinary Microbiology at Texas A&M University (TAMU), my research focused on immunological responses to BCG vaccinated *Mycobacterium tuberculosis* infected guinea pigs. For my Ph.D. project at TAMU, I made monoclonal antibodies and used them to characterize IBV (a chicken virus that is related to SARS & MERS). My post-doctoral research experiences are extensive in exploring both viral and cellular aspects of host-pathogen interactions. Additionally, I directed and taught courses in the Professional Science Master program in Biotechnology at Arkansas State University (ASU). I have over 30 years of experience teaching both graduate and undergraduate students. At Stephan F. Austin State University (SFASU), I am focusing on what I love to do most, teaching and research. One of my research interests is to evaluate natural products that can inhibit virus replication. My other interest is to detect animal viruses in nature and determine their importance in recombination with human viruses.

OFFICE HOURS: My office hours are M.W, from 9:30am -noon or by appointment. If I am not in the office, I will have a note on my door explaining where I am (so that you can find me, usually in the lab) and when I will return. If you need to contact me apart from my office hours, and I do not answer my phone, please leave an email message. Please make sure you leave both your name and a local phone number where I can return your call. Should you have questions or need additional help, please feel free to contact me at 468-2267 during the day, come by my office (S-112). Also, I prefer to communicate with you through D2L or parrr1@sfasu.edu . I maintain an opened door policy.

MATERIALS:
1. Lecture text (Cowan 4th edition) and online supplement (Connect):

   Package ISBN: 9781259968990
   Package Net Price: $110

   The most cost-effective way for students to purchase all of the required components is by purchasing them altogether in this package rather than obtaining each item separately.

   For this course, you will be required to purchase McGraw-Hill Education Connect® access for (Cowan 4th edition). You may choose not to buy a print text since Connect contains the full reading experience. Please be aware if you purchase a used textbook you will still need to purchase Connect access to complete required assignments that make up [ADD %] of your total course grade. Information on REQUIRED course material: Connect is an easy-to-use homework and learning management solution that embeds learning science and award-winning adaptive tools to help you get the best results in this course. It is designed to create a personalized pathway for your success, making
every minute you study more effective. Using adaptive technology, Connect pinpoints exactly what you know and
don’t know yet, and seamlessly offers up learning resources in real time to help you focus your study time. Connect
contains the interactive eBook and study tools, giving you anytime access to course resources and assignments.
Connect can help you:
√ Stay organized on assignments and due dates all in one place
√ Focus more on difficult sections and concepts √ Practice for exams with self-assessment tests and quizzes
√ Track your performance with personalized reports √ Save time on studying
√ Save money on textbooks
√ Score higher in the class

If having trouble registering or accessing Connect, please contact McGraw-Hill’s Customer Support for the fastest
help. Live chat, email, and phone support are available almost every hour of the day. Website:
www.mhhe.com/support | Phone: (800) 331-5094 Hours (EST) Sunday: 12 PM - 12 AM Monday - Thursday: 24 hours
Friday: 12 AM - 9 PM Saturday: 10 AM - 8 PM Ensure your computer meets system requirements by going to this
link: http://connect.mheducation.com/connect/troubleshoot.do

All course assignments in Connect will be scheduled, completed and recorded in Connect. All students are required
to complete every assignment by the due date listed.
2. Clickers will be required by Wednesday of the first week of class. No excuses. The NXT response card
(from Turning Technologies) is required. The SFASU bookstore is well stocked with these.
3. Lecture notes will be posted on D2L.
4. Lab manual: Specifics will be covered in the first lab period by Mr. Havner.

ACCEPTABLE STUDENT BEHAVIOR: Classroom behavior should not interfere with the ability of other
students to learn from the instructional program or the instructor’s ability to conduct the class (see the Student
Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt
the learning environment will be asked to leave class and may be subject to judicial, academic or other penalties.
This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field
trips, etc. The instructor shall have full discretion over what behavior is appropriate / inappropriate in the
classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may
be referred to the Early Alert Program. This program provides students with recommendations for resources or other
assistance that is available to help SFA students succeed.

Standard classroom decorum is expected. Please do not carry on a separate conversation that might be
distracting to other students. You will be asked to leave. If you have a cell phone, pager, or other electronic device,
please make sure that it is turned off.

The presence of anything on/in your desk, lap, pockets, or in the general vicinity of your seat during exams will
not be tolerated. The presence of a cell phone or any other electronic device, either visually or audibly, will result
in an automatic grade of “zero” for that exam with no ability to re-take, make-up or replace that exam. The only
items allowed at your desk for exams are pens and markers. ALL other materials will be placed at the front of the
room prior to administering the exam. All exams must be taken using ink. Any responses on your exam written
in pencil will result in a five (5) point deduction from your final course grade.

