

الجمهورية العربية السعودية
وزارة التعليم العالي
جامعة أم القرى مكة المكرمة



كلية العلوم الطبية التطبيقية
بمادة الشؤون الأكاديمية
قسم التغذية الإكلينيكية

Kingdom of Saudi Arabia
Ministry of Higher Education
Umm Al-Qura University



Faculty of Applied Medical Sciences
Deanship of Academic Affairs
Clinical Nutrition Program

الإرشادات الأكاديمية

Academic Guidelines

لطالبات برنامج التغذية الإكلينيكية

For clinical nutrition program students

١٤٣٥ - ١٤٣٦ هـ

1435 - 1436 H



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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

نبذة تعريفية عن القسم

بدأ استقبال الطالبات في قسم التغذية الاكلينيكية في مطلع العام الدراسي ١٤٢٦/١٤٢٧ هـ (٢٠٠٦/٢٠٠٧ م). وفي العام الدراسي الاول تمت الموافقة على ٤١ طالبة في القسم بحيث أن أعداد المقبولين في القسم في ازدياد وذلك لحاجة سوق العمل الى خريجين قسم التغذية العلاجية. وفي نفس الوقت تم زيادة أعداد أعضاء هيئة التدريس حتى تتم تغطية كافة المقررات العلمية بكفاءة واقتدار ومشاركة خبرة أعضاء هيئة التدريس في تدريب الطلبة .

الرؤية

أن تكون برنامجاً يجهز أخصائين في التغذية الإكلينيكية أكفاء يقدمون العلاج الغذائي للأفراد والجماعات في المواقع الصحية المختلفة وأن تكون مركزاً بحثياً رائداً ومتميزاً في التغذية الإكلينيكية على المستوى المحلي والعالمي.

الرسالة

رسالتنا في تقديم برنامج متميز يؤهل الطلبة في مجال التغذية الإكلينيكية للعمل في مختلف المواقع الصحية، والمشاركة في تطوير الخدمة الصحية بوجه عام وفي التغذية تشخيصاً وعلاجاً بوجه خاص، والتعاون مع المجتمع لتحسين الخدمات الصحية والحالة الغذائية للمجتمع .

Vision

The vision of the clinical nutrition program at the Faculty of Applied Medical Sciences is to develop clinical nutrition practitioners who are competent to provide medical nutrition therapy to individuals and groups within a variety of settings, and to be an excellent and competitive research facility in the area of nutrition in the region.

Mission

Our mission is to provide program of excellence; to prepare students for the practice of clinical nutrition in a variety of settings; to contribute to the advancement of health care in general, diagnostic and therapeutic nutrition in particular; and to collaborate with the community for the enhancement of health care services and nutritional situation.

Educational Goals

Upon completion of the clinical nutrition program our graduate will:

1. Acquired a broad basis of clinical nutrition knowledge, understanding and skills, as well as in depth in the areas of specialization.
2. Identify the various components of nutrition and principles of diet planning in health and disease.
3. Apply proper nutritional management of patients suffering from various nutritional related disorders.
4. Apply recent methods and techniques for nutritional assessment of patients.
5. Identify the importance of integrating nutrition/ health components into national and community socioeconomic developments plans.
6. Plan and conduct community field surveys using different qualitative and quantitative methods.
7. Use communication and training skills for effective nutrition and health program purposes.
8. Apply skills in planning and conducting communication

Activities & Achievements:

The program of Clinical Nutrition is a modern program of the College of Applied Medical Sciences and will assume the following duties:

1. Holding seminars to draw the community's attention to the Department's specialties, interests and significance.
2. Training the Department's female students at Makkah-based hospitals.
3. Contributing to the solution of community problems in the field of clinical nutrition through relevant specialized research.
4. **Number of Female Students in the Department of Clinical Nutrition year 1435-1436H :**

School Year	Number of Female Students
2	106
3	73
4	50

نبذة تعريفية عن التخصص

أخصائي التغذية العلاجية

أخصائي التغذية العلاجية أو أخصائي الحميات المؤهل عالمياً (هو المهني) الذي يزود بمعلومات التغذية على أساس علمي وبموضوعية وبتجرد من المعلومات المضللة والتي لا تستند على الحقائق العلمية. هناك العديد من التخصصات في مجال علم التغذية، فكما أن هناك العديد من الأطباء الذين يتخصصون في معالجة حالات معينة فأخصائيو التغذية العلاجية يمكن أن يتخصصوا في بعض الحالات المرضية ذات الصلة بالغذاء سواء للمرضى المنومين أو في العيادات الخارجية، أيضاً يمكنهم أن يتخصصوا في التغذية الرياضية والصحة العامة أو في مجال المطبوعات التي تنشر الوعي الغذائي في الصحافة ووسائل الإعلام المختلفة.

