

## **CHANGE IN COURSES**

C11

February 4, 2016

Memorandum

To: Sandra Williams  
 Associate Registrar

Through: Dr. Kim Dooley  
 Associate Dean

*David W. Reed for KD*

From: Department of Agriculture Economics  
 Dr. Fred Boadu

*Fred Boadu*

Subject: Request to Include Zero Credit Hour in Existing Courses

The College of Agriculture and Life Sciences, Department of Agricultural Economics, request the following existing courses to be changed to include a zero credit hour option effective 201631. No other changes are being made to the course.

Department Name	Course Number/Title	Existing Credit Hours	Proposed Credit Hours	Purpose
Agricultural Economics	AGEC 285	1-4	0-4	Zero credit option will be used to track student participation in internships
Agricultural Economics	AGEC 291	1-4	0-4	Zero credit option will be used to track student participation in internships
Agricultural Economics	AGEC 484	1-6	0-6	Zero credit option will be used to track student participation in internships
Agricultural Economics	AGEC 485	1-6	0-6	Zero credit option will be used to track student participation in internships
Agricultural Economics	AGEC 491	1-6	0-6	Zero credit option will be used to track student participation in internships

C12  
**Texas A&M University**  
**Departmental Request for a Change in Course**  
**Undergraduate ♦ Graduate ♦ Professional**

• Submit original form and attachments •

Form Instructions

1. Course request type:  Undergraduate     Graduate     First Professional (DDS, MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Department of Biology
3. Course prefix, number and complete title of course: BIOL 456 MEDICAL MICROBIOLOGY

Attach a brief supporting statement for changes made to items 4a thru 4d, and 10 below.

4. Change requested
- a. Prerequisite(s): From: \_\_\_\_\_ To: \_\_\_\_\_
- b. Withdrawal (reason): \_\_\_\_\_
- c. Cross-list with: \_\_\_\_\_
- Cross-listed courses require the signature of both department heads.
- d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
- e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. **Attach a course syllabus.**
5. Is this an existing core curriculum course?  Yes     No
6. If grade type is changing for existing course, indicate the new grade type:  Grade     S/U     P/F (CLMD)
7. If this course will be stacked, please indicate the course number of the stacked course: \_\_\_\_\_
- I verify that I have reviewed the FAQ for *Export Control Basics for Distance Education* (<http://vpr.tamu.edu/resources/export-controls/export-controls-basics-for-distance-education>).
9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

Prefix	Course #	Title (excluding punctuation)										
BIOL	456	Medical Microbiology										
Lect.	Lab	Other	SCH	CIP and Fund Code	Admin. Unit	FICE Code				Level		
4.00	0.00		4.00	26.0503 0002	0440	0	1	0	2	9	8	4

b. Change to:

Prefix	Course #	Title (excluding punctuation)													
BIOL	456	Medical Microbiology													
Lect.	Lab	Other	SCH	CIP and Fund Code	Admin. Unit	Acad. Year				FICE Code					
3.00	0.00		3.00	26.0503 0002	0440	16	-	17	18	0	1	0	2	9	8
												Level	4		

Approval recommended by:

Nancy K. Versman    2-1-16    \_\_\_\_\_    2/8/16  
 Department Head or Program Chair (Type Name & Sign)    Date    Chair, College Review Committee    Date

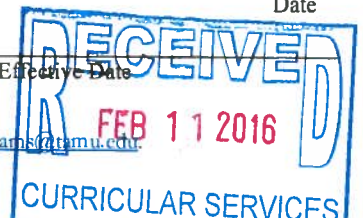
[Signature]    \_\_\_\_\_    2/9/16  
 Department Head or Program Chair (Type Name & Sign)    Date    Dean of College    Date

Submitted to Coordinating Board by: \_\_\_\_\_    Chair, GO or UCC    Date

Associate Director, Curricular Services

Date

Effective Date



# BIOL 456-MEDICAL MICROBIOLOGY Fall 2016

Lecture: MWF 10:20-11:10 in ENPH 205

## Instructor: Dr. Rita B. Moyes

office: 301B BSBE tel: 979-862-7485  
office hours: TR 2:30-4:30 or by appointment  
email: rita-b-moyes@tamu.edu

## Required Texts:

- Medical Microbiology 7<sup>th</sup> Ed. By Murray, Rosenthal, and Pfaller
- Demon in the Freezer by Richard Preston

## Course Description and Prerequisites:

### BIOL 456. Medical Microbiology (3-0). Credit 3

Microbiology, epidemiology and pathology of human pathogens with an emphasis on bacterial agents.

