INTRODUCTORY MICROBIOLOGY SYLLABUS

BIOLOGY 2200-001

Lecture: SECTION 35687

Spring/Summer 2018, 5 Credits

MW 10:30 AM-12:00 PM; Location:0146 DRY

Course website: www.canvas.wayne.edu

Instructor: Dr. Anne-Marie Kosi-Kupe E-mail: gn0658@wayne.edu Phone: 1-313-993-4217

Office hours: MW-12:30PM-1:30PM, Stem Commons by appointment

Required Materials:

<u>1-Textbooks</u> : Microbiology : An evolving science. 4th Edition, Norton Press, Slonczewski and Foster Wayne State Custom Edition

<u>2-iClicker2</u>: Please register your iClicker 2 as soon as possible on canvas.

Course Objectives

1-The overall goal of this course is to fulfill the WSU General Education Life Science requirement and the core concepts of biological literacy. Students will be instructed in the principles and procedures of modern microbiology, including the concepts of microbial growth and control, microbial structure and function, evolution and microbial diversity/adaptation, and interactions of microbes with humans, plants and the environment. The influence of microbes on society will be emphasized by introducing microbial application in commercial products and microbial diseases in their co-evolution with host responses.

2-From laboratory course, students will gain insight of the use aseptic techniques in order to develop the necessary skills to isolate pure cultures, and identify unknown microorganisms from mixed cultures.

Course Outcomes:

At the end of this course, students will be able to:

- 1. Understand the role microorganisms play in our environment/society
- 2. Explain basic and applied fields of microbiology
- 3. Describe the range of diversity between eukaryotes, prokaryotes, and other microbial agents in regards to their structure and physiology
- 4. Describe basic concepts of medical microbiology and immunology
- 5. Understand the processes of transmission of infection and mechanisms of antimicrobial treatments

6. Develop the requisite skills needed to isolate, identify pure isolates from mixed cell cultures.

<u>Resources for Success :</u> I-CONTACTING DR. KOSI-KUPE AND GETTING HELP

II-Discussion Board: There is a discussion board on canvas. This is a good place for simple content questions. There will be a forum for discussing exam questions.

III-LEARNING COMMUNITY SUPPORT

•Peer Mentors: At WSU, you have a learning community of peers and peer mentor meeting once a week in small group discussion; and sitting together in lecture. This group is one of your resource for success in this course and at WSU. You will get notice from your peer mentors on when they will meet in the study room. WSU data have shown an increased pass rate in the class by about 15% for those who have used this learning community.

•STEM Commons: is your Learning Community: Some of the members of your learning community have been at WSU for a while and know how to succeed in Bio2200; and others are just beginners like you. We encourage you to support each other by asking for help any time you need it, and share successful learning strategies. All you need to do there is to join a Bio2200 table.

IV-ACADEMIC SUCCESS CENTER

You will get free individual tutoring and group workshops at this center. You can also make an appointment with a <u>learning specialist</u> to design study strategies just for you for free. See <u>http://success.wayne.edu/</u> and check Canvas for more information.

-iClicker2:

Clickers will be used this semester to enhance your learning experience of the course. Clickers are remote control-like devices that allow you to answer questions in class and see how the class answered. Students like clickers because they motivate them to active class participation, and it can also improve learning and grades. Answering a clicker question will give you 0.5 clicker points for answering and another 0.5 clicker points for answering correctly. If you receive > 85% of all the clicker points, you will be automatically receive all 50 lecture points for this category. If you score less than 85% of the possible clicker points, you will receive that percentage of the 50 possible lecture points. Student caught having another student answer questions with their clicker will result in both students receiving 0 clicker points for the entire semester. Each student is required to have an iClicker2. Register your iClicker serial number via our Canvas site (under the menu tab on the left as "Register Your Clicker Here"), so that your name is associated with the clicker (and thus I can assign you the points you earned). NOTE: iClicker points are only assigned at the end of the semester and do not count towards a drop grade (WF, WP). NO MAKE UP FOR MISSED Clicker for any reason, including sickness, personal reasons to miss class, dead batteries or technical issues. See Canvas for more information on buying clickers.

