



# **Course Specifications**

Institution:College of dentistry.Academic Department:Basic Science department.Programme:Dentistry Programme.Course:Oral microbiology.Course Coordinator :Mohammad Rashad AlganzoryProgramme Coordinator:..../ ..... H

This form compatible with NCAAA 2013 Edition



## **A. Course Identification and General Information**

| 1 - Course title : Oral microbiology.Course Code: MAC 411.   |
|--|
| 2. Credit hours : (2)  |
| 3 - Program(s) in which the course is offered: Dentistry.  |
| 4 – Course Language :  |
| 5 - Name of faculty member responsible for the Mohammad Rashad   |
| course:  |
| 6 - Level/year at which this course is offered : Fourth Year   |
| <ul> <li>7 - Pre-requisites for this course (if any) :</li> <li>General microbiology and immunology 211 MAC.</li> </ul>                |
| 8 - Co-requisites for this course (if any) :   |
| 9 - Location if not on main campus : (On main campus)  |
| 10 - Mode of Instruction (mark all that apply)   |
| A - Traditional classroom V What percentage? 100 %   |
| B - Blended (traditional and online) What percentage?%   |
| D - e-learning What percentage?%   |
| E – Correspondence What percentage?%   |
| F - OtherWhat percentage?  |
| Comments :   |
|  |
| ) Objectives:  |
| What is the main purpose for this course?  |
| By the end of the course the dental students should:   |
| 1. Have a broad overview of the current research, and methods used in studying problems in dental caries and periodontal disease.      |
| 2. Have an understanding of the broad range of infection diseases affecting the oral cavity.   |
| 3. Have an understanding of the clinical and biological factors to be considered in the appropriate use of antimicrobial drugs.        |
| 4. Be aware of the contemporary principles and practices of laboratory diagnostic techniques and interpretation of laboratory reports. |
| 5. Have and understanding of hospital acquired infections and infections in the compromised host.                                      |



## Briefly describe any plans for developing and improving the course that are being implemented :

<u>جامعة المجمعة</u>

- Summary of the teaching material (e.g. in PowerPoint) to be inserted in the department's website
- Increase the use of IT based reference material
- Course content is following the most recent research in the field

## **C.** Course Description

## **1.** Topics to be covered

| List of Topics   | No. of<br>Weeks | Contact<br>Hours |
|--|-----------------|------------------|
| 1 <sup>st</sup> Semester                                       |                 |                  |
| Introduction.  | 1               | 1                |
| Microbial Ecology of the Oral Cavity                           |                 | 1                |
| Microbiology of Dental Caries                                  |                 | 1                |
| Microbiology of Periodontal Diseases                           |                 | 1                |
| Immunological Disorders and Oral Diseases                      |                 | 1                |
| Oral and Systemic Infections with Oral Manifestations I,II,III |                 | 3                |
| Dental Bacteraemia   |                 | 1                |
| Dental Bacteraemia and Infective Endocarditis                  |                 | 1                |
| Infection in Comromised Host                                   | 1               | 1                |
| Nosocomial Infection and Cross-infection in Dental clinic      | 1               | 1                |
| Antimicrobial chemotherapy in dentistry                        | 1               | 1                |
| Dentist and microbiology Laboratory                            | 1               |                  |
|  |                 |                  |

## 2. Course components (total contact hours and credits per semester):

|                  | Lecture | Tutorial | Laboratory | Practical | Other: | Total |
|------------------|---------|----------|------------|-----------|--------|-------|
| Contact<br>Hours | 1       |          | 3          |           |        | 4     |
| Credit           | 1       |          | 1          |           |        | 2     |



**3.** Additional private study/learning hours expected for students per week.

(This should be an average: for the semester not a specific requirement in each week)