تصنيف أخصائي التغذية العلاجية

إن أغلبية أخصائي التغذية العلاجية يتخصصون في مجال التغذية السريرية الذين يعملون بها على وصف التعديلات الغذائية على حسب الحالة المرضية، بالإضافة لتوعية المرضى وأسرهم من خلال البرامج الغذائية والعروض التعليمية لإفادة الناس من كل الأعمار. أيضاً أخصائي التغذية العلاجية يعتبر عضو مهم في الفريق الطبي وله دور أساسي في الرعاية الطبية المتكاملة للمرضى الذين يحتاجون لأنواع المختلفة من أساليب التغذية سواء التغذية الفموية أو الأنبوبية.

- عند انتهاء الخريج من دراسته لبرنامج التغذية الإكلينيكية يحصل على:
 - اكتساب القواعد الأساسية في علم التغذية الإكلينيكية فهماً ومهارةً بالإضافة إلى التعمق في مجال التخصص.
 - التعرف على العناصر الغذائية المختلفة وأسس تخطيط الوجبات الغذائية في الصحة والمرضى.
 - تطبيق البرامج الغذائية المناسبة للمرضى الذين يعانون من الأمراض المختلفة.
 - تطبيق الطرق الحديثة لتقييم الحالة الغذائية للمرضى.
 - التعرف على المشاكل الصحية المتعلقة بالتغذية محلياً وفي التجمعات السكانية.
 - تصميم وإدارة مشاريع المسح الميداني الكمي النوعي في المناطق المزدهمة والتجمعات السكانية المختلفة بمناطق المملكة.
 - استخدام طرق الاتصال والتدريب الحديثة لتفعيل التغذية وتصميم برامج صحية.

فعاليات القسم

تندرج فعاليات قسم التغذية الإكلينيكية في خدمة المجتمع المحلي من خلال عمل ورش عمل ومحاضرات توعوية وتنظيم الأيام العلمية لزيادة الوعي الصحي والتغذوي للمجتمع والمشاركة في المؤتمرات المحلية والإقليمية والعالمية. كما قامت بعض طالبات القسم بعمل محاضرات علمية عن أهمية التغذية لطلبة المدارس ودور الرعاية الخاصة بكبار السن. بالإضافة إلى تدريب الأخصائيات في المستشفيات وتطوير أقسام التغذية فيها ودعم عملية الاعتماد الطبي للمستشفيات.

Semester Information

- Semester

A period of time not less than fifteen weeks during which courses are to be taught not including the registration and the final exams period.

- Summer semester

A period of time not more than eight weeks not including the registration and the final exams period, during which the time allocated for each course is doubled.

- Study level

Is indicative of the academic stage where the required number of study levels for graduation is eight levels or more, according to the approved study plans.

- Course

A curriculum provided in a specific level which is approved within the study program. Each course has a number, code, name and description for its vocabulary that distinguishes it from other levels and is maintained and documented in a special file in the department for the purpose of follow-up, rating and development. Moreover, there may be specific requirements or [pre-requisites for some courses.

Module Unit

The weekly duration of theoretical lecture is not less than fifty minutes, while practical or tutorial sections are not less than a hundred minutes. Activities essential for nutrition and health programs to promote public health levels.

- Academic Warning

The warning sent to the student due to the low cumulative grade point average under the minimum requirement previously described in this regulation. Each student would have only one chance to pass before the enrollment is terminated.

- Semester marks

The marks granted to the student that show his achievement during the semester exams, educational research and activities related to the academic course.

- Final exam

Is an exam for each academic course taking place at the end of each study semester.

Grades of the final exam: Are the marks each student earns in the final exam of the semester.

- Final grade:

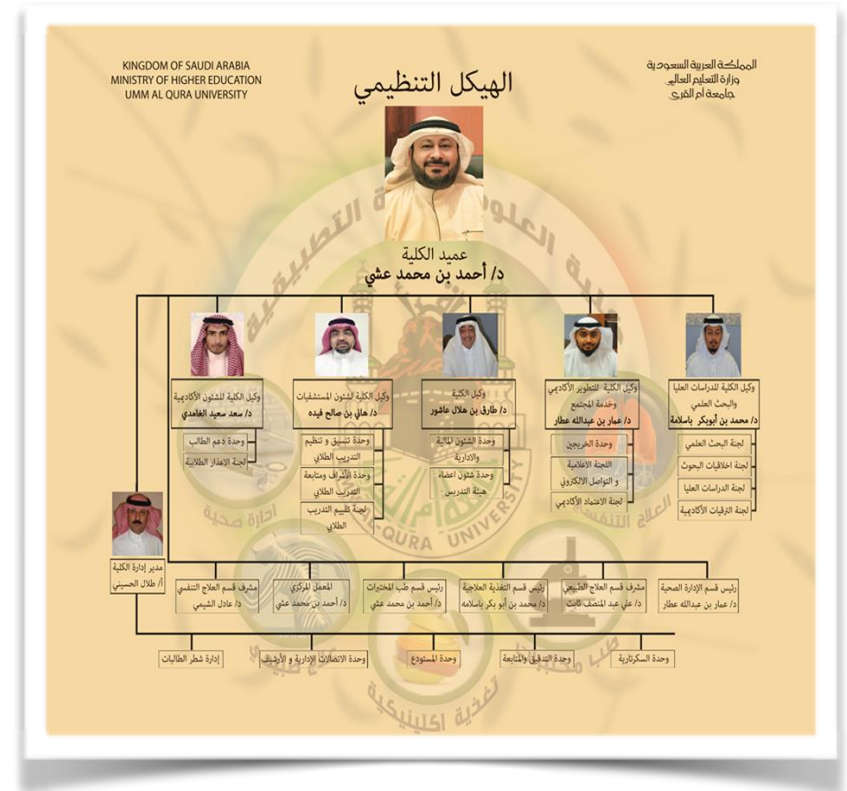
Is the sum of the semester activity grades added to the final exam grades for each course, calculated from a total of one hundred grades.