<u>COURSE PREREQUISITES</u>: Students are required to have completed **BIO1510** (Basic Life Mechanisms) with a C or higher. BIO 1500 is recommended for BIO-Majors. Students who managed to enroll in this course without satisfying this prerequisite will be required to drop it. Students who have questions regarding these prerequisites should see one of the Biological Science Department's Undergradute Advisors during the first week of class.

Withdrawals: See WSU policy at: http://sdcl.wayne.edu/Registrar/policies.htm

Office Hours: Dr. Kosi-Kupe's office hours: Monday and Wednesday in STEM Commons (time 12:30 PM-1:30 PM) by appointment. You may e-mail Dr. Kosi-Kupe your questions, concerns or arrange an office hour appointment at gn0658@wayne.edu Responses are usually provided within 48 hour window. Keep in mind that you may also get help from your peers/TAs.

<u>Lab</u>: The lab is directed by **Krystyn Purvis**. Contact your **TA** first for lab questions, then Krystyn Purvis, as directed in the lab syllabus.

<u>In the lecture hall before or after class</u>: This is not a time for long discussions. I have limited time to set up before class and get out of the way after class for the next class. When I am at the podium sitting up, I need to set up and cannot answer even quick questions. I can often take questions after class, but we will have to go to the lobby to accommodate the next class.

E-mail: See e-mail guidelines in General Policy 3

<u>GRADING</u>: A total of 1050 points are possible for the course. Of these 1050 points, 650 points are from lecture and 400 points are from the Laboratory (see lab syllabus).

EXAMS: Four hourly exams (120 points each) and a comprehensive final exam (240 points) will be given. The hourly exam with the lowest score will be dropped. The final cannot be dropped.

Since the lowest hourly exam will be dropped, NO MAKEUP EXAMS WILL BE GIVEN AND NO EXAMS WILL BE GIVEN IN ADVANCE

Grading Summary:

Lecture	
4x 120 point one-hour exams	+480 points
Lowest hour exam dropped	-120
Comprehensive final	+240
Clicker questions	+50
Lecture total possible	650
Laboratory	400
TOTAL COURSE POINTS POSSIBLE:	1050 POINTS

Exam corrections/disputes: When each exam is returned, you will have THREE BUSINESS DAYS to correct errors in grading or to challenge the questions on the exam. Failure to challenge the grade within this period indicates a willingness to accept the grade as assigned. The challenge should consist of a written description of why the answer is correct based on other published material that you cite. It is not an opportunity for complaint.

Final course Grade: A letter grade is assigned according to the table below:

72-75% C
70-71% C-
66-69% D+
62-65% D
60-61% D-
59% or less F

All exams will be in the regular lecture room. Hourly exams are during lecture on the days indicated in the syllabus . Procedures and exams policies will be explained again before each exam and MUST be followed by all students. http://reg.wayne.edu/finals/final exam schedule summer2018.pdf

<u>Be respectful to your classmates</u>: As you are probably aware, talking during large lecture class can distract your neighbors and interfere with their learning. Please be respectful to your neighbors. You will be given class time to work together in groups so please hold off on your conversations until the designated times.

During lecture, electronic devices may ONLY be used for the purposes of the class, such as taking notes or answering clicker questions. The consequences for misusing an electronic device in class will be that we will require you to put away your electronics and will take your device or clicker to return at the end of class.

<u>Academic integrity</u>: To acknowledge that most, if not all, students do not cheat, the following policy will be strictly observed in accordance with the WSU policy on cheating.

1. Any student caught cheating will automatically receive a grade of "F" for at least the exam and up to and including failing the class and explusion from WSU. Charges may be filed in accordance with the university policy on academic honesty (http://www.doso.wayne.edu/judicial/academic-integrity.htm). Please Read this carefully.