## 4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

مامعة المجمعة

|     | NQF Learning Domains   | Course                 | Course                |
|-----|--|------------------------|-----------------------|
|     | And Course Learning Outcomes   | Teaching<br>Strategies | Assessment<br>Methods |
| 1.0 | Knowledge  |                        |                       |
| 1.1 | Discus the microbiology/pathogenesis associated with dental caries and periodontal diseases.   | Lecture.               | Exam.                 |
| 1.2 | Discus systemic implications of oral microbiology o include bacteremia and endocarditis infections in the compromised host.                            | Lecture.               | Exam.                 |
| 1.3 | Demonstrate an understanding of the dynamics<br>of antimicrobial chemotherapy and when to<br>prescribe for use.  | Lecture.               | Exam.                 |
| 1.4 | Demonstrate knowledge of procedure and<br>indications for collection of clinical<br>microbiology samples for the purpose of<br>laboratory diagnostics. | Lecture.               | Exam.                 |
| 1.5 | Perform laboratory analysis of clinical samples to<br>identify microbial profile and the appropriate<br>chemotherapeutic agent.                        | Lecture.               | Exam.                 |
| 1.6 | Describe current technologies used for detecting<br>and analyzing oral microbes.   | Lecture                | Exam                  |
| 2.0 | Cognitive Skills   |                        |                       |
| 2.1 | Define a clinical problem  | Lecture.               | Exam.                 |
| 2.2 | Analyses a given clinical data   | Lecture.               | Exam.                 |



## جامعة المجمعة

|     |   | Course                 | Course                |
|-----|---|------------------------|-----------------------|
|     | NQF Learning Domains<br>And Course Learning Outcomes  | Teaching<br>Strategies | Assessment<br>Methods |
| 2.3 | Have abroad overview of the current research and methods<br>used in studying problems in dental caries and periodontal<br>disease.        | Lecture.               | Exam.                 |
| 2.4 | Have an understanding of the broad range of infection diseases affecting the oral cavity  | Lecture.               | Exam.                 |
| 2.5 | Have an understanding the clinical and biological factors to<br>be considered in the appropriate use of antimicrobial drugs.              | Lecture.               | Exam.                 |
| 2.6 | Be aware of the contemporary principles and practices of<br>laboratory diagnostic techniques and interpretation of<br>laboratory reports. | Lecture.               | Exam.                 |
| 2.7 | Have an understanding of hospital acquired infections and infections in the compromised host.   | Lecture.               | Exam.                 |
| 3.0 | Interpersonal Skills & Responsibility   |                        |                       |
| 3.1 | Acquire the skills of respecting teachers and colleagues  | During lecture.        | Recognition.          |
| 3.2 | Acquire the skills of good listening  | During lecture.        | Recognition.          |
| 3.3 | Acquire the skill of self learning  | During lecture.        | Recognition.          |
| 3.4 | Build up personal responsibility  | During<br>lecture.     | Recognition.          |
| 3.5 | Acquire the skills of team-work   | During<br>lecture.     | Recognition.          |
| 4.0 | Communication, Information Technology, Numer  | ical                   | -                     |
| 4.1 | Ability to work in a team to conduct specific microbiology experiments  | During lecture.        | Exam.                 |
| 4.2 | Ability to use computers and internet for research purposes.  | During lecture.        | Exam.                 |
| 4.3 | Presenting and discussing the results obtained.   | During lecture.        | Exam.                 |
| 4.4 | Encouraging students to submit duties, activities and writing reports   | During<br>lecture.     | Exam.                 |
| 4.5 | Evaluating the laboratory written reports resulted from microbiology experiments.   | During<br>lecture.     | Exam.                 |
| 4.5 | Evaluating activities   | During<br>lecture.     | Exam.                 |





|     | NQF Learning Domains<br>And Course Learning Outcomes   | Course<br>Teaching<br>Strategies | Course<br>Assessment<br>Methods |
|-----|--|----------------------------------|---------------------------------|
| 5.0 | Psychomotor  |                                  |                                 |
| 5.1 | Identify the bacteria by microscopy, colonial morphology on cultures and confirmatory tests. | During lecture.                  | Recognition.                    |
| 5.2 | Describe the susceptiblity of the microorganisms to antimicrobials.                          | During lecture.                  | Recognition.                    |
| 5.3 | Describe basic microbiological instruments   | During lecture.                  | Recognition.                    |