- Estimate :

Description of the percentage or the symbol alphabet of the final grade obtained by the student in any course.

- Incomplete Estimate :

Temporary estimate for each course the student is





- Continuous assessment

A temporary estimate made for each course studied over more than a semester to complete and has the symbol (IP).

Overall rating

Measuring the level of educational attainment of the student during the period of study at the university.

Denied:

An estimate made for each course the student is deprived of attending and admitting in its final exam caused by exceeding the allowed percentage for absence and has the symbol (DN).

Excused withdrawal:

An estimate made for each course the student is withdrawn from by an accepted apology and has the symbol (W).

Symbol (K):

An estimate given in the student's academic record when caught cheating, attempting to cheat or violating the rules and procedures of the exams and has no point or grade reference.

- Semester Grade point average:

The result of dividing each student's points by the total number of credit units studied during that semester.

Cumulative Grade point average :

The result of dividing the total sum of points for each student by the total number of credit units studied during the entire period of the program since admission.

- Academic guidance office:

An office established in each department of each faculty consisting of one department coordinator and one or more of the faculty academic section staff.

The office is established by a decision from the faculty dean based on the nominations of the department head to provide the following:

1. Academic follow up of students and filing reports to the department heads in case of failing to fulfill the conditions needed to continue his/her university studies.
2. Student registration for courses and following registration in the database.
3. Cooperating with the faculty coordinator in cases of postponement or apology from studying.
4. Revision of the graduation recommendation of each graduate to be sent to the specialized sectors for approval.
5. Following the process of curriculum equivalences.

- Exams and Estimates

1. Based on the recommendation of the department council providing the course, the faculty board may define the degrees of semester activities and achievements by no less than 30% of the total final grade of the course.
2. Based on the recommendation of the department council the faculty board may include practical or oral exams to the final exam and determine the designated degrees from the total.
3. Based on the recommendation of the course instructor, the department council providing the course may allow a student to complete the requirements of a semester granted an estimate of (IC). Only the estimate of the completed requirements is granted and if one academic year passes while the student fails to complete the requirements, he/she will attain an (F) estimate added to the total GPA.

المستوى	الساعات	اسم المقرر	رمز المقرر
1	2	اللغة العربية	2-501101
1	2	القرآن الكريم(1)	2-605101
1	12	اللغة الانجليزية	12-705200
1	2	علم الكمبيوتر(الحاسب الآلي)	2-1000113
1	8	المدخل للعلوم الطبية	8-1000101
2	2	التقافة الاسلاميه(1)	2-601101
2	2	مهارات التعلم	2-1000112
2	2	المهن الطبية واخلاقياتها	2-1000111
2	3	المدخل للفيزياء الطبية	3-403104
3	2	السيرة النبوية	2-102101
3	2	القرآن الكريم(2)	2-605201
3	3	أسس تغذية إنسان	3-1702221
3	2	التغذية خلال مراحل العمر المختلفة(1)	2-1702222
3	3	العناصر الغذائية والايض في الانسان	3-1702271
3	3	التغذية و وظائف اعضاء الجسم	3-1701212
4	2	التقافة الاسلاميه(2)	2-601201
4	2	اقتصاديات الغذاء	2-1702261
4	2	تحليل أطعمة	2-1702251
4	2	التغذية خلال مراحل العمر المختلفة(2)	2-1702223
4	3	الاحتياجات الغذائية	3-1702241
4	3	اساسيات الاحياء الدقيقة في الاغذية	3-1702274
4	3	التغذية وانسجة الجسم والامراض	3-1702273

