

Cover Sheet: Request 10622

Microbes without Borders - new class approval

Info

Process	Course New Ugrad/Pro
Status	Pending
Submitter	Oli,Monika moli@ufl.edu
Created	12/14/2015 1:32:52 PM
Updated	4/12/2016 5:09:41 PM
Description	Microbes play a significance role for you personally, for our communities and for the whole planet. This course introduces students to the amazing world of microbiology. Readings, discussions and activities will provide a mind opening, global journey to acknowledge the great things microbes do for us.

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 and revisions requested by the CALS CC have been made.	3/3/2016
Replaced Microbes without borders syllabus 12-14-15.docx					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Case, Brandon	Added to the April agenda.	3/21/2016
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/21/2016
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|New for request 10622

Info

Request: Microbes without Borders - new class approval

Submitter: Oli,Monika moli@ufl.edu

Created: 2/25/2016 3:51:31 PM

Form version: 3

Responses

Recommended PrefixMCB

Course Level 2

Number xxx

Lab Code None

Course TitleMicrobes without Borders

Transcript TitleMicrobes w/o Borders

Effective Term Earliest Available

Effective YearEarliest Available

Rotating Topic?No

Amount of Credit3

Repeatable Credit?No

S/U Only?No

Contact Type Regularly Scheduled

Degree TypeBaccalaureate

Weekly Contact Hours Web

Category of Instruction Introductory

Delivery Method(s)Online

Course Description Microbes play a significance role for you personally, for our communities and for the whole planet. This course introduces students to the amazing world of microbiology. Readings, discussions and activities will provide a mind opening, global journey to acknowledge the great things microbes do for us.

Prerequisites None

Co-requisites None

Rationale and Placement in Curriculum This course is designed as introduction to microbiology and a survey of the different branches of microbiology and cell science. The course is also part of the UFIC "International Scholars Program" and aligned with the goals of UF's quality enhancement plan to enhance globalization of the gator nation. The challenge project will enhance global awareness and critical thinking of the students. We currently don't have nay introductory courses in the department and the first microbiology course we offer is MCB3023.

Course Objectives • Have examined the building blocks of life and DNA replication, understand mutations and resistance mechanisms

- Can name and explain the basic historic milestones that caused paradigm shifts in our thinking and behavior as it pertains to microbiology
- Can define and identify the basic difference between groups of microbes (viruses, bacteria, protists, parasites and fungi)
- Show increased awareness of global microbial issues and geographic locations
- Can intellectually discuss controversial topics like GMOs, vaccines and antibiotic resistance
- Defend the importance of microbes in their personal lives, their community and across the globe
- Can discuss scientifically the difference between the Germ theory of disease and the hygiene hypothesis

- Are familiar with vocabulary and concepts in microbiology to excel in other courses like MCB3023

Course Textbook(s) and/or Other Assigned Reading Alcamo's Microbes and Society (4th edition, 2015) by Pommerville and Weeks

Other literature, articles and audiovisual material will be used to supplement the textbook and activities in the class.

Weekly Schedule of Topics	Week	Topic
1		Intro, syllabus
2		How we see and examine Microbes
3		Viruses and Prokaryotes
4		Protists and Fungi
5		Extremophiles and Metabolism
6		Art and Biodegradation
7		Bioterrorism and Biotechnology
8		Diseases and Epidemics
9		Food - Mold ripened or rotten
10-14		Global Microbial Challenge (team project)
15		The future of microbes and interesting careers
16		Why Microbiology? revisited

Grading Scheme Activity Types

Percent of grade

Portfolio activities and travel log	20
Discussions, persuasions and debates	20
Module assessments/quizzes	30
Global microbial challenge	

30

TOTAL

100

Instructor(s) Monika Oli

Microbes without Borders

MCB2xxx

3CR – WEB (Canvas <http://elearning.ufl.edu/>)

Instructor: Monika Oli, PhD, MSE
<http://microcell.ufl.edu/contact-us/directory/faculty/monika-oli/>
Lecturer and Undergraduate Coordinator
Department of Microbiology and Cell Science, room 1049
moli@ufl.edu; 352-3928434

