**King Saud University**

**College of Applied Medical Sciences**

**Clinical laboratory science Department**

**Practical Course Specifications**

**Basic Information**

**-Title of the programs:** …CLS

**-Title of the course:** …… Bacteria 1

**-Code number of the course:** …CLS 411……………

**-Credit hours:** …1………………………………………….……………..

**-Contact hours:** *…*3hours***………………………………………………..…..***

**-Academic year:** …1432-1433……1st semester

**-Level:** ……7…………………………………………………….…………….

**Tutors conducting the course**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Name | Mobile | e- Mail |
| 1- | Dr Amina Ali Hasan | ……………… | …………………………………. |
| 2- | Mrs. Amany Niazy | 0552424299 | aniazy@ksu.edu.sa |
| 3- | Mrs. Ohoud Alhumaidan | 0555272862 | Oalhumaidan@ksu.edu.sa |

**Professional informations**

**(Course specifications)**

* **Overall aim of the course:**

1. Learn to identify the given organisms based on their morphology, growth properties and biochemical reaction.
2. Learn how to perform different identification test and understand their principle.
3. Learn about different media used for culturing and their role in identification.

* **Intended learning outcomes of the course: (Skills)**
* **Practical skills:**

1. Perform safe laboratory practice.
2. Learn the aseptic technique and how to apply it to a variety of laboratory techniques.
3. Learn and perform gram stain as many as possible, to be able to master the technique.
4. Learn the proper way to focus a microscope and clean it afterword.
5. Learn and practice the proper streaking of culture plate, and how to obtain isolated colonies.

**Interpersonal skills:**

1. Learning team work by sharing with other student the reagent and things used in the lab.
2. Learn how to take responsibility on organizing and cleaning their area after they finish work.

* **Course contents (Time schedule)**

|  |  |  |
| --- | --- | --- |
| Week | Practical lesson | No. of hours |
| 1 | Antibiotic Sensitivity (Sold Method) | 2-3 |
| 2 | Antibiotic Sensitivity (Broth Dilution Method) | 2-3 |
| 3 | Staphylococci | 2-3 |
| 4 | Staphylococci (Continue) | 2-3 |
| 5 | Streptococci | 2-3 |
| 6 | Streptococci (Continue) | 2-3 |
| 7 | Niesseria | 2-3 |
| 8 | Listeria | 2-3 |
| 9 | Corynebacterium | 2-3 |
| 10 | Bacillus | 2-3 |
| 11 | Mycobaterium | 2-3 |
| 12 | Revision | 2-3 |
| 13 | Final Exam | 2 |
|  |  |  |
|  |  |  |

* **Teaching Methods:**

1. Power point presentation, with pictures of what the student should see in the practical session.
2. Demonstration of gram stain, different culture plates and different test when available.
3. Student should perform gram stain, subculture almost every lab to master the technique.
4. Student should perform different test when possible.

* **Assessment methods:**

1. Quizzes 10 marks

+ 30 marks for final = total 40 marks for practical.

1. Checking gram stain for student and point out the different mistakes they make.
2. Assessment of the student work in every lab (streaking, focusing of microscope, other test) and coaching.
3. Final spot practical exam.

* **References:**

1-District Laboratory Practice in Tropical Countries Part 2-2nd Edition.

2-Recommended websites:

* <http://pathmicro.med.sc.edu/book/bact-sta.htm>.
* [www.asm.org](http://www.asm.org). (American Society for Microbiology).

**Lecturing staff member Co-coordinator of the course**

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**Head of department**

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