المستوى	الساعات	اسم المقرر	رمز المقرر
5	2	القرآن الكريم(3)	2-605301
5	4	مبادئ التغذية العلاجية	4-1702331
5	3	تخطيط الوجبات	3-1702337
5	3	تقييم الحالة الغذائية	3-1702342
5	3	صحة وسلامة الغذاء	3-1702325
5	3	جودة وخدمات التغذية في المستشفيات	3-1702335
6	3	الثقافة الاسلاميه(3)	3-601301
6	4	التغذية العلاجية(1)	4-1702332
6	3	إعداد وجبات	3-1702338
6	2	التغذية والمناعة	2-1702324
6	2	أمراض سوء التغذية	2-1702339
6	3	التغذية في المجتمع	3-1702362
6	2	الإرشاد الغذائي	2-1702363
7	2	القرآن الكريم(4)	2-605401
7	3	التغذية العلاجية الأنبوية والوريدية	3-1702436
7	1	التغذية في الإسلام	1-1702467
7	2	التغذية الوظيفية	2-1702452
7	4	التغذية العلاجية(2)	4-1702433
7	3	مشروع التخرج	3-1702499
7	1	اساسيات الاحصاء التغذوي	1-1702474
8	2	الثقافة الاسلاميه(4)	2-601401
8	4	التغذية العلاجية العملية في المستشفيات	4-1702434
8	3	التثقيف الغذائي	3-1702466
8	2	تفاعل الغذاء والدواء	2-1702426
8	3	التغذية التطبيقية	3-1702453
8	2	الاتجاهات الحديثة في التغذية	2-1702427

4. The semester degrees are calculated by either:

➤Oral or practical exams, research assignments, summer activities and one written exam.

➤Two written exams at least.

5. a student is not considered passing of a study course including clinical examinations unless achieving no less than 60% of the clinical exam , and if not achieved, the student is considered failed attaining (F).

6. Curricula of symposiums, research and other courses with a practical or field characteristic may be relieved from the rules of articles 1, 2 and 4 with a decision from the College Board based on the recommendation from the department providing the course .The faculty council will determine the method to assess these courses.

7. If research courses would demand more than one study level, the student is granted an estimate of continuous (IP) and after completion; the student is granted the obtained estimate and degrees.

8. If the course is not completed in the designated time, the department providing the course may approve granting an estimate of incomplete (IC) in the student record.

9. If a student is absent in the second round of testing without an excuse acceptable to the College Board the student would receive a result fail (F) .

10. If the student is unable to attend the final exam in any of the courses for a compelling excuse accepted by the College Board,

the Board may, in extreme cases , accept his excuse and allow him to re-examine during a period no longer than the end next semester granted his full estimate.

Study Plan of Clinical Nutrition Program

Degree: Bachelor's Degree of Applied Medical Sciences (Nutrition Program)

- Term of Study: 4 years + residency (hospital basic training) (140 S.U.)

First year									
First Term					Second Term				
p	T	C	COURSE	Course No	p	t	cu	Course	Course No
-	2	2	1 HOLY QURAN	2-605101	-	2	2	Islamic culture	2-601101
-	2	2	Arabic language	2-501101	1	2	3	Medical physics	2-403101
1	1	2	Computer science	3-1702221	-	2	2	Microbiology	17-1004201
-					-	2	2	Professional medical ethics	2-10001111
6	6	12	English language						1-705200
2	6	8	Approach to medical sciences						8-1001101

SECOND YEAR									
First Term					Second Term				
p	T	C	COURSE	Course No	p	t	cu	Course	Course No
-	2	2	Holy Quran 2	2-605201	-	2	2	Islamic Culture 2	2-601201
-	2	2	Prophet Curricula	2-102101	-	2	2	Food Economics	2-1702261
-	3	3	Foundation of Human Nutrition	3-1702221	1	2	3	Microbiology	17-1004201
-	2	2			1	1	2	Food Analysis	2-1702274
-					-	2	2	Nutrition Throughout the Life Cycle (2)	2-1702223
1	2	3	Food Elements and metabolism	3-1702271	1	2	3	Human Anatomy	17-1003201
1	2	3	Human Physiology	1035212 17	1	2	3	Nutritional Requirements	3-1702241