Cheating includes cheating on exams or misuse of clickers. You may only use your own clicker. Do not risk getting caught with a clicker that does not belong to you, or having your clicker caught with someone else. If you are caught with someone else's clicker in class, or someone else has your clicker in class you both earn a zero for ALL of the clicker points for that unit or the whole semester.

2. **Picture identification** will be required for each exam. Individuals without picture ID will not be allowed in the examination room.

3. You must arrive on time for the exam. Students who arrive after the first student has finished with the exam and left the room will not be allowed to take the exam.

4.Students will not be allowed to leave the room once they enter. Once a student has left the room, he or she will not be allowed to return.

5. Absolutely **no talking or communication** among students will be tolerated during the exam.

-<u>STUDENTS WITH DISABILITIES</u>: If you need special arrangements for documented disability, please contact Dr. Kupe at beginning of the semester, and you also will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department.

SDS telephone number is 313-577-1851 or 313-577-3365 (TTD: Telecommunication device for deaf; phone for hearing impaired students only). Once you have your accommdations in place, we need to meet privately to discuss your special needs. It is in your best interest to get your accommodation letters as early in the semester as possible. For more information about students with disabilities and the services we provide for faculty and students: http://studentdisability.wayne.edu/.

General Policies:

1-<u>Missing Class:</u> Students are expected to attend every class and lab in person. If you are going to miss class on a non-exam day, please see the grading policies for homework and clicker participation above. I DO NOT give individual extensions or exceptions for personal reasons, including but not limited to illness, travel, weddings, transportation problems, weather, funerals, dependent care or family obligations. The general course policies take into account that sometimes students will need to miss one or two classes. See the details under homework and clickers above.

There are exceptions for Student Disability Accommodations, jury duty and court dates. If you have a disability, please see general policy above. I want to accommodate disabilities, but I cannot accommodate situations I do not know about ahead of time. Please let me know early in the semester if you need an accommodation. If you have jury duty or court date during lecture or an exam, please email me as soon as you know there will be a conflict so we can make arrangements.

2-<u>Professional Behavior</u>: Is expected in lecture and labs, which includes respecting your classmates by arriving on time, not having distractions on electronic devices and not talking. All students must show respect in language and attitude towards the instructors and their fellow students. You are encouraged to discuss differences of opinion with each other, respectfully. Disrespectful students will be asked to leave the lecture or lab, and will lose their opportunity to turn in any missed assignments or earn any points for the day. No unregistered people may attend labs or lecture, including children. If you are disrupting your team, your peer mentor will move you to another team in the group, so that everyone can learn better. Cheating includes cheating on exams and misuse of clicker units (see clickers rules above). See the "Student Code of Conduct", for clarifications on cheating: www.doso.wayne.edu/student-conduct/Student Code Conduct.html.

-Disruptive Students: Professional respectful behavior toward all is expected. You will respect your classmates by arriving on time, staying for the whole class, only using electronics for class, cell phones, IPods and other mobile devices turned off or on vibration, and without disturbing, leave quietly the room in case of emergency and not eating or drinking during class. No text messaging allowed while class is in session. If you bring a laptop to class, it is to be used solely for course-related activities.

3-<u>Email Guidelines</u>: No e-mail reply from me when answer can be found in the syllabus or on Canvas. Any biology content questions or study strategy will not be discuss by e-mail, and I will be happy to answer them during office hours. I will respond to most of the your e-mails within <u>two business days</u> only if the answers cannot be found in your syllabus or on Canvas, or requires my inputs. Please try again after two business days, just in case of technical failure.

Due to privacy laws and for professionalism, you MUST e-mail me from your WSU e-mail account. I also expect emails written professionally, with a subject including course number, a proper greeting, e.g. "Dear Dr. Kupe", a proper salutation, e.g. "Sincerely, John Wall", correct punctuation including capitalization, and no texting abbreviations. Those above guidelines are part of your communication skills learning behaviors at WSU which are preparing you for life and also to get help you need.