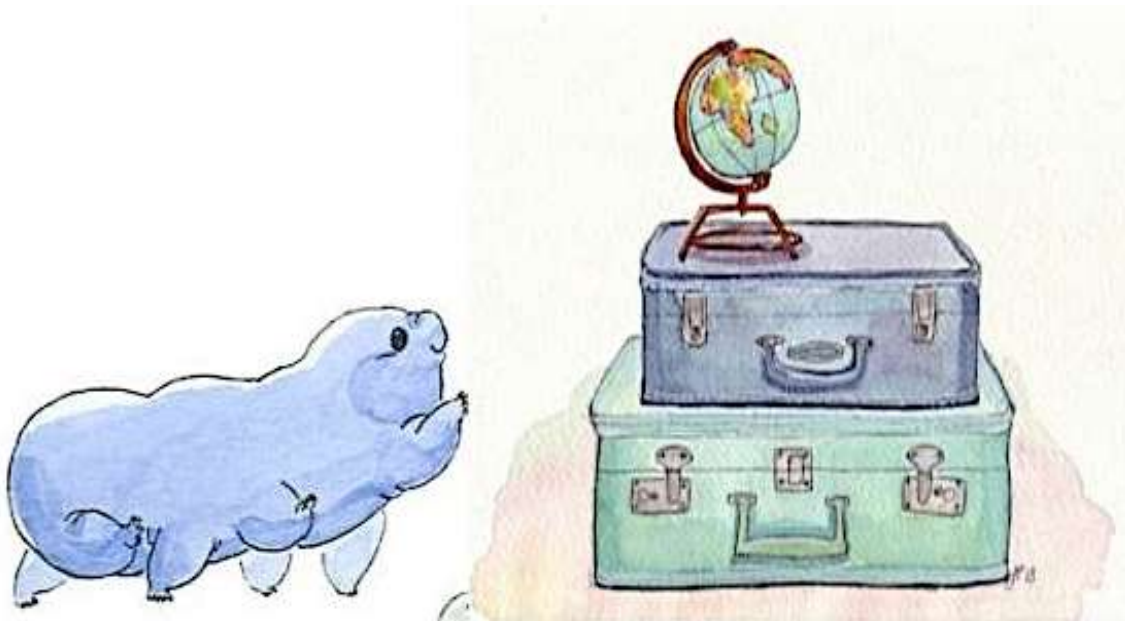
Prerequisites: no prerequisites required, open to all majors across campus, course is also a part of the UF International scholars program

<https://www.ufic.ufl.edu/UAP/InternationalScholarsProgram.html>

Offered Fall

Introduction to Microbes without Borders by Dr. Oli:

<https://mediasite.video.ufl.edu/Mediasite/Play/8d8d0e326ca14cd494d37fbbca2b37811d>



Office Hours: *Will be announced at the beginning of the semester or by appointment*

Course TA: *TBD*

Course Communications: Please send general questions to the TAs first. If you need to communicate with me directly, please email me at moli@ufl.edu - emails through Canvas may not be answered!

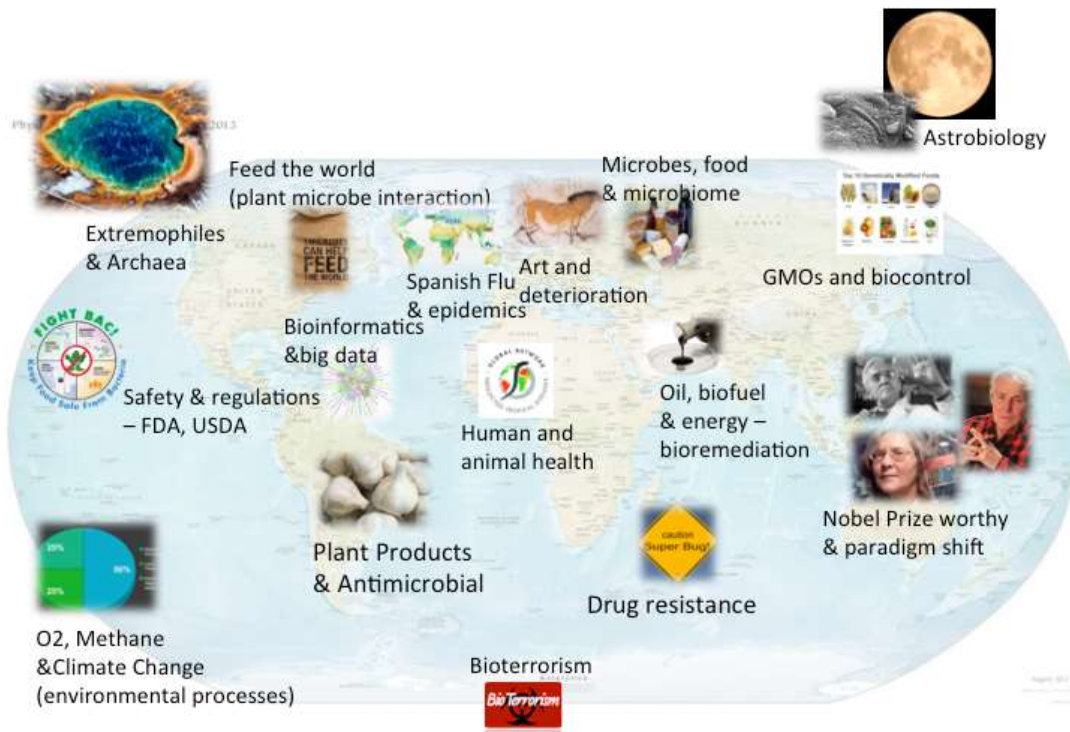
Required Text: Alcamo's Microbes and Society (4th edition, 2015) by Pommerville and Weeks. The textbook is available as cheaper e-Book and students will purchase Access Codes (necessary for redemption of eBook) for the book directly through www.jblearning.com. Detailed reading materials are assigned week by week. Additional readings and audiovisual sources will be required and will be provided to the students.