THIRD YEAR										
First Term					Second Term					
p	T	CU	Course	Course No	p	T	cu	Course	Course No	
	2	2	Holy Quran	2-605301	-	3	3	Islamic Culture	3-601301	
2	2	4	Principles of Medical Nutrition Therapy (MNT)	4-1702231	2	2	4	MNT(1)	4-1702332	
1	2	3	Diet Planning	3-1702337	2	1	3	Meals preparation	3-1702338	
1	2	3	Nutritional Assessment	3-1702342	-	2	2	Nutrition & Immunology	2-1702324	
1	2	3	Food Hygiene & Safety	3-1702325	-	2	2	Diseases of Malnutrition	2-1702339	
1	2	3	Food Services & Quality control in Hospital	3-1702335	1	2	3	Nutrition in Community	3-1702362	
					-	2	2	Nutritional Counseling	2-1702363	
TOTAL: 37										
FOURTH YEAR										
First Term					Second Term					
P	T	CU	Course	Course No.	P	T	C	Course	Course No.	
-	2	2	Holy Quran	2-605401	-	2	2	Islamic Culture	2-601401	
1	2	3	Enteral & Parenteral Nutrition	3-1702436	4	-	4	MNT (Practice in Hospital	4-1702434	
-	1	1	Nutrition in Islam	1-1702467	-	2	2	Nutrition and Epidemiology (2)	2-1702465	
1	1	2	Functional Foods	2-1702452	1	2	3	Nutrition Education	3-1702466	
2	2	4	MNT (2)	4-1702433	-	2	2	Nutrients and Drugs Interactions	2-1702453	
-	2	2	Nutrition and Epidemiology (1)	2-1702464	2	1	3	Applied Nutrition	3-1702453	
	1	1	Biostatistics	17-1008403	-	2	2	New Trends in Nutrition	2-1702427	
-	3	3	Research Project							3-1702499
4	1/4	18	TOTAL		7	11	TOTAL			

TOTAL:36



A HEALTHY FROM
OUTSIDE START
FROM THE INSIDE

كيفية الوصول للمكتبة الالكترونية

The screenshot shows the 'Learning Resources Library' website. It features a header with the library's name and a navigation menu on the right. The main content area includes a search bar and a list of resources. A large white arrow points from the search bar area towards the 'قواعد المعلومات الأجنبية' (Foreign Information Resources) link in the navigation menu. The page also displays a table with information about the library's services and contact details.

المستخدم :	UQU
كلمة المرور :	12345678
المستخدم :	
كلمة المرور :	

Course Overview

Course code :	1702272-3		
Course title:	Nutrition and body systems functions		
Level/semester	2 nd Year - semester 1		
Credit hours:	3 CU	Theoretical: 2 CU	Practical: 1CU
Contact hours	4 hr	Theoretical: 2 hr	Practical: 2 hr
Language:	English		
Course Description:	<p>This course in physiology aims to introduce students to the physiological concepts of the functions of body systems with emphasis on clinical relevance. This course covers:</p> <ol style="list-style-type: none"> 1) Cardiovascular disease 2) Physiology of Blood . 3) Physiology of respiration. 4) Gastro- intestinal Physiology. 5) Renal physiology. 6) Physiology of Reproduction. 7) Neuro-muscular physiology . 8) Nervous system. 9) Endocrine physiology. 		
Aims and Goals/Skills of the course:	<p>By the end of this course the student should be able to :</p> <ol style="list-style-type: none"> 1. Identity the functions of the tissues, organs, & body systems. 2. Describe the mechanisms by which the human subject functions. 3. Discuss the interaction of the internal & external environments in relation to the functions of the body systems. 		
Content of the Course:	<ul style="list-style-type: none"> - Cell structure and function review - Cardiovascular Physiology 1 - Cardiovascular Physiology 2 - Physiology of Blood - Physiology of Respiration 1 - Physiology of Respiration 2 - Gastrointestinal Physiology - Renal Physiology 1 - Physiology of Reproduction - Neuro - muscular physiology - Nervous system 		
Examination:	<ul style="list-style-type: none"> • THEORY 3 PERIODIC EXAMS (8.0 MARKS EACH)... 24% • Presentation 16% • FINAL PRACTICAL EXAM10% • Final written exam 50% 		

Course Overview

Course code :	
Course title:	Internship
Level/semester:	5 th Year – one year (12 month)
Conduct hours:	-----
Contact hours	8 hours
Language:	English
Course Description:	This course will allow students to demonstrates and practice when to determine and estimate the daily requirements to diet planning using a guide to good eating (basic four food groups), food guide pyramid as well as meals descriptions, food exchange, calculation of nutrients in diet from food composition table, diet hospital regular and planning restricted diet.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Recognize and analyze basic issues of clinical nutrition interest, hence to suggest the suitable solutions and test them • Ability to take responsibility for their own learning and continuing personnel development. • Ability to perform effective communication and positive relation with others • Ability to work with team • Ability to lead a team • Apply the ethical and professional standards in the clinical settings. • Ability to assess the patient's nutritional needs. • Establish and implement the suitable clinical nutrition care program and strategies to meet the patient's needs. • Provide the nutrition education to patients and their families according to their conditions during hospitalization and on discharge.
Content of the Course:	<ul style="list-style-type: none"> • Students are required to spend 1 year after completion of all required courses under supervised training in clinical nutrition departments in hospitals. • This will be a fifth year full employment for senior students. The students will be assigned to local hospitals and community projects after agreement with supervisors in the departments. • The training will covers different wards or sections of the establishment that the student will enrolled in to have a wide and in depth training in all the fields of nutritional services. Two supervisors will be assigned to the students, one from the university department and the other in the work place such as Clinical dietician or school nurse... etc. • The structure practical experience in this internship will allow the student to work closely with senior nutrition practitioners. At the end of the year, the student should show a satisfaction progress and profession that will be assessed by the two supervisors and by admitting a written report to the clinical nutrition department.