**5.** Schedule of Assessment Tasks for Students during the Semester:

|   | Assessment task | Week Due | Proportion<br>of Total<br>Assessment |
|---|-----------------|----------|--------------------------------------|
| 1 | midterm exam    | 6        | 20%                                  |
| 2 | Quiz            | 3        | 5%                                   |
| 3 | Research        | 4        | 5%                                   |
| 4 | Presentation    | 13       | 5%                                   |
| 5 | Practical exam  | 14       | 25%                                  |
| 6 | Final Exam      | 14       | 40%                                  |
| 7 | Total           |          | 100%                                 |





## **D. Student Academic Counseling and Support**

Students are supported academic guidance during office hours and provide them with guidance and advice, as well as scientific knowledge of students' problems and how to solve it.

## **E. Learning Resources**

#### 1. List Required Textbooks :

Oral Microbiology and Immunology By R.J. Nisengard and M.G. Newman Fifth Edition W.B. Sanders Company 2004.

#### 2. List Essential References Materials :

-Oral Microbiology By Marsh and Martin ASM Press

-Clinical Oral Microbiology L.P. Samaranyake and T. W. Macfarlane Wright Company

#### 3. List Recommended Textbooks and Reference Material :

Recommended Books and Reference Material (Journals, Reports, etc) (Attach List) Burnett, Scberp and Schuster, Oral Microbiology and Infections Disease, Williams and Wilkins Marsh and Martin, Oral Microbiology, American Society for Microbiology L.P. Samaranayake, Clinical Oral Microbiology McCraken and Cawson, Clinical and Oral Microbiology, McGraw Hill

#### 4. List Electronic Materials :

• www.pubmed.com.

#### Mohammad Rashad site in the Majmaah university site

(mu.edu.sa) http://faculty.mu.edu.sa/m.rashad

#### 5. Other learning material :

- Perform medical analysis using patient cases from hospitals.
- Prepare culture media tests.
- Discuss with students about different bacterial diseases .

## **F. Facilities Required**

- 1. Accommodation
  - A classroom with a seating capacity of 30 students, equipped with a projector and smart board.
  - A well-equipped laboratory with advanced Microbiology equipment.

### 2. Computing resources

- Computer classroom.
- Internet connection.



#### **3.** Other resources

• General knowledge.

#### **G** Course Evaluation and Improvement Processes

**1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:** 

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- Make questionnaires.
- Perform theoretical examination.
- Make seminars.

**2** Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

• Make meetings with groups of students to discuss the contents of the course, method of teaching to evaluate the course and the instructor.

**3** Processes for Improvement of Teaching :

• Make meeting every week in the department to update the status of each student and the difficulties felt by the colleague will be resolved accordingly.

• The power point presentation of each lecture is distributed to all the staff members of the department for evaluation and suggestions for improvement.

• Teachers will be subjected to go for up gradation of knowledge by attending the relevant conferences and will be encouraged to carry on a self-improvement.

4. Processes for Verifying Standards of Student Achievement

- Make 1<sup>st</sup> midterm, quiz and final examinations.
- Make practical examination.
- Perform a questionnaire to evaluate the student's experience.

**5** Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

• Make meeting every week in the department to update the status of each student and the difficulties felt by the colleague will be resolved accordingly.

• The power point presentation of each lecture is distributed to all the staff members of the department for evaluation and suggestions for improvement.

• Teachers will be subjected to go for up gradation of knowledge by attending the relevant conferences and will be encouraged to carry on a self-improvement.





## Course Specification Approved Department Official Meeting No ( ..... ) Date .... / ..... *H*

## **Course's Coordinator**

## **Department Head**

| Name :                        | Mohammad Rashad<br>Alganzory |
|-------------------------------|------------------------------|
| <i>Signature :<br/>Date :</i> | / H                          |

| Name :      | Ass. Prof. Fekrey |
|-------------|-------------------|
|             | Shata             |
| Signature : |                   |
| Date :      | / / H             |

