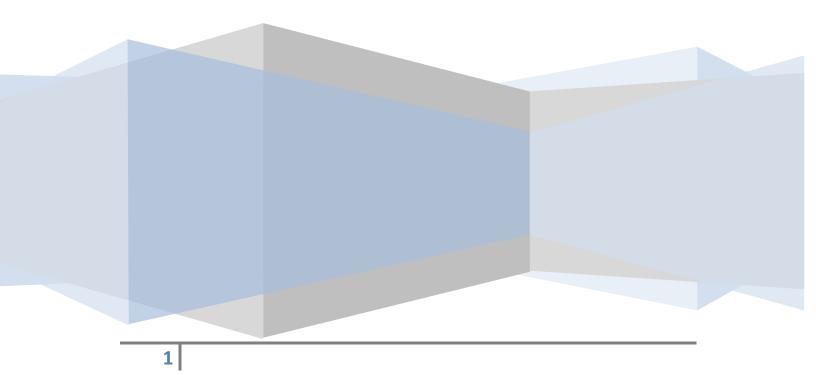# Course Specifications

Title:

Digestive System

Year2

Course Specifications

University: South Valley University

Faculty: Qena Faculty of Medicine

Programme(s) on which the course is given: Bachelor of Medicine & Surgery(**M.B.B.Ch. program)**

Department offering the program: Education sector (Multidisciplinary integrated program)

Department offering the course: Anatomy, histology and physiology.

Academic year / Level: Year 2, 4th semester

Date of specification approval: Approved by the Faculty Board on 3/2010

Date of modification: 11\2018

1-basic information

Title: Digestive System

Code: DIG202

Credit points: 150 mark

Lecture: 39 hrs

Practical academic lab: 54 hrs

Total: 93 hrs

Target Population: 2ⁿᵈ year medical students

The qualification degree: "Bachelor Degree in Medicine and Surgery (MBBCh)"

2- Professional Information

Overall Aims of Course:

The overall aims of the course are that the students:

➢ Develop the basic knowledge, skills, and attitude expected from a medical student to be able to participate in the prevention, diagnosis and management of digestive system diseases in the clinical training period.

➢ Know the structure of the digestive system and understand its function.

➢ Know the most common diseases affecting the digestive system.

➢ Know the risk factors related to digestive system diseases.

<u>Anatomy</u>

<u>1-Overall aims</u>

By the end of the course, students should be able to:

➢ Provide the student with an appropriate background that enable him / her to identify the normal structure and function of the body and of each of its major systems.

➢ To enable the student to recognize different stages of the life cycle and how these affect normal structure and function.

➢ To provide the student with the knowledge and skills that enables him/ her to identify and examine the normal anatomy of the body and of each of its major organ systems grossly.

➢ To provide appropriate ethical and professional education necessary for dealing with cadavers.

➢ To enable students to correlate anatomical facts with their clinical applications.

2- Intended Learning Outcomes (ILOs)

A- **Knowledge and Understanding**

A1- Describe the normal anatomy of   the abdomen

A2- Describe course, relations and branches of main blood vessels of abdomen

A3- Mention course, relations and branches of main nerves of abdomen.

A4- Describe the surface anatomy of the abdominal organs .

B-Intellectual Skills

By the end of the course, students should be able to:

B1- Interpret the normal anatomical structures of abdomen.

B2- Correlate anatomical facts with manifestations of various injuries in abdomen

B3- Correlate anatomical facts with its major clinical applications.

C- **Practical and Professional Skills**

By the end of the course, students should be able to:

C1- Examine the regions of abdomen

C2- Examine the gross morphology of different organs of abdomen .

C3-Examine the arrangement of the internal structures in abdomen.

C4- Summarize reports on the different anatomical samples of abdomen

D- **General Skills**

By the end of the course, students should be able to:

D1- Communicate effectively with teachers and colleagues.

D2- Value the ethics and respect to all individuals inside and outside the dissecting room and give a good deal of respect to the cadavers.

D3- Write a report on the different anatomical samples of abdomen.

Histology

1-Overall aims

By the end of the course, students should be able to:

➢ Mention and describe the histology of the gastero-intestinal tract (GIT) and its associated glands (salivary glands,liver, pancreas)

2- lntended learning outcomes (ILOs)

A- Knowledge and understanding

By the end of the course, students should be able to:

A1- Define and describe the histological characteristics mucosa of the GIT and the histology of its associated glands.

