MIC2010                                                                          SPRING Term 2021

Ref: # 44-9351                                                Saturdays 1:20pm – 3:50pm

Microbiology

Miami Dade College

North Campus

Course Syllabus Spring 2021 ONLINE CLASS

Dr. Fredy Ruiz

        Office: A354.

        Hours: TBA

        Phone Mail: Call (305) 237 1294 and leave me a message.

        E-mail: fruiz@mdc.edu

- **The procedure for each class will be online communication thru chat on Blackboard. Questions & answers during the day of scheduled class.**(Synchronous teaching)

**Grading activities that are mandatory, are open on Mastering Micro,** (Web Enhanced tool, by Pearson),**and are to be done during each week, covering each topic**. (Asynchronous teaching).

**Study guide, videos and power point** presentation are available on **Black Board** under **announcements.**

**Tests are open on Mastering Micro each scheduled day at official class time during 1 hour ONLY.**

Catalog Course Description:

This course introduces basic principles of morphology, physiology, biochemistry and genetics of microorganisms. The students will learn representative types of microorganisms including bacteria, algae, protozoa and viruses and the roles of various microorganisms in health and disease, modes of transmission and the effects of their activities in our biosphere.

Credit Hours Breakdown: 3 lecture hours

Prerequisite:  CHM 1033/.and BSC 1005/2085/86/L.

Co requisite: MIC2010L

Required Text:

 1-Tortora, G.J., Funke, B.R. & Case, C.L. (2007) Microbiology: An Introduction (13th edition) with accompany CD. Benjamin Cumming Publishing Co. (Text reference).

2-Student access kit, please register online on Mastering Micro Pearson: Course ID: ruiz24931 Some grade activities are online.

Course Description/Goals:

LEARNING OBJECTIVES:

Once you complete this course, you should have an understanding of:

1. The importance of microorganisms to our global society (students are invited

and encouraged to bring relevant news articles to class for discussion).

2. The structure and function of cells, their metabolism, how they grow and divide.

3. The tools and techniques that are used to classify and identify microbes as well

as those used in biotechnology to develop products.

4. Beneficial and detrimental host-microbe interactions.

5. The role of the immune system in the host response when challenged by

microbes.

6. The contributions that microbes make to the environment and society in terms of

geochemical cycling, remediation and food production.

7. The use of antimicrobial drugs

8. Microbial diseases specific to each organ systems

Reading Assignments:

The lecture schedule lists the discussion topics for each week's meetings as well as the textbook and study guide reading assignments that support the lecture.  Students are responsible for all readings that relate to the course objectives

Grading Scale:

100 POINTS EACH MODULE

TOTAL FIVE MODULES.

100 points :    Module1=  Test1 + Mastering Micro #1.         A         450 - 500
100 points:     Module2= Test 2+ Mastering Micro  #2           B         400 - 449
100 points:     Module3= Test 3+ Mastering Micro  #3           C         350 - 399
100 points :    Module4= Test 4+ Mastering Micro   #4           D        300 - 349
100 points :    Module5= Test 5+ Mastering Micro  #5.\_         F         300 <
500 points      Total.

# Test grades are INDEPENDENT Letters you will obtain base on the following scale:

1. A= 95-100

2. B =85-94

3. C= 75-84

4. D= 65-74

5. F= <64

#  Mastering Micro Grades are INDEPENDENT Letters you will obtain base on the summatory  of quiz/homework PLUS Dynamic Study Modules, following scale will be used:

1. Homework/quiz:

1. A= 95-100

2. B =85-94

3. C= 75-84

4. D= 65-74

5. F= <64

2. Dynamic Study MODULES MUST BE 100% Completed BEFORE DUE DATE to be graded with the following scale:

1. A= 95-100

2. B =85-94

3. C= 75-84

4. D= 65-74

5. F= <64

# MODULE GRADE: will be the final Letter obtained from TEST + Mastering Micro.

Example:  Test= B, Mastering Micro= A, the Final grade for the module will be:  B+A=B

# FINAL GRADE: will be the summatory of final grades Letters obtained on each Module.

1.) Tests will be given at the beginning of the scheduled class thru Mastering Micro.  They will include vocabulary identification, multiple choice, matching, short answer, true/false, and diagram/model identifications.
2.) All students are responsible to maintain permanent valid access to Mastering Micro Pearson web enhanced tool during ALL semester.
3.) Five tests will be given. Students will be responsible for attending all tests/exams on their scheduled date. Missed test/quiz OR Mastering Micro activities without exceptions will be graded with F.