Prerequisite: BIOL 351 or approval of instructor.

### Course objectives:

Medical Microbiology course objectives aim to provide an understanding of the scientific basis for prevention, pathogenesis, diagnosis, and treatment of infectious human diseases. The course presents a broad introduction to immunology, general and pathogenic microbiology, and host responses to infectious agents. The student should develop an understanding of the biological characteristics of pathogenic microorganisms, the course of their infections, the functions of the immune system, and the actions of antibiotics against these pathogens.

Upon completion of this course, the student should be able to:

- use microbiology concepts and terminology in describing important aspects of microbial cell physiology and virulence factors and toxin production
- outline the host defense mechanisms against pathogens and how the host response can also contribute to the pathogenesis of the disease
- describe the basis of pathogenic process of disease and how it correlates to the areas of epidemiology, chemotherapy, and immunology
- understand the mechanisms of prevention of disease especially in the area of vaccine production

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Test A	100	Monday Sept 26
Test B	100	Friday October 21
Test C	100	Friday November 11
Test D	100	December 13 (Tuesday 8-10am) Final Exam
Quiz	120	(every weds -grade based on best 12)
Friday Articles	150	(small group discussions)

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670 / 6.7 = average

(A=90-100, B=80-89, C=70-79, D=60-69, F=<59)

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### Invited Speakers:

- Dr. Nancy Street- Associate Dean UT Southwestern Medical Center at Dallas Southwestern Graduate School of Biomedical Sciences- Summer Undergraduate Research Fellowships
- Rana Gunjot- Research Scientist with Luminex
- The **final exam** will be a **noncomprehensive exam**; that is, it will only cover the material presented after the material for Test C.
- Exam questions will be drawn mainly from lecture material but will also come from study questions and from reading assignments. Format of exams will be mostly short answer, discussion, and problem solving questions.
- **Missed lecture exams, weekly quizzes, and journal articles:** If you miss an exam or assignment for a University Excused Absence (<http://student-rules.tamu.edu/rule07>), you are allowed to take a make-up exam or assignment. Please contact the instructor within 48 h of the missed exam or assignment in person, by email, or by phone to request a make-up. The make-up exam will be held within one week of the regularly scheduled exam or assignment. ***\*Remember an excuse from a Doctor's appointment is not valid unless it was necessary to see the Doctor during class time and you are deemed infectious or too sick or injured to attend class.***

**Class attendance:** You have a quiz every Wednesday and a journal discussion every Friday. Unexcused absences cannot be made up (<http://student-rules.tamu.edu/rule07>). Wednesday Quizzes- total of 120 points. Each quiz is 10 pts each and your best 12 quiz grades will be used to calculate your quiz grades. Quizzes will be an individual effort unless otherwise indicated.

- Students have the right to challenge a question on the examination. However, the following rules must be followed:
  - Challenges must be made within 7 days after the examination is returned to the class.
  - Challenges must be in writing using text page number(s) to justify your challenge.
  - Challenges are to be placed on the credenza outside of my office. I will evaluate your test and then give you my response. My decision will be final and I reserve the right to re-grade your entire test.

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>.

"Misconduct in research or scholarship includes fabrication, falsification, or plagiarism in proposing, performing, reviewing, or reporting." Cheating and plagiarism will be reported to the honor council. <http://aggiethonor.tamu.edu>

