Cover Sheet: Request 10623

MCB3023 - change organic chamistry prerequisite requirement

Info

Process	Course|Modify|Ugrad/Pro
Status	Pending
Submitter	Oli,Monika moli@ufl.edu
Created	12/14/2015 1:50:32 PM
Updated	2/12/2016 11:41:45 AM
Description	We would like to request to change organic chemistry to be a co-requisite instead of a pre-requisite for MCB3023.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Microbiology and Cell Science 514910000	Triplett, Eric		12/15/2015
No document changes					
College	Approved	CALS - College of Agricultural and Life Sciences	Brendemuhl, Joel H	Corrections requested by the CALS CC have been made and the request is now approved.	1/22/2016
No document changes					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Case, Brandon	Added to the February agenda	1/22/2016
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			1/22/2016
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|Modify for request 10623

Info

Request: MCB3023 - change organic chamistry prerequisite requirement
Submitter: Brendemuhl,Joel H brendj@ufl.edu
Created: 1/22/2016 4:00:24 PM
Form version: 3

Responses

Current Prefix: MCB
Course Level: 3
Number : 023
Lab Code : None
Course Title : Principles of Microbiology
Effective Term : Earliest Available
Effective Year : Earliest Available
Requested Action : Other (selecting this option opens additional form fields below)
Change Course Prefix?: No
Change Course Level?: No
Change Course Number?: No
Change Lab Code?: No
Change Course Title?: No
Change Transcript Title?: No
Change Credit Hours?: No
Change Variable Credit?: No
Change S/U Only?: No
Change Contact Type?: No
Change Rotating Topic Designation?: No
Change Repeatable Credit?: No
Change Course Description?: No
Change Prerequisites?: Yes
Current Prerequisites: BSC 2010 and BSC 2010L, or equivalent, with minimum grades of C; BSC 2011 and BSC 2011L, or equivalent, or AGR 3303, with minimum grade/s of C; CHM 2200 or CHM 2210, with minimum grade of C; microbiology majors only.
Proposed Prerequisites: BSC 2010 and BSC 2010L, or equivalent, with minimum grades of C; BSC 2011 and BSC 2011L, or equivalent, or AGR 3303, with minimum grade/s of C; microbiology majors only.
Change Co-requisites?: Yes
Current Co-requisites: none
Proposed Co-requisites: CHM 2200 or CHM 2210, with minimum grade of C
Rationale: We would like to change organic chemistry to be a co-requisite instead of it being a pre-requisite. The reason is that the students don't need the knowledge of organic chemistry to succeed in the class as it is currently taught. Secondly this change will allow the students to take microbiology earlier in their academic career and thus provides them more time to take other classes in their major (Microbiology and Cell Science). This request is approved by the instructors.

MCB 3023: Principles of Microbiology, Fall 2015 (3 credits)

MCB3023 is an upper division course on Microbial Biology. This course will cover eukaryotic and prokaryotic microbes and viruses, but will emphasize on Bacteria. This course will provide a conceptual background in microbiology sufficient to enable students to take more advanced courses in related fields.

Student Learning Outcomes – After successful completion of this course, students will be able to:

1) Compare and contrast basic groups of microbes, including Eukaryotic microbes, Archaea, Bacteria and viruses.
2) Compare and contrast major pathways of anabolism and catabolism. List the key products of each pathway.
3) Describe how microbes can adapt to their environment.
4) Compare and contrast the acquisition of novel genetic information in microbes via mutations and genetic exchange.
5) List different types of symbiotic interactions between microbes and other organisms, including commensalism, mutualism, and parasitism, and provide examples of each.
6) Compare and contrast examples of beneficial and pathogenic microbe-plant and microbe-animal interactions.
7) Compare and contrast beneficial and harmful use of organisms, including applications in food and biotechnology.

Lectures: Online through Canvas

Instructors: Dr. Claudio F Gonzalez Office: Genetics Institute, Room 306

Dr. Graciela L Lorca Office: Genetics Institute, Room 307

WebPage: Canvas (https://ufl.instructure.com/). Please select MCB 3023.

On line help with classroom technology: http://helpdesk.ufl.edu/

Prerequisite: BSC 2010 and BSC 2010L, or equivalent, with minimum grades of C; BSC 2011 and BSC 2011L, or equivalent, or AGR 3303, with minimum grade/s of C; CHM 2200 or CHM 2210, with minimum grade of C; microbiology majors only.

Communication: for questions regarding class and textbook content use the Discussion Board, for issues on Home Work Assignments, class organization check first the syllabus, the announcements and calendar on Canvas, then post your questions on the discussion board. For all other issues contact Claudio Gonzalez or Graciela

Lorca.

Contact Information: Use TEACHER ROLE is your emails through Canvas

Dr. Claudio F Gonzalez:

Email (the most efficient): ONLY use Canvas e-mail (If you do not have access to the Canvas platform and need to contact us for an emergency, use cfgonzalez@ufl.edu)
Phone: 273 8088 (please leave a message).
Office hours: Fridays 2-4 PM at Genetics Institute, Room 306. By appointment: (only if you cannot make it to office hours) send an e-mail with three suggested times and I will choose one for us to meet.

Dr. Graciela L Lorca:

Email (the most efficient): ONLY use Canvas e-mail (If you do not have access to the e-learning platform and need to contact us for an emergency, use glorca@ufl.edu)

Office hours: Fridays 2-4 PM at Genetics Institute, Room 307. By appointment: (only if you cannot make it to office hours) send an e-mail with three suggested times and I will choose one for us to meet.