Course Overview

Course code :	1702426-2
Course title:	NUTRIENT-DRUGS INTERACTIONS
Level/semester :	4 th Year (Second Semester)
Credit hours:	Lecture hours: 2 hours
	Practical hours: 0
Language:	English
Course Description:	This course is designed to give, the fourth year Clinical Nutrition students, a basic knowledge about aspects of Food/Nutrient-Drug Interactions and its clinical importance.
Aims and Goals of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • The meaning and different branches of Food/Nutrient-Drug Interactions. • The different categories of Medical drugs. • Recognize the direct effects of various therapeutic categories of drugs on nutritional status and clinical manifestations of these effects. • Identify the effects of foods on drug absorption, distribution and metabolism. • Identify the effects of drugs on food/nutrient absorption, distribution and metabolism. • Common examples of desirable and undesirable aspects of Food/Nutrient-Drug Interactions. • Discuss the role of nutrition-pharmacy team.
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 40% • Student Assignment and activity..... 10% • Final written exam 50%

Course Overview

Course code :	1702221-3
Course title:	FOUNDATION OF HUMAN NUTRITION
Level/ semester:	2 nd Year - semester 1
Credit units	3 CU
Contact hours	3 hours
Language:	English
Course Description:	This course introduce the student to the basic human nutrition, general concepts of nutrition, food component (protein, carbohydrates, fats, energy balance, vitamins, minerals and water) and study the main sources, daily requirements, physiological functions, deficiency symptoms, digestion, absorption and metabolism. for all nutrients.
Aims and Goals/Skills of the course:	<p>At the end of this course, the student should be able to:</p> <ul style="list-style-type: none"> • Recognize the concepts of clinical nutrition program. • Understand the food component. • Study the main sources, daily requirements, physiological functions, deficiency symptoms, digestion, absorption and metabolism. for all nutrients.
Content of the Course:	<ul style="list-style-type: none"> • Concepts of clinical nutrition program • Good nutrition • Carbohydrates Protein Fats • Water Vitamins • Mineral Trace Elements • Energy Balance
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 20% • Final written exam 50%

Course Overview

Course code :	1702271-3		
Course title:	Food elements and metabolism		
Level/semester:	2 nd Year - semester 1		
Credit hours:	3 CU	Theoretical: 2 CU	Practical: 1CU
Contact hours	4hour	Theoretical: 2 hr	Practical: 2 hr
Language:	English		
Course Description:	This course aims to introduce students to the concepts of the functions of living cells at molecular level including carbohydrates, lipids and proteins and to understand their different metabolic pathways. It also provides knowledge related to hormonal regulation and role of enzymes in cellular reactions. The course emphasizes on the role of vitamins and minerals in maintaining healthy life. An overview of DNA structure, replication and gene mutation is also described.		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Ability to understand the mechanism of fuel production from different food stuff. • Ability to rationale integrated metabolic pathways. • Diverse hormonal effect on metabolic pathways during various physiological situations as; fasting and feeding state. • Point out the clinical significance of determination of plasma levels of; glucose, cholesterol, urea, creatinine, uric acid, enzymes. • Perform chemical tests for estimation of serum levels of cholesterol, urea, creatinine, albumin, liver enzymes , plasma glucose. 		
Content of the Course:	<ol style="list-style-type: none"> 1- Introduction to biochemistry 2- CHO digestion & absorption - Glycolysis 3- TCA cycle Oxidative 4- Glycogen metabolism- Regulation 5-Gluconeogenesis- Maintenance of blood glucose- Pentose-Phosphate Pathway 6-Lipids digestion, absorption ,Lipoproteins metabolism 7- Lipolysis - Oxidation of fatty acids- 8- Ketone body's metabolism -Cholesterol synthesis 9- Proteins; Importance- Essential amino acid- Nitrogen balance Protein turnover- Deamination of amino acids - Urea cycle 10-Outline of Fate of Carbon Skeleton of Amino Acids 11- Important compounds derived from amino acids - Inborn error metabolic disease of amino acids metabolism 12- Uric acid - Hormonal regulation metabolism 13- Vitamins; water soluble and fat solvent soluble- importance, deficiency 14- Minerals; Ca, P, Fe , Na , K, Zn, I2 – Importance , deficiency 15- Blood buffers, blood pH -Acidosis, Alkalosis 		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 15% • Semester activity..... 10% • Final Practical Exam 20% • Final written exam 40% 		