B-Intellectual skills

By the end of the course, students should be able to

B1- Correlate between the structure & function of the mucosa of the GIT.

C- Professional skills

By the end of the course, students should be able to:

C1- Identify different parts of the GIT.

C2- Identify different glands associated with the GIT (salivary glands, liver and pancreas).

C3- Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

D- General skills

By the end of the course, students should be able to:

D1- Appreciate the importance of life long learning and show a strong commitment to it.

D2- Use the sources of biomedical information to remain current with advances in knowledge and practice.

Physiology

1-Overall aims

By the end of the course, students should be able to:

➢ To acquire an appropriate background and recognize the normal structure and function of the digestive system. \

➢ Describe the integration of physiological functions of digestive system, which characterize the performance of the human body as a whole in health

➢ Know the physiological principles underlying disease states that aids in interpretation of symptoms of the digestive system

3- Intended Learning Outcomes ILOS

3-A- Knowledge and Understanding

By the end of the course, students should be able to

A1-Define the digestive process and describe its components as regards, secretion, motility and control.

A2- Describe functional structures of the organs of digestive system

(3.B) Intellectual Skills

By the end of the course, students should be able to: -

B1- Distinguish between physiological and pathological conditions of digestive system.

B2- Evaluate the normal functions of different components of digestive system and the effect of their lesions.

B3- Integrate physiology with clinical conditions.

(3.C) Professional and Practical Skills

By the end of the course, students should be able to: -

C1- Perform different function tests of the GIT

C2- Dissect the frog and perform experiments of effect of different substances on intestinal motility.

(3.D) General Skills

By the end of the course, students should be able to:-

.D1- Be responsible towards work

D2- Maintain a professional image concerning behavior, dress and speech

D3- Work separately or in a team to research and prepare a scientific topic

D4- Use available presentation aids (Overhead projectors or Data show) to present clearly and effectively in a scientific topic.

3- Course Contents Digestion and Nutrition DIG 202

Anatomy

Time	Topic	Lectures	Practical	Total
1st week	Lumbar vertebrae, hip bone and anterior abdominal wall.	1	2	3

2nd week	Inguinal canal male external genitalia	1 1	2 2	6
3rd week	Peritoneum (general arrangements) Peritoneum (folds, and recesses)	2	4	6
4th week	Stomach and celiac trunk.	1	2	3
5th week	Blood supply of gut	1	2	3
6th week	Duodenum , Free part of small intestine (,jejunum , ileum)and superior mesenteric vessels	2	4	6

		1	2	3
7th week	Large intestine (cecum , appendix ,ascending ,transverse .descending and sigmoid colon , rectum and anal canal) and inferior mesenteric vessels.	1	2	3
8th week	Large blood vessels(descending abdominal aorta and its branches, IVC and its tributaries)	1	2	3
9th week	Liver ,biliary system	1	2	3
10th h	spleen and pancreas	1	2	3

week				
11^t h week	posterior abdominal wall muscles.	1	2	3
12th week	lumbar plexus and vessels of posterior abdominal wall	1	2	3
Total		15	30	45

Histology

Date	Topic	Lecture	Practical
1st week	Histology of the oral cavity	1	1
2nd. Week	General structure of the gastrointestinal tract	1	1
3rd. week	Histology of the osophagus	1	1
4th. Week	Histology of the stomach	1	1
5th. Week	Histology of the small intestine	1	1
6th. week	Histology of the large intestine	1	1

7th week	Histology of the salivary glands (1)	1	1
8th. week	Histology of the salivary glands (2)	1	1
9th. Week	Histology of the liver (1)	1	1
10th. Week	Histology of liver (2)	1	1
11th. Week	Histology of pancreas	1	1
12th. Week	Histology of gall bladder	1	1
	Total	**12 hours**	**12 hours**

Physiology

Weeks	Topics	lectures	practical	Total	%
1st week	**Motor function of stomach**	1	1	2	**8.3%**
2nd week	**Movements of small intestine**	1	1	2	**8.3%**

3rd week	Movements of colon	1	1	2	8.3%
4th week	Secretion of saliva	1	1	2	8.3%
5th week	Esophageal secretion	1	1	2	8.3%
6th week	Gastric secretion	1	1	2	8.3%
7th week	Pancreatic secretion	1	1	2	8.3%
8th week	Pancreatic secretion	1	1	2	8.3%
9th week	Secretion of bile by liver	1	1	2	8.3%
10th week	Secretion of small intestine and large intestine	1	1	2	8.3%
11th week	Jaundice	1	1	2	8.3%
12th week	Digestion and absorption in GIT	1	1	2	8.3%

	Total	12	12	24	100%

4- Teaching and Learning Methods

4.1- Lectures (for acquisition of knowledge: 1 hours/week).