- Discussion Board: A discussion board is available in Canvas. It is very useful, please post and answer your questions on class content and organization there. Postings and answers are monitored by the instructors to make sure no mistakes get propagated. There are several discussion themes. Please post your questions in the adequate section. The discussion board is also used for certain graded assignments to prepare for lecture and for the group monograph assignment.

Textbook: The required textbook for this course is: Prescott's Microbiology, Willey-Sherwood- Woolverton. McGraw-Hill, NY. 9th Edition.

Assessment of learning

- Assignments (400 points): Activities will be assigned by module. The activities include timed multiple choice quizzes, study cases etc. The activities are mandatory and count towards the final grade. They should be completed by the deadline indicated.
- Exams (600 points): Exams will assess your knowledge of the concepts covered in this class and your ability to apply them by solving problems that you will not have been previously exposed to. Students must sign up on ProctorU at least 72h in advance.

The assessment will be performed in Four Mandatory Mid-term exams. The student will be given the option to take a final cumulative exam to improve the grade obtained through the mid-term exams.

- Mid-terms (600 points): There will be four 50 minutes proctored mid-term exams (150 points each) with multiple choice questions, true/false, fill in the blanks questions and short answers questions. All exams are mandatory and will count towards the final grade. Exams will test learning and understanding of material presented in the textbook, in lectures and in

assignments as well as integration and application skills.

- Final (optional-600 points). The final exam is optional. It will be held during final's week. Questions will assess basic microbiology concepts and advanced comprehension. The final cannot be taken if the student missed any of the mid-term exams. The student will keep the highest grade (either the final's grade or the addition of the four midterm tests).

Make-Up policy: No make-up exams. If one exam is missed, it will result in a score of 0 for the test (see below for "Excused absences").

Excused absences:

Documentation MUST be provided for absences caused by serious illness, accident, jury duty, or death in the immediate family. You must contact the instructor IN ADVANCE of the missed exam and I will arrange an alternative time for the exam. Excused absences are consistent with university policies in the undergraduate catalog (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) and require appropriate documentation

After the exam: The grades will be available on Canvas three days after the exam, unless notified by an announcement. Test questions will be made available through Canvas.

Grading: Straight scale

A	900 or above
A-	860-899
B+	830-859
B	790-829
B-	750-789
C+	720-749
C	690-719
C-	660-689
D+	630-659
D	600-629
D-	570-599
E	560 or below

The grading scale may be adjusted slightly, based on class performance.
More information on grades and grading policies is here:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the

possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Other UF Counseling Services: available on-campus for students having personal problems or lacking clear career and academic goals includes:

- Student Mental Health, Student Health Care Center, 392-1171, personal counseling.
- Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual assault counseling
- Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling

Weekly outline

	Module	Topic	Chapter	Instructor	Book
Week 1	1	a. Methods to study microbes	2	Gonzalez	b. Bacterial cell
Week 2	1	structure	3	Gonzalez	b. Bacterial cell structure 3 Gonzalez
Week 3	1	c. Archaeal cell structure	4	Gonzalez	d. Eukaryotic cell
9/14/15	1	structure	5	Lorca	
		e. Virus structure	6	Gonzalez	
		Module 1 Assignment/s submission			
9/16/15 Test 1 (Module 1)					
Week 4	2	a. Microbial nutrition	7	Gonzalez	b. Microbial growth 8
9/27/15	2	Gonzalez c. Control of microorganisms	9	Lorca	
Week 5	2	c. Control of microorganisms	9	Lorca	
	2				
		Module 2 Assignment/s submission			
Week 6	3	a. Introduction to metabolism	10	Gonzalez	b. Catabolism:
10/5/15	3	Energy release and Conservation	11	Gonzalez	c. Anabolism: The
	3	use of energy and biosynthesis	12	Lorca	
		Module 3 Assignment/s submission			
10/7/15 Test 2 (Modules 2 and 3)					
Week 7	4	a. Bacterial genome replication and expression	13	Lorca	a.
Week 8	4	Bacterial genome replication and expression	13	Lorca	a.
10/25/15	4	Bacterial genome replication and expression	13	Lorca	b.
Week 9	4	Regulation of bacterial cellular processes	14	Lorca	b.
	4	Regulation of bacterial cellular processes	14	Lorca	c.
	4	Mechanisms of genetic variation	16	Lorca	
	4	c. Mechanisms of genetic variation	16	Lorca	
		Module 4 Assignment/s submission			
10/30/15	5	a. Recombinant DNA technology	17	Lorca	
	5	b. Genomics	18	Lorca	
		Module 5 Assignment/s submission			
Week 10					
11/2/15 Test 3 (Module 4 and 5)					
11/8/15	6	a. Evolutionary processes	1	Gonzalez	
	6	b. Microbial taxonomy	19	Gonzalez	
Week		Module 6 Assignment/s submission			

11		
	7	a. Methods of microbial ecology 29 Lorca
	7	b. Microbial interactions 32 Lorca
	7	c. Human–microbe interactions 35 Lorca

11/15/15		Module 7 Assignment/s submission
	8	a. Microbiology of Food 41 Lorca
Week 12	8	b. Biotechnology and Industrial microbiology 42 Gonzalez
		Module 8 Assignment/s submission
Week 13		
11/23/15 Test 4 (Module 6, 7 and 8)		
Week 14		
	9	a. TED Talk 1
	9	b. TED Talk 2
12/4/15		Module 9 Assignment/s submission
12/16/15		**Optional Cumulative Final**