

**University of Detroit Mercy School of Dentistry**  
Department of Biomedical Sciences  
Course Syllabus

**Introductory Microbiology and Immunology**  
**DBS 830**

**Course Information**

Web Address: <http://knowledge.udmercy.edu>

**Course Director:**

John A. Molinari , Ph.D. Office: 4 <sup>th</sup> floor clinic bldg, Room 435 Office Hours by appointment or contact Carol Grennan, Administrative Assistant Phone: 313-494-6630 Email: <a href="mailto:molinaja@udmercy.edu">molinaja@udmercy.edu</a>
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**Summer Term , 2008**

DS2 Students (Class of 2011)

**Credit Hours:** 2

**Prerequisites:** None

**Lecturers/Support Faculty**

**Lecturers:**

Dr. Michael Gleason

**Academic Policies:**

All policies in the School of Dentistry Academic Policies Handbook including but not limited to academic integrity, mandatory attendance, professional decorum & dress code, identification (ID) badges, preclinical and classroom decorum, use of cell phone and electronic devices, examination policies and exam/quiz absences apply.

**Accommodations:**

If you would like to request a classroom, testing, preclinical, clinical, or other accommodation because of a legally protected disability, or if you might require any special assistance in the event of an emergency or evacuation, please contact the University of Detroit Mercy's Office of University Academic Services (UAC) at 313-578-0310 or email your request for information to [gallegem@udmercy.edu](mailto:gallegem@udmercy.edu)

### **Student Evaluation of Instruction**

Student feedback is valued by the faculty and the administration. All students are required to complete the School of Dentistry's on-line course evaluation by a specified date. Failure to comply by posted deadline dates will result in the receipt of an F (Failing) grade of record for the Evaluation Responsibility Course. Only constructive, professional recommendations will be reported and considered.

### **Course Description**

#### **Purpose of the course:**

This course is comprised of lecture and discussion sessions with the purpose of assisting dental students in acquiring knowledge of the fundamental principles and clinical application of microbiology. Characteristics of infectious agents affecting oral and maxillofacial tissues, basic immunological principles and concepts, and responses of the host to infection are emphasized.

#### **Instructional Methods:**

Instructional methods utilized in the course include lecture, question and answer, discussion and content exams.

### **School of Dentistry Competencies**

**Competency-based Education:** Assumes that learning to become an entry-level professional is a progression through stages from novice to competent.

#### **Stages of Progression to Competence:**

**F or Foundation Knowledge:** Basic knowledge, skills, and attitudes needed to begin the journey to competence.

**N or Novice Level:** Ability to articulate or describe the appropriate skills, knowledge, and professional attitudes. Novices need structure, clarity of goals, single and clearly explained approaches.

**B or Beginner Level:** Combines the appropriate skills, knowledge, and professional attitudes, all of which are performed with guidance and correction.

**C or Competent Level:** Combines the appropriate supporting skills, knowledge, and professional attitudes, all of which are performed reliably without assistance.

	<b>Competencies of the Graduating Dental Student</b>	<b>Addressed</b>	<b>Evaluated</b>	<b>Method</b>
<b>1.</b>	The graduating student obtains, records, updates and organizes accurate and completed medical/dental histories including pertinent psychological and socioeconomic information.	YES	F	Written evaluation
<b>2.</b>	The graduating student performs, records and organizes a physical assessment appropriate for dental care.	YES	F	Written evaluation
<b>3.</b>	The graduating student determines differential, provisional or definitive diagnoses by correlating and interpreting examination and assessment findings.	YES	N	Written evaluation
<b>4.</b>	The graduating student develops alternative treatment plans which are sequenced to address the chief complaint, eliminate oral disease, restore function, and maintain health, and prevent oral disease consistent with assessment and diagnoses.	YES	F	Written evaluation
<b>5.</b>	The graduating student establishes with the patient a mutually acceptable treatment plan.	NO		
<b>6.</b>	The graduating student monitors and provides for patient comfort associated with dental care.	NO		
<b>7.</b>	The graduating student delivers and/or manages the planned treatment in sequence and in accordance with accepted standards of care.	YES	F	Written evaluation
<b>8.</b>	The graduating student promotes health maintenance and disease prevention.	YES	F	Written evaluation
<b>9.</b>	The graduating student applies the principles of infection control and environmental safety.	YES	F	Written evaluation
<b>10.</b>	The graduating student makes professional decisions affecting the practice of dentistry based on values that satisfy legal and ethical principles and service to society.	NO		
<b>11.</b>	The graduating student performs routine self evaluation.	NO		
<b>12.</b>	The graduating student applies business & practice management skills.	NO		
<b>13.</b>	The graduating student demonstrates interpersonal skills to function successfully in a multicultural work environment.	NO		
<b>14.</b>	The graduate critically evaluates the validity of new information, new products, and/or techniques and their relevance to the practice of dentistry.	NO		

## **Course Policies**

### **Attendance:**

Attendance is expected at each session.