4.2- Practical sessions (0.5 hours/ week) to gain practical skills (Laboratory demonstration, practical training and problem-based learning)

4.3- Assignment (practical book) and reports

5- Student Assessments

Anatomy

a- Attendance criteria

The minimal acceptable attendance is 75%; students who fail to attend that percentage of activities will not be allowed to sit for final written examination.

B Student Assessment tools and grading

tools	Time Schedule	Weight	Measured Skills (ILOs)
MCQ,True or False,Matching	Periodic exams	%30	**Understanding(A1 -A4) and Intellectual skills(B1-B3)**
Final practical exam	By the end of the semester	%25	**understanding Intellectual and general skills(D1- D3)**

Final written exam,MCQ ,matching,True or False	By the end of the semester	%3 5	**understanding Intellectual and general skills**
Final oral exam	By the end of the semester	%1 0	**understanding and Intellectual skills**

Periodic exams	**30%**	**18 marks**
Final written exam	**35%**	**21 marks**
Final oral exam	**10%**	**6 marks**
Final practical exam	**25%**	**15 marks**
Total		**60 marks**

Histology

- Student assessment Methods

Assessment1: Periodic and mid term MCQ assessment.

Assessment 2: Final practical examination.

Assessment 3: Final written examination.

Assessment 4: Final oral examination.

Assessment 5: Final drawing examination.

Assessment 6: Course assignment (practical book).

Weighting of assessments :

Periodic and mid term MCQ assessment   10 marks(22.22%)

Final written Examination   17 marks(37.77%)

Final Oral Examination   4 marks(8.88%)

Final practical examination   5 marks(11.11%)

Final drawing examination   6 marks(13.33%)

Course assignment (practical book)   3 marks(6.66%)

Total   **45 marks(100%)**

Physiology

Measured Skills (ILOs)	Tools -ا	Time Schedule	Weight
Knowledge & understanding (A1- A2), Intellectual (B1-B3)	(short essay and MCQs) Assessment 1: Periodic assessment Assessment 2: Periodic assessment	By the end of the 5th week). by the end of the 9th week	30% (13marks)
intellectual (B1-B3), practical & Professional Skills (C1- C2)	Assessment 3: Practical examination	by the end of the semester	25% (11marks)
Knowledge & understanding (A1- A2), Intellectual (B1-B3)	(short essay and MCQs) Assessment 4: Final written exa9mination	by the end of the semester	35% (17marks)
Knowledge & understanding (A1- A2), Intellectual (B1) & Some general skills (D1&D2)	Assessment 5: Final oral examination	by the end of the semester	10% (4marks)

6- List of references

Anatomy

- Course notes: books authorized by department

- Essential books: Cunningham's anatomy, Gray's anatomy and National books
- Kadasn's Textbook of Anatomy (Clinically Oriented), Upper & Lower Extremeties(v1)
- **Anatomical Sciences Journal (ASJ)**

Histology

6.1- Essential Books (Text Books):

Junqueira, Cameino and Kelly(2008) L.C,2016 Basic Histology,7th ed .Librairrie du liban and Lang buruit ,London ,New York

6.2-Recommended Books:

Fawcett (2006):A Text book of Histology ,12th edition .Chapman and Hall. New york ,London

6.3- Periodicals:

Egyptian J of Histology

International J of Experimental Research

6.4- Web Sites of histology:

Physiology

- lectures notes
- Recommended books
    - Physiology department book and Lectures note. (Lectures and practical)

▪ Ganon textbook of physiology

▪ Essential pathophysiology

- Journal and websites

▪ American Journal of physiology

7- Facilities Required for Teaching and Learning

- Classrooms for small group tutorials (equipped with data show and computers)

- Equipped laboratories

- Clinical skills labs.

- Digital library

- Lecture Halls (data show)

Course coordinator:

Dr. Eman Ahmad Abd El-Rahim

Dr/ Haytham Mohamed ALI

External Evaluator:

Prof.Dr Amal Taha Abou El ghait Taha

Assistant prof: Ahmed Mostafa Mahmoud