ATTENDANCE: I strongly suggest that you come to all the classes this semester. For the first day, attendance
will be taken on a sign in sheet. It is your responsibility to sign this. If you fail to sign the signature roster, you
will be counted absent. After the first day, attendance will be taken by using the clickers. If you click in the start
of class and leave before the end of class, you will be marked as absent. Students will be allowed 4 absences without penalty. This correlates to missing two weeks of lecture. Upon the next absence, students will receive a reduction of 10 points (= 10%) from their final course grade and be ineligible for any bonus opportunities throughout the semester whether they occurred prior to or after the 2nd absence. For each additional absence, students will receive an additional 5 points (= 5%) reduction from their final course grade.

There will be no distinction between excused and unexcused absences in counting absences. Legitimate excuses for absences only affect whether students may be given an opportunity to make-up work. Students must inform the instructor well in advance of the day of absence so that suitable arrangements may be made. Absences caused by bona fide emergencies may be excused after occurrence with suitable documentation, and make-up opportunities may be provided only if possible or practical at the judgment of the instructor. There is no guarantee that an opportunity for make-up work will be provided.

Homework will be assigned. Each assignment must be submitted before the due date that will be posted on the McGraw Hill Connect through D2L. There will be no opportunity for make-up homework, no exceptions.

If a student leaves the classroom during a test, the test must be turned in as is. The test will be graded on all the test questions on the test.

Missing an exam will be permitted only by prior arrangement, by death, or by a near death experiences. Please contact me if there is a problem. Quizes/Exams will be administered during the lecture period. Any student who arrives late for quizes/exams must complete the quizzes/exams in the time allotted at the beginning of the lecture period. Any student who arrives to class after an exam has been turned in will not be allowed to take the exam, will be counted absent, and will receive a 0% for that quiz/exam. There will be no opportunity for making up missed quizzes. Make up exams will be given one time towards the end of the semester at the discretion of the instructor. You are responsible to make sure that you have completed all your exams before the final.

ACADEMIC INTEGRITY (A-9.1): Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Faculty members must promote the components of academic integrity in their instruction, and course syllabi are required to provide information about penalties for cheating and plagiarism as well as the appeal process. (Much of this information will be provided through internet links.)

DEFINITION OF ACADEMIC DISHONESTY: Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to: (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) falsification or invention of any information, including citations, on an assignment; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism include, but are not limited to: (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from the Internet or another source; and (3) incorporating the words or ideas of an author into one's paper or presentation without giving the author due credit.

Please read the complete policy and the appeals process at http://www.sfasu.edu/policies/academic_integrity.asp and http://www.sfasu.edu/policies/academic_appeals_students.asp

WITHHELD GRADES (Semester Grades Policy A-54): At the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar
year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

STUDENTS WITH DISABILITIES: To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

F-1 VISA HOLDERS: There are important federal regulations pertaining to distance education activity for F-1 Visa holders. All students with an F-1 Visa should follow the instructions at the following link to make sure they are in compliance. http://www.oit.sfasu.edu/disted/facsup/f1visa.html

COURSE EVALUATION: All students are required to complete a course evaluation at the end of the semester (details on availability will come later) for both the lecture AND lab sections. Failure to complete both of these evaluations will result in a 2% deduction (1% for lecture and 1% for lab evaluations) in your final grade for the course.

REQUIREMENTS: The grade in this course is based on the following criteria. Please remember that lecture and laboratory grades are computed into one grade. The lab counts 25% while the lecture counts 75% of your final grade. If you fail the laboratory or the lecture, you fail the course. Requirements for the course are summarized below:

1. Lecture exams, Final Exam and Participation (Homework, Quiz and Clicker questions- see #2): All three parts (lecture exams, final exam and participation) grades will be averaged and computed as 75% of the final grade. There will be four lecture exams and a comprehensive final exam during the semester, and each equals 12.5% of your grade. The participation grade is explained in #2, and is equal to 12.5% of your grade. That totals up to 12.5% x 6 = 75%. The syllabus lists the tentative scheduled dates of these exams. Exams will NOT be returned. However, grades will be posted in a timely manner on the D2L, and you can come to my office to view one exam per visit during the week so that everyone has time to review their tests.

2. Homework, Quiz, Clicker questions and Participation &Attendance: Homework, daily clicker questions, quizzes and Participation &Attendance will be graded and averaged as your Participation grade (see#1) which will equal 12.5% of your grade.