Course Overview

Course code :	1702453-3		
Course title:	Applied Nutrition 47		
Level/semester:	4 th Year - semester 2		
Credit hours:	3 CU	Theoretical: 2 CU	Practical: 1 CU
Contact hours	4 hr	Theoretical: 2 hr	2CUhr
Language:	English		
Course Description:	<p>At the end of this course, the student should be able to: Recognize the concepts of clinical nutrition program. Understand The meaning of applied nutrition (Global and Local) Understanding the functional food and how to Extract the active ingredients from the food Understanding how to use the experimental animal in research work Understanding the method of administration of the food and other materials</p>		
Aims and Goals/Skills of the course:	<p>The ability to act as a decision maker. The ability to discuss the importance of nutrition and nutrients. Application of innovative tools in presenting case studies. The ability to act as a decision maker. Ability to take responsibility for their own learning and continuing personnel development</p>		
Content of the Course:	<p>Definition of applied nutrition Use of functional foods to curing some diseases Basal Diet Preparation of plant extracts Chemical composition of plants and herbs Sprague Dawley strain rats Inflicting rat groups with diabetes mellitus Inflicting rat groups with hypercholesterolemia Inflicting rat groups with Gastric ulcer Inflicting rat groups with kidney inflammation Inflicting rat groups with Anemia Biological evaluation Under weight and (anorexia nervosa)</p>		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 20% • Final written exam 50% 		

Course Overview

Course code :	1705271-3		
Course title:	Nutrition and human body structures and diseases		
Level/semester :	2 nd Year (1 st semester)		
Credit hours:	3 CP	Lecture hours: 2 CP	Practical hours: 1CP
Contact hours	4hour	Lecture hours: 2 hr	Practical hours 2 hr
Language:	English		
Course Description:	<p>This course is designed to give the students the basic anatomical structure and function of the various parts and systems of the body, their location and their relation to each other according to what is needed in Clinical Nutrition. Also, the course gives the student the function of these organs and a brief account on the related pathological problems.</p> <p>Also, the course should give the students the basic histological structure of the body organs and their relation to Clinical Nutrition. Moreover, the course gives the students the basic knowledge to help them understand other courses..</p>		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ol style="list-style-type: none"> 1- Acquire the basic anatomical structure and function of the parts of the human body. 2- The location of these different parts and their relation to each other as to help the students in their practical life such as in phlebotomy. 3- The function of these organs and a brief account on related pathological problems regarding the cause and change in structure. 4- the basic histological structure of the body organs and their application in Clinical Nutrition as in blood cells picture and gross histopathological preparation. 		
Content of the Course:	<ol style="list-style-type: none"> 1- Introduction to anatomy, function and histology of cell and medical terminology. 2- Muscles, vessels and nerves, cell structure. 3- Bones and joints of the body, epithelium, connective tissue. 4- Cardiovascular system, blood cells. 5- Blood vessels of the body, blood cells. 6- Respiratory system, histology of muscle cells. 7- Gastrointestinal tract, histology. 8- Nervous system and endocrinology. 9- Urinary system, histology. 10- Male genital system 11- Female genital system 12- Organs of special senses. 		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Student Assignment and reports 10% • Final Practical Exam 20% • Final written exam 40% 		

Course Overview

Course code :	1702434-4		
Course title:	Medical Nutrition Therapy (MNT) Practice In Hospital		
Level/semester r:	4 th Year - semester 2		
Credit hours:4	Contact hours: 8 hours	Theoretical: -	Practical:8
	Practical hours: 4		
Language:	English		
Course Description:	<p>This course is designed to allow the students to apply the practical skills of clinical dietitian in different departments of hospital, students will study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in deferent ward of hospital such as (medical – surgery – pediatric – orthopedics – cardio – nutritional care in intensive care unit (ICU) – renal dialysis - gynecology) to manage some chronic disease, malabsorption disease and metabolic disorder disease.</p>		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Acquire the practical skills of clinical dietician in different ward of hospital. Applied practical skills in different ward of hospital including (medical – surgery – pediatric – orthopedics – cardio – ICU – renal dialysis - gynecology). 		
Content of the Course:	<ul style="list-style-type: none"> - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (medical) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (medical) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (surgery) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (surgery) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (pediatric) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (pediatric) ward of hospital. 		