Course Description: Microbes play a significant role for you personally, for our communities and for the whole planet. This course introduces students to the amazing world of microbiology. Readings, discussions and activities will provide a mind opening, global journey to acknowledge the great things microbes do for us.

Purpose of Course: This course will make you aware of the importance of the diversity of microbes and the significance in our every day lives. Different microbes are explored in readings, audiovisual materials and hands on explorations. Topics include viruses, bacteria, parasites and fungi, microbes and art, bioterrorism, GMOs and biotechnology, food production and the role of microbes in agriculture. Issues like disease spread and prevention, vaccines and drug resistance will be examined. Students will participate in a challenge project to solve some of the global issues that are currently facing humanity.

Course Goals and/or Objectives: *By the end of this course, students*

- *Have examined the building blocks of life and DNA replication, understand mutations and resistance mechanisms*
- *Can name and explain the basic historic milestones that caused paradigm shifts in our thinking and behavior as it pertains to microbiology*
- *Can define and identify the basic difference between groups of microbes (viruses, bacteria, protists, parasites and fungi)*
- *Show increased awareness of global microbial issues and geographic locations*
- *Can intellectually discuss controversial topics like GMOs, vaccines and antibiotic resistance*
- *Defend the importance of microbes in their personal lives, their community and across the globe*
- *Can discuss scientifically the difference between the Germ theory of disease and the hygiene hypothesis*
- *Are familiar with vocabulary and concepts in microbiology to excel in other courses like MCB3023*



Goals for the Globalization of the Gator Nation: By the end of this course and with help of the activities, students will be able to

- Identify, describe, and explain global and intercultural conditions and interdependencies
- Analyze and interpret global and intercultural issues.
- Communicate effectively with members of other cultures

“You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose. You're on your own. And you know what you know. And YOU are the one who'll decide where to go...”
 — Dr. Seuss, Oh, The Places You'll Go!

Teaching Philosophy: The overarching goal for my teaching program is to provide a holistic learning experience that fosters students’ global awareness and critical-thinking skills, enhances their personal and professional development, and prepares them for the real world. Specifically, the goals for my students in this class are to:

- Be inspired to understand the global importance of microbiology
- Develop creative and critical habits of the mind
- Expand students’ comfort zone and global and international awareness
- Empower students to make informed decisions based on scientific evidence

Instructional Methods: This course is a creative discourse into the world of microbiology. The fundamental knowledge and definitions will be acquired by textbook and other readings. Each week will have a “practical” component where you will have to explore a given topic, go on a field trip or create something at home. Weekly discussions should stimulate teamwork and also critical thinking. A 4-week block of the course is

dedicated to the “Global microbiological challenge project”, where students will decide on the problems to be solved and teams of students will provide in depth solutions to their chosen problem.

Although it is an online class the course is designed to include weekly activities and teamwork so students will feel as a “part of the class”.

COURSE POLICIES

Attendance Policy: *this is a Web class – no physical attendance is required*

Quiz/Exam Policy: Quizzes, assignments and activities are due on the announced date (usually Sunday night at 11:59pm). For makeup policy, see below.

Course Technology: Canvas will be used as e-learning platform (<http://elearning.ufl.edu/>). Your ePortfolio in WIX will be used for project assignments and a link to your page will be counted as assignment as indicated.

Grading Policies:

Graded activities

The table below shows the activity types contained within this course and the assigned points to determine the final course grade.