3. Final Exam: The final exam will be comprehensive, and will cover the material covered throughout the semester. It will equal 12.5% of your grade. All students will take the final exam.

4. Lab Grade (25% of final grade): As noted above, you will receive a separate lab grade that will be used to calculate one final grade for the course. It will be computed as 25% of your final grade for the course.

Summary of Course Grade:
Four lecture tests, final exams and participation grade = 75% (12.5% x 6 = 75%)
Lab Grade = 25%

Grading Scale
90.0 – 100% = A
80.0 – 89.5% = B
70.0 – 79.5% = C
60.0 – 69.5% = D
Below 59.5% = F

**PROGRAM LEARNING OUTCOMES:** Each of the student learning outcomes listed below address the Biology Department Program Learning Outcome.
The students will demonstrate a good knowledge base in biological concepts and show the ability to integrate knowledge with critical thinking skills to become problem solvers. Knowledge base will include: levels of complexity (molecular/cellular through population/communities/ecosystems); biological principles and processes.

**COURSE OBJECTIVES:** To introduce the students to human pathogenic microbes and how the human system combats pathogens.
- Understand the implications of the presence and functions of microorganisms
- Understand microorganisms grow requirements and methods of control
- Understand the techniques used to study and identify microorganisms
- Understand pathogenesis, epidemiology, and treatment of microbial diseases affecting humans

**STUDENT LEARNING OUTCOMES** Students who successfully complete Microbiology 308 will develop an understanding of the following:
- the importance and roles of micro-organisms presence in our environment
- the pathogenesis of microorganisms for human health
- physical, chemical and antibiotic control of microorganisms
- human immune response to infection by microorganisms
- diagnosis, pathogenesis, epidemiology, and treatment of microbial diseases

**Tentative Schedule for Fall 2017**
*** Please note that this is only a tentative schedule ***

<table>
<thead>
<tr>
<th>BIO 308</th>
<th>Monday</th>
<th>Tues</th>
<th>Wednesday</th>
<th>Thurs</th>
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<tbody>
<tr>
<td>Week 1  (8/28-8/30)</td>
<td>Intro</td>
<td>Proks &amp; Archea (4)</td>
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<tr>
<td>Week 2  (9/4-9/6)</td>
<td>Eukaryotes (5)</td>
<td>viruses (6)</td>
<td>Microbial nutrition (7)</td>
<td>Microbial genetics (9)</td>
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<td>Week 3  (9/11-9/13)</td>
<td>Microbial nutrition (7)</td>
<td>Microbial metabolism (8)</td>
<td>Microbial nutrition (7)</td>
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<td>Week 4  (9/18-9/20)</td>
<td>Test 1 (4,5,6, 7&amp;8)</td>
<td>Microbial genetics (9)</td>
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<td>Week 5  (9/25-9/27)</td>
<td>control of microbes (11)</td>
<td>Drugs/microbes/host (12)</td>
<td>Epidemiology (13)</td>
<td>Epidemiology (13)</td>
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<td>Week 6  (10/2-10/4)</td>
<td>Epidemiology (13)</td>
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<td>Host Defense (14)</td>
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<tr>
<td>Week 7  (10/9-10/11)</td>
<td>Test 2 (9,11, 12, 13)</td>
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<td>Host Defense (14)</td>
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<td>Week 8  (10/16-10/18)</td>
<td>Host Defense (14)</td>
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<td>Host Defense (15)</td>
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<td>Week 8  (10/23-10/25)</td>
<td>Host Defense (15)</td>
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<td>Skin and eyes (18)</td>
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<td>Week</td>
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<td>10 (10/30-11/1)</td>
<td>Nervous system (19)</td>
<td><strong>Test 3 (14,15,18,19)</strong></td>
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<td>11 (11/6-11/8)</td>
<td>Cardiovascular &amp; systemic</td>
<td>Cardiovascular &amp; systemic diseases (20)</td>
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<td>diseases (20)</td>
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<td>13 (11/20-11/24)</td>
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<td><strong>Thanksgiving</strong></td>
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<td>14 (11/27-11/29)</td>
<td>Digestive System (22)</td>
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<td>Urinary &amp; Reproductive Systems (23)</td>
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<td>15 (12/4-12/6)</td>
<td>Urinary &amp; Reproductive Systems (23)</td>
<td><strong>Test 4 (20,21,22,23)</strong></td>
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<td>Final Exams (12/11-12/15)</td>
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<td>December 11, Monday 1-3p.m.</td>
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