Lecture Topic	Lecture pages in book	Assigned Text Reading (includes all associated charts, figures, and boxes within the reading)
Introduction		<b>Rhinoviruses p. 503-504</b> <b>Enterobacteriaceae p. 258</b> (reading ends at the beginning of the section titled “clinical diseases”)
Bacterial Cell Wall	112-119	<b>Teichoic acids through spores p.118-121</b> <b>Pathogenesis of Fungal Disease p. 611-613</b> (does not include tables and reading ends at the beginning of the section titled “Presentation of Surface Antigen modulates the T helper...”)
Normal Flora	6-10	<b>Opportunistic Mycoses &amp; Candidiasis p. 675-680</b> (reading ends at the beginning of section titled “clinical symptoms”)
Innate Immune Defenses	37-46	<b>Mycotoxins &amp; Aflatoxins p.706-708 and clinical case 75-1 on p.709</b>
<ul style="list-style-type: none"> <li>• overview</li> </ul>		
<ul style="list-style-type: none"> <li>• cells</li> <li>• phagocytosis</li> <li>• Ag presentation</li> <li>• Inflammation</li> <li>• Fever</li> </ul>	37-46 50-57 67-68 57-60 58-59	<b>Mechanisms of Viral Pathogenesis p.410-412</b> (intro through viral pathogenesis up to but not including lytic infections)
<ul style="list-style-type: none"> <li>• Cytokines/IFN</li> <li>• Complement</li> </ul>	38,57-59 47-50,65-66,86-90	<b>Pathogenesis of Parasitic diseases p.722-725</b>
Specific Immune Defenses		<b>Flagellates p. 748-751</b>
<ul style="list-style-type: none"> <li>• Antigenes</li> <li>• Antibodies</li> <li>• T cells</li> </ul>	61-62 72-75 62-72	<b>Chlamydia p. 381-384</b> (reading ends at the beginning of the section titled “clinical diseases”)
Vaccines	100-106	<b>Enteroviruses through polio infections p.497-500</b>
Epidemiology		<b>Ticks p. 825-826</b> <b>Sucking Lice, Fleas, p. 830-831</b>
Mechanisms of Pathogenesis	138-146	<b>Neisseria p. 248-253</b> (reading ends at the beginning of the section titled “ <i>Neisseria meningitidis</i> - clinical diseases”)
<b>Bacteria and their Diseases</b>		
<i>Streptococcus pyogenes</i>	188-196	<b>Staphylococcus aureus p. 176-184</b> (Pathogenesis & Immunity through clinical diseases up to but not including <i>Staphylococcus epidermidis</i> )
<i>Bacillus</i>	209-215	<b>Treponema pallidum p.350-354</b> (reading ends at the beginning of the section titled “treatment, prevention, and control”) <b>Yersinia p.267-269</b>
<i>Clostridium</i>	327-338	<b>Vibrio p.273-277</b> (intro through clinical diseases up to but not including <i>laboratory diagnosis</i> )
<i>Mycobacterium</i>	235-246	<b>Bordetella p. 304-307</b> (intro through clinical diseases up to but not including <i>laboratory diagnosis</i> )

## MICR 456- Friday Journal Assignments for Fall 2015

DATE	TITLE	AUTHOR	REFERENCE
<b>9/2/16</b>	The Past is Never Dead-Measles Epidemic	David M. Morens	EID 21(7):1257-1260
	Filoviruses (including Clinical case 58-1)	Murray et al	Textbook p.537-538
	Ebola drugs still stuck in lab	Martin Enserink	Sciencemag.org July (2014) 345 (6195):364-365
	Ebola:Is it fair that Americans Received the Treatment?	Art Caplan	Medscape. Aug 21, 2014
<b>9/9/16</b>	The Bacteria Fight Back ( including section on C. difficile)	Gary Taubes	Science (July 2008) 321:356-361
	Fecal Transplantation		<a href="http://www.hopkinsmedicine.org">www.hopkinsmedicine.org</a>
<b>9/16/16</b>	Temple Monkeys and Health Implications	L. Jones-Engel	EID 12(6): 900-905
	Gut Flora, Losing Weight	David Williams	<a href="http://www.drdauidwilliams.com">www.drdauidwilliams.com</a> 2015
<b>9/23/16</b>	Bacillus anthracis Incident Tokyo	H. Takahashi	EID 10(1):117-120
	Triclosan Promotes S. aureus nasal colonization	Adnan Syed	Mbio.asm.org(Mar/Apr 2014) 5(2):1-4
<b>9/26/16</b>	<b>TEST 1 (MONDAY)</b>		
<b>9/30/16</b>	Antimicrobial Mechanisms of Phagocytes-part 1	Ronald S. Flannagan	Nature Reviews May 2009 7:355-360
<b>10/7/16</b>	Antimicrobial Mechanisms of Phagocytes-part 2	Ronald S. Flannagan	Nature Reviews May 2009 7:360-366
<b>10/14/16</b>	Ebola Virus Entry	Sven Moller-Tank	PLOS Pathogens April 30,2015
	Structure of protective Abs –Ebola virus	Charles D. Murina	PNAS Dec 2, 2014 111(48):17182-17187
<b>10/21/16</b>	<b>TEST 2</b>		
<b>10/28/16</b>	Advancement towards an approved vaccine to target Plasmodium falciparum malaria	A. Taylor-Robinson	Intl J. Imm.2014 2(5):31-39
<b>11/4/16</b>	Bedeveled by Dengue	Beth Mole	The-scientist.com(Mar 2013) Article no. 34434
	Guinea Worm Eradication		<a href="http://www.cartercenter.org/health/guinea_worm">www.cartercenter.org/health/guinea_worm</a>
	GWD Epidemiology &Risk Factors		<a href="http://www.cdc.gov/parasites/guineaworm/epi.html">www.cdc.gov/parasites/guineaworm/epi.html</a>
<b>11/11/16</b>	<b>TEST 3</b>		
<b>11/18/16</b>	Mycobacterial Furunculosis associated with Footbaths	K. Winthrop	N Engl J Med 346(18):1366-1371
	Biased Viruses Suggest New Vaccine Strategy	Martin Enserink	Science320(27June 2008)p.1709
	A Milestone in Africa (polio)	Donald McNeil Jr.	<a href="http://www.msn.com/en-us/news/world/a-milestone-in-africa">www.msn.com/en-us/news/world/a-milestone-in-africa</a>
<b>12/13/16</b>	<b>TEST 4</b>		