Protocol for missed quizzes and exams: It is expected that each student will come prepared for each lecture session. All notifications of absences or illnesses **MUST** be made to the Course Director in addition to the Registrar's Office.

**Exams:** Make-up examinations in the event of an excused absence will be given within one week of the scheduled exam. Failure to take an exam will result in a zero (0) grade for that exam. Make-up examinations will be essay and will be recorded as 90% of the score attained, i.e. if the actual score on the make-up examination is 80%, the grade recorded will be 72%.

**Quizzes:** NO EXCUSES will be given for missed quizzes, and these may not be made up.

Tardiness and/or behaviors during class: Students that are late for class will NOT enter the classroom after the lecture has started. If there is a pause in the lecture, entrance may be made with a minimum of disturbance. If a student's behavior is such that it is disturbing other students in the class, that student may be asked to leave the class. There will be NO active cell phones, audible beepers, food, or restroom breaks allowed during class.

Examination policies: Students who arrive late to a scheduled exam will be permitted to take the examination **UNLESS** other students have completed the exam and have already left the examination room. The student will not be given extra time to complete the exam and must complete the exam within the designated time. During the exam, the student will place bookbags, backpacks, notes, coats, and hats in a designated area of the examination room. All cell phones and beepers will be off during the examination. PDA's and tablets are not permitted during the exam.

## **Textbook and Resource Materials**

### **Required Text:**

Medical Microbiology. P.R. Murray, et al. 5<sup>th</sup> edition. Mosby (2005).

## **Evaluation and Grading**

### **Evaluation and Grading**

The numerical grading scale for the Microbiology DBS 827 course is as follows:

94 - 100 = A	77 - 79 = C+
90 - 93 = A-	73 - 76 = C
87 - 89 = B+	70 - 72 = C-
83 - 86 = B	60 - 69 = D
80 - 82 = B-	Below 60 = F

Criteria for evaluation of students are the following:

1. Periodic short quizzes and assignments.
2. Scheduled major examinations.

The value for each of the evaluation criteria is:

Unscheduled short quizzes and assignments minus lowest quiz	15%
Examination #1	40%
Final Comprehensive Examination	<u>45%</u>
	100%

### **Course Evaluation Methods**

#### **Quizzes**

Quizzes will be given throughout the course in class and will cover information from the lectures and reading assignments. The lowest quiz score will be dropped and the average of all quizzes will constitute 15% of the final course grade. Missed quizzes cannot be made up. Outside assignments will include those tasks where students are required to read material on certain microbiological topics. For completion of assignments, students will develop and submit multiple choice questions covering the topic. These will be evaluated and graded.

#### **Unit Exam**

The Unit Exam will consist of questions in a multiple choice format.

#### **Final Exam**

A comprehensive final exam covering material presented in DBS 830 will be administered at the end of the Summer term. Multiple choice and other short answer questions will comprise the examination.

<b>IMMUNOLOGY DBS 830 DS 2 - SUMMER TERM 2008</b>				
<u>DATE</u>	<u>TIME</u>	<u>TOPIC</u>	<u>READING ASSIGNMENT</u>	<u>INSTRUCTOR</u>
Mon. 5/19	10:00-11:50	1. Course Introduction 2. The Microbial World 3. Biology of Microbial Pathogens	Chaps. 1-4 for self-study	Dr. Molinari
Tues. 5/27	1:00-2:50	Normal Microbial Flora	Chap. 9	Dr. Molinari
Mon. 6/2	10:00-11:50	Microbial Genetics	Chap. 5	Dr. Gleason
Tues. 6/3	1:00-2:50	Host-Parasite Relationships	Chap. 19	Dr. Molinari
Mon. 6/9	10:00-11:50	Microbial Pathogenesis and Virulence	Chap. 19	Dr. Molinari
Tues. 6/10	1:00-2:50	Introduction to Immunology	Chap. 11	Dr. Molinari
Mon. 6/16	10:00-11:50	EXAM #1		
Tues. 6/17	1:00-2:50	Innate Immunity	Chap. 11	Dr. Molinari
Mon. 6/23	10:00-11:50	1. Innate Immunity 2. Acquired (adaptive) Immunity	Chap. 11	Dr. Molinari
Tues. 6/24	10:00-11:50	Antigens	Chap. 12	Dr. Molinari
WEEK of 6/30- 7/4		NO CLASSES - Mid-Summer Break		
Mon. 7/7	10:00-11:50	Immunoglobulins	Chap 12	Dr. Molinari
Mon. 7/14	10:00-11:50	1. Complement 2. Assigned reading - Serology	Chap. 12 Chap. 18	Dr. Molinari
Mon. 7/21	10:00-11:50	Development and Function of Humoral Immunity	Chap. 12	Dr. Molinari
Mon. 7/28	10:00-11:50	Development and Function of Cellular Immunity	Chaps 13 - 14	Dr. Molinari
7/29-8/1		FINAL EXAMS SCHEDULED		