4). Activities on Mastering Microbiology by Pearson are Mandatory and represent 50% of the final grade. It is student’s responsibility to maintain access to Mastering Microbiology by Pearson during the duration of the Semester.

GRADES FOR MODULE 1.

1). Test 1   50%.

 A……45-50

B…….40-44

C…….35-39

D…….30-34

F……..25-29

             2). MASTERING MICRO 50% COMPLETION OF ALL ON LINE ACTIVITIES.

GRADES FOR MODULE 2.

1). Test 2 50%.

 A……45-50

B…….40-44

C…….35-39

D…….30-34

F……..25-29

2). MASTERING MICRO 50% COMPLETION OF ALL ON LINE ACTIVITIES.

GRADES FOR MODULE 3.

1). Test 3 50%.

 A……45-50

B…….40-44

C…….35-39

D…….30-34

F……..25-29

 2). MASTERING MICRO 50% COMPLETION OF ALL ON LINE ACTIVITIES

GRADES FOR MODULE 4.

1). Test 4 50%.

 A……45-50

B…….40-44

C…….35-39

D…….30-34

F……..25-29

2). MASTERING MICRO 50% COMPLETION OF ALL ON LINE ACTIVITIES

GRADES FOR MODULE 5.

1). Test 5 50%.

 A……45-50

B…….40-44

C…….35-39

D…….30-34

F……..25-29

2). MASTERING MICRO 50% COMPLETION OF ALL ON LINE ACTIVITIES

Final grade: Points

A……450-500

B…….400-440

C…….350-390

D…….300-340

F……..250-290

Attendance:

1.) Students are expected to attend each scheduled class meeting. Be late more than ten (10 minutes) for tree times will be counting as one (1) absence; 3 absences are consider a cause to droop the student from the class.

2.) The instructor reserves the right to drop any student who has missed 3 classes. The instructor may also drop a student who has never attended or stopped coming to class.

3.) Absences accepted only with medical excuse. Students with 2 unjustified absences before the next correspondent scheduled test will be graded with F in this particular test.

4.) Students are reminded that it is their responsibility to withdraw if they wish to receive a W for the course.  An Incomplete (I) will not be given, except in the case of hospitalization or a similar problem on the day of the last Test. A contract must be completed and signed by the instructor and the student during the final week of class. If the student does not complete the assignment on the time agreed upon in the contract, the grade of I will become an F.

5.) Students are expected to arrive to class on time. Tests/Exams posted at the beginning of class will not be given to students who arrive 10 minutes late.  Classroom will be locked and no students will be allowed in after start of test/exam.

Student Responsibility and Conduct:

Professional students are responsible for taking charge of their own education by being prepared before every lecture session and conducting themselves appropriately during all learning activities.  Class disruptions that prevent other students from benefiting from the learning process will not be tolerated by the instructor.  These include unwarranted noises, talking among students while the instructor explains important concepts or answers questions posed by another student, unacceptable gestures and the operation of electronic devices (beepers and cell phones) during regular lecture sessions. F will be assigned for copy attempt in the test. Student with special needs MUST inform to the Instructor about it. Student Feed Back of Instructors; forms must be returned to the College using the corresponding Schedule. Illness /Emergencies. Students are responsible for the information to the instructor about emergencies using: e-mail- fruiz@mdc.edu, or phone        305 237 1294 , within the following 48 hours after the emergency situation. Please read the Students Rights  and Responsibilities Book MDC.

Withdrawals: The professor is not required to withdraw/drop students from the course. It is the student’s responsibility to determine his /her status in the course at all times, and make that decision, if necessary.