### **BIOL 456 –Friday Journal Articles- articles will be posted in ecampus.**

- EID= Emerging Infectious Diseases which is an online journal put out by the CDC. To access these articles go to [www.cdc.gov/eid](http://www.cdc.gov/eid)
- Science articles can be accessed at [www.sciencemag.org](http://www.sciencemag.org)
- To access other articles: On a TAMU computer go to <http://library.tamu.edu>
- Click on **ejournal** and type the name of the journal in the search word box.
- (CID = Clinical Infectious Diseases)
- Click on the correct journal then click on a site that provides the journal covering the volumes required (usually the first site).
- **Everyone** will be responsible for the assigned Friday journal readings. You will have an individual quiz and a group quiz.
- Be sure to look up any words you don't know
- Some papers assume you are familiar with the organism or disease- be sure to look it up if you don't know the background info.

### **Friday Journal Articles Total- 150 pts (15 pts/Friday)**

- 1) **Individual journal quiz of 5 multiple choice questions =5pts**
- 2) **Group journal quiz of same 5 multiple choice questions =5pts**
- 3) **Group discussion of ~3-6 discussion questions grade=5pts**

**You will meet as the same group throughout the semester and I will assign the groups**

**You may have one 3x5 card of information that you can use when you meet as a group (you will not be able to refer to the journal articles)**

**\*No electronics of any kind during the journal quizzes and discussions- you will receive a zero on the assignment**

**TEXAS A&M UNIVERSITY**  
**AT GALVESTON**



**TAMUG  
CHANGE IN COURSES**



## Brief Supporting Statement

MARB 303 (Biostatistics): Adding MATH 142 as a pre-requisites because students can choose to take either MATH 151 or MATH 142 to satisfy one of their math electives.

John R. Schwarz, Regents Professor and Head  
Department of Marine Biology  
Director, Seafood Safety Laboratory  
Texas A&M University, Galveston Campus  
P.O. Box 1675, OCSB Room 268  
Galveston, Texas 77553-1675

(409) 740-4453 (voice)

(409) 740-5001 (fax)

[schwarzj@tamug.edu](mailto:schwarzj@tamug.edu)



## Brief Supporting Statement

MARB 310 (Cell Biology): Removing sentence in course description because the suggested course is no longer offered or required for the MARB degree.

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Director, Seafood Safety Laboratory  
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## Brief Supporting Statement

MARB 408 (Marine Botany): Deleting sophomore status in order to align equally with MARB 430 since students have the option to take MARB 408 in spring or MARB 430 in the fall to satisfy their plant course requirement.

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## Brief Supporting Statement

MARB 425 (Marine Ecology): Removing MARB 408 and 435 as a pre-requisite because most seniors take these courses during the same semester due to when the courses are offered.

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