Activity Types	Percent of grade
Portfolio activities and travel log	20
Discussions, persuasions and debates	20
Module assessments/quizzes	30
Global microbial challenge	30
TOTAL	100

Letter grades for the course will be based on the following grading scale:

Letter Grade	Percentage	Grade Point
A	92–100%	4
A-	90–91.9%	3.67
B+	87–89.9%	3.33
B	82–86.9%	3
B-	80-81.9%	2.67
C+	77–79.9%	2.33
C	72–76.9%	2

C-	70-71.9%	1.67
D+	67-69.9%	1.33
D	62-66.9%	1
D-	60-601.9%	0.67
E,I,F	<60%	0

Grading Scale: For more information, see: <http://www.isis.ufl.edu/minusgrades.html>

Course Schedule (tentative):

Week	Topic	Activity	Reading/Video	Discussion topics
1	Intro, syllabus	Microbes across campus	Ch 1-2	Introductions
2	How we see and examine Microbes	Microscopy practice and DNA replication	Ch 1-4	Microbes across campus
3	Viruses and Prokaryotes	Kitchen Lab	Ch 5-6	Vaccines
4	Protists and Fungi	Fungi identification or fungi scavenger hunt	Ch 7-8	Antibiotics and drug resistance
5	Extremophiles and Metabolism	Extreme living	Ch 9-10, 16	Bioremediation
6	Art and Biodegradation	Visit the caves of Lascaux or microbes at the museum	Ch 11	Biodegradation
7	Bioterrorism and Biotechnology	GMO interviews and survey	Ch 14-15	How old is bioterrorism?
8	Diseases and Epidemics	Gideon game	Ch 17, 18,	Plague.inc
9	Food - Mold ripened or rotten	Food label junkie	Ch 12-13	The new Gut Feeling - Germ theory vs Hygiene Hypothesis

10-14	Global Microbial Challenge	<pre> graph TD A[Assigned to strategic team] --> B[Project Design] B --> C[Applicaition] C --> D[Bump in the road] D --> E[Solving the global problem/challenge] </pre> <p>Assigned to strategic team</p> <p>Get to know the team Decide on topic</p> <p>Project Design</p> <p>Team SWOT --> project management plan Find (international) mentor/person affected</p> <p>Applicaition</p> <p>Literature/Background Globalization aspect</p> <p>Bump in the road</p> <p>Find global sponsor First draft proposal</p> <p>Solving the global problem/challenge</p> <p>Elevator pitch Fianl challenge solutions</p>		
15	The future of microbes and interesting careers	Paradigm shifts		Internships, research opportunities, etc.
16	Why Microbiology? revisited			

UF POLICIES

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

Make-up policy: Late assignments will be penalized by deducting 25% of the possible points for each late day. Excused absences from exams and/or assignments follow the criteria of the UF Undergraduate Catalogue (e.g., illness, serious family emergency, military obligations, religious holidays) and must be communicated by a formal signed documentation to the instructor as soon as possible. An alternative deadline for exams and assignments will be arranged by the instructor. Requirements for make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>. 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 (<http://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 obliged 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.

Course materials and academic dishonesty

Please note that the course instructor considers all unauthorized online posting or distribution of course materials a form of academic dishonesty, and such actions will be treated accordingly. All course materials posted on the course website are assembled and intended for students taking this course. Unauthorized posting of course materials infringes on UF's copyright policies and the "Fair Use" Act. These policies will be vigorously upheld at all times in this course.

Netiquette: It is important to recognize that the online classroom is in fact a classroom, and certain behaviors are expected when you communicate with both your peers and your instructors. These guidelines for online behavior and interaction are known as

netiquette.

[http://teach.ufl.edu/wp-](http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf)

[content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf](http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf)

Course evaluations: Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online 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>.

CAMPUS RESOURCES

Resources are available on campus for students having personal problems or lacking clear career and academic goals, which interfere with their academic performance.

These resources include:

Health and Wellness

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
- Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575;
- Sexual Assault Recovery Services (SARS) at the Student Health Care Center, 392-1161.
- For emergencies call: University Police Department, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

Academic Resources

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.
- Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <http://www.crc.ufl.edu/>
- Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>

University Police Department: 392-1111 or 9-1-1 for emergencies.

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.

Microsoft Office 365 Software is free for UF students

<http://www.it.ufl.edu/gatorcloud/free-office-365-downloads/>

Other free software is available at:

<http://www.software.ufl.edu/>

To check for availability of the media and technical requirements, contact the UF Computing Help Desk at (352)392-HELP(4357).

UNIVERSITY OF FLORIDA COMPLAINTS POLICY AND STUDENT COMPLAINT PROCESS

The University of Florida and most instructors believe strongly in the ability of students to express concerns regarding their experiences at the University. *Most problems, questions and concerns about courses can be resolved by professionally communicating with the instructor. Please try to meet your instructor in person, make an appointment to call, or try to set up a remote meeting through Skype or other media.*

If this does not help the University encourages the students who wish to file a written complaint to submit that complaint directly to the department that manages that course. If a problem really persists and cannot be resolved by communicating with the instructor and the department, contact

- Residential Course: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.
- Online Course: <http://www.distance.ufl.edu/student-complaint-process>.