4-<u>Letters of Recommendation</u> are to give people an idea of who you are beyond the grades and classes on your transcript. I do not write letters for students who I only know from my classes. You are likely to need letters from professors. Start planning now how you will get involved on campus so you will have professors who know you well enough to write a letter for you. Examples: Do research, join club or become a peer mentor or supplemental instructor.

5-University Closures: They will be notified via

- The University Newsline 313-577-5345,

-WSU Homepage (<u>www.wayne.edu</u>),

-WSU Pipeline (www.pipeline.wayne.edu),

-WDET-FM (Public Radio 101.9)

-By other local radio and television stations.

The information on closures and class cancellations is likely to be found at these locations before it is broadcasted by local radio and television stations. You should set up your WSU Broadcast Messaging settings in Academica so you get notices the way that works best for you.

6-I recommend that you **check** for syllabus and schedule updates on **Canvas** website **at least once each business day** of a semester in which you are enrolled.

7-<u>Miscellaneous</u>: **FOR ANY AND ALL ISSUES** not covered in this syllabus, please refer to the "Student Code of Conduct" at doso.wayne.edu/assets/codeofconduct.pdf

8-WSU Computing & Information Technology(C &IT) at 313-577-4778 or <u>helpdesk@wayne.edu</u>

-Canvas Home Page: www.canvas.wayne.edu

Your lecture canvas site is a place for class or group discussion. You will ask questions about class materials. I will try to answer to your questions and other students can participate as well.

For any canvas problem, please contact Computing & Information Technology

The Materials to be covered, as presented here, may change as class progresses, and those necessary changes will be announced in class and on Canvas. Exam's date change will be unlikely for any reason other than University closure. See details on Learning Objectives on Canvas.

WEEK	DATE	TOPIC	CHAPTER
WEEK 1	Monday, May 07	Overview/Microorganisms &	1,2
		Microbiology	
	Wednesday, May 09	Microbial Cell Structure & Function	3
WEEK 2	Monday, May 14	Microbial Growth & Growth Control	4,5
	Wednesday, May16	Genes & Genomes	7, 8, 9,
WEEK 3	Monday, May 21	EXAM I (120 POINTS)	1,2,3,4,5,7,8,9,
	Wednesday, May 23	Molecular Regulation	10
WEEK 4	Monday, May 28	Biotechniques & Synthetic Biology	12
	Wednesday, May 30	Microbial Metabolism	13, 14
WEEK 5	Monday, June 04	Viruses	6
	Wednesday, June 06	Viral Molecular Biology	11
WEEK 6	Monday, June 11	EXAM II (120 POINTS)	6,10, 11, 12, 13,14
	Wednesday, June 13	Food & Industrial Microbiology	16
WEEK 7	Monday, June18	Bacterial Diversity	18
	Wednesday, June 20	Archaeal Diversity	19
WEEK 8	Monday, June 25	Eukaryotic Diversity	20
	Wednesday, June 27	Microbial Ecology	21
WEEK 9	Monday, July 02	EXAM III (120 POINTS)	16, 18, 19, 20, 21
	Monday, July 09	Microbes in Global Elemental Cycles	22
WEEK 10	Wednesday, July 11	Human Microbiota & Innate	23
		Immunity	
	Monday, July 16	Adaptive Immune Response	24
WEEK 11	Wednesday, July 18	Microbial Pathogenesis	25
	Monday, July 23	Microbial Diseases/Antimicrobial	26/27
		Therapy	
WEEK 12	Wednesday, July 25	Clinical Microbiology &	28
		Epidemiology	
	Monday, July 30	EXAM IV (120 POINTS)	22,23,24,25,26,27,28
WEEK 13	Wednesday, Aug 01	FINAL EXAM	ALL
		(Comprehensive)	

NOTE: These topics are tentative and thus may be subject to change

Course Syllabus Receipt and understanding acknowledgment

I have read and understand the information in this syllabus distributed by Dr. Anne-Marie Kosi-Kupe.

I have also read all policies and understand the consequences of not following them.

Student's Name (printed)-----

Student's signature----- Date-----

Please submit on canvas under Assignment: "Bio2200 Syllabus Receipt& Acknowledgment"