TIPS for SUCCESS:

MAKE A COMMITMENT TO SUCCEED:

Decide to do well in the course.  Spend the time. Be responsible for your own learning. Expect to learn more than what is covered in class or textbook.

GET HELP RIGHT AWAY:

Do not wait for someone to ask if you need help.  Talk with your professor, lab assistants,      and your study group.  The professor encourages frequent visits during office hours to clarify material covered in class. If you cannot make it to the professor's office hours, please make    an appointment.  Your success in this course depends on how well you understand the concepts covered during the semester.  Use the Study partner CD-ROM, and the Study Guide that accompanies the textbook, and the computer courtyard.  Review your notes after each class.

WORK WITH A STUDY GROUP:

Meet regularly.  Be sure everyone contributes and understands.

TIE IDEAS AND CONCEPTS TOGETHER:

Connect the material to what you already know.  Look for the big picture, not just isolated details. Be able to apply information in a new situation.

PREPARE FOR LECTURE OR LABORATORY BEFORE CLASS:

Read the text assignments.  Read effectively.  Use the study aids in the book.  Answer the questions at the end of the chapter.  Highlight sparingly.  Write down questions to ask during the next lecture period. Make every effort to know the material before class begins.

UTILIZE ADDITIONAL RESOURCES AVAILABLE TO YOU

Additional help in form of sample exams and quizzes lecture notes and other didactic materials are available through the many links that could be accessed through the World Wide Web for this course.  Please, feel free to use the available the equipment at the Computer Courtyards and the Science Resource/Tutoring. Center for this purpose.

COME TO CLASS:

Attend every class.  Remember that attendance is mandatory.  Be on time.  Bring your textbook and handouts.  Be attentive and take notes.

STUDY EVERY DAY:

Follow a study schedule.  Find times and places that allow you to concentrate.  Review and rewrite your notes after class.  Outline the material.  Draw concept maps and/or use diagrams.

 Schedule of Classes/Topics: (TENTATIVE OUTLINE)

Week    Chapter/                                         Topics Class Title

1                                                     Syllabus Overview-Intro. To Microbiology

2                     1&3                         Microbial world and you / Microscope

3                     4                             Functional Anatomy of Pro/ Eukaryotes

4                    1-3-4                                    Test 1 Module 1

5       5-6                     Microbial Growth, and Metabolism

6       10-11   Classification of Microorganisms. Prokaryotes : Domain Bacteria

7                    5-6-10-11                            Test 2 Module 2

8                   12-13                       Eukaryotes: Fungi, Protozoa, and Helminths.

                                                                                Viruses, Viroid, and Prions.

9                 7 & 20                            Control of Microbial Growth, and Antimicrobial drugs

10             7-12-13-20                                 Test 3  Module 3

11                   14-15                      Disease and Epidemiology /Microbial Mec of  Pathogenicity

12                   18-19                      Practical Applications of Immunology /Disorders OF the Immune System

13                   14-15-18-19                          Test 4 Module 4

14                  21&24                              Microbial Diseases of Skin, Eyes and Respiratory Systems

15                 25&26                    Microbial Diseases of Digestive, Urinary and Reproductive Systems.

16           21 24 25 & 26                             Test 5 TBA Module 5

\* Exact lecture topics, exams, and quizzes are subject to change.

Class, please be aware the following rules to use email, (only way to effectively help you).
 I have almost 300 students, impossible to respond on time if you do not consider the following:

RULES OF COMMUNICATION.

1. Complete name, student ID, AND class reference with BSC or MIC ID MUST BE initiating the text ex:
JULIAN GREEN, ID 123456, and BSC 2086 THURSDAYS CLASS REF 1234

2. Specific questions on GRADES, OR CONTENT FOR THE NEXT EXAM:  Test, homework or any ONLINE activities were considered to build up this academic report. Any missing test or homework due to not participation according to due dates is not possible to be retake it. There is no option to re-open ANY HW TEST OR QUIZ, after due date. NO EXCEPTIONS

3. During the chat in your class time you are more than welcome to ask any specifics on your academic situation.