<p>Content of the Course:</p>	<ul style="list-style-type: none"> - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (orthopedics) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (orthopedics) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (cardio) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (cardio) ward of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in nutritional care in intensive care unit (ICU) of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in nutritional care in intensive care unit (ICU) of hospital. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in deferent ward of hospital such as renal dialysis. - Study the prevalence of disease, daily nutritional requirements, daily diet planning, nutrition education and diet therapy for patient in (gynecology) ward of hospital
<p>Examination:</p>	<ul style="list-style-type: none"> • Semester activities 20% • Theoretical quizzes 30% • Final written exam 50%

<p>Course code :</p>	<p>1702222-2</p>
<p>Course title:</p>	<p>Nutrition Throughout The Life Cycle (1)</p>
<p>Level/semester :</p>	<p>2nd Year - semester 1</p>
<p>Credit unit:</p>	<p>2 CU</p>
<p>Contact hours</p>	<p>2 hr</p>
<p>Language:</p>	<p>English</p>
<p>Course Description:</p>	<p>This course provides the students to study dietary recommendations for pregnant , lactation and infant, daily food plan for human throughout the life cycle, physiologic changes in human throughout the life cycle, and factors affect health.</p>
<p>Aims and Goals/Skills of the course:</p>	<p>At the end of this course the student must be able to: Identify dietary recommendations for pregnant , lactation and infant</p> <ul style="list-style-type: none"> • Identify concerns in the diets of pregnant , lactation and infant • Lists ways to encourage healthy eating behavior in pregnant , lactation and infant. • Explain causes and guidelines to overcoming childhood obesity. • Develop a list of diet outlines for healthy pregnant , lactation and infant and special diet plans for pregnant , lactation and infant with special nutritional needs
<p>Content of the Course:</p>	<p>Pregnancy</p> <ul style="list-style-type: none"> • Maternal weight • Nutrition during pregnancy Nutritional requirement (carbohydrate - protein - fat) - vitamins and minerals requirements. • Physical growth - Nutritional requirement • Eating patterns - Eating disorders (anorexia nervosa - bulimia nervosa) - Teenage pregnancy. • Lactation • Advantages of breast feeding • Infancy (physical growth from birth to 6 months) • Nutrition in infancy (from birth to 6 months) • Infancy (physical growth from 7 to 12 months) • Nutrition requirements (from 7 to 12 months). • Infancy diseases • Infancy from 1 to 2 years
<p>Examination:</p>	<ul style="list-style-type: none"> • Periodical Exams (Quizzes)30% • Semester activity.....20% • Final written exam50%

Course Overview

Course code :	1702466-3		
Course title:	Nutrition Education		
Level/semester :	4 nd Year - semester 2		
Credit hours :3	Contact hours: 4 hours	Theoretical: 2 hr	Practical:- 2
	-		
Language:	English		
Course Description:	<p>This course introduces the students to the basics, background and the characteristics of nutrition education programs (NEPs). A comprehensive discussion of the goals, methods, locations of education, screening and factors affect NEPs are essential to be studied. This is a field course that will enable the students to understand the theoretical and practical knowledge about steps to be an educator, and to recognize the food habits of many populations. This will help the student to be able to improve dietary habits applying interventions projects using techniques from epidemiology and community courses to help the student to evaluate and plan education for all age groups. Malnutrition including both obesity and underweight with their related consequence beside other chronic and endemic diseases will be studied intensively in order to enhance the situation by nutrition education as a preventive and curative approach .</p>		
Aims and Goals/Skills of the course:	<p>At the end of this course, the student should be able to:</p> <ul style="list-style-type: none"> • Define the meaning of good nutrition education. • Arrange and develop a successful nutritional education programs (NEP). • Implement and evaluate the suggested NEP. • Assess food habits in local and national settings. 		
Content of the Course:	<p>Introduction Scope of Nutrition Education Factors That Influence Food Habits Internal Factors Of Food Choices: Setting and Institutes That may Benefit from Nutrition Education. Target Groups of Nutrition Education Nutrition Educator: Theory of Food Habit Modification Materials that can be used in nutrition education. A Frame Work for Planning Nutrition Education Programs Health Belief Model: Nutrition Education Strategies to Facilitate the Ability to Take Action</p>		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes)30% • Semester activity.....20% • Final written exam50% 		

Course Overview

Course code :	1702241-3		
Course title:	Nutritional requirement		
Level/semester:	2 nd Year - semester 2		
Credit units:	3 CU	Theoretical: 2 CU	Practical: 1CU
Contact hours	4 hr	Theoretical: 2 hr	Practical: 2hr
Language:	English		
Course Description:	<p>This course is designed to introduce the students to estimate the total energy requirement, method for calculation of energy requirement, up to date methods for nutritional requirements estimation, uses food composition tables, uses computer programs for food analysis, nutrition requirements estimation according to age, daily requirements during fasting and hajj.</p>		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Demonstrate advance skills in the estimation of total energy requirement. • Understand the method for calculation of energy requirement. • Know up to date methods for nutritional requirements estimation. • Recognize the daily requirements during fasting and hajj. 		
Content of the Course:	<ol style="list-style-type: none"> 1- Definition of nutrient sufficiency. 2- Estimation of total energy requirement. 3- Energy expenditures content. 4- Method for calculation of calories requirements. 5- Measurement of energy expenditure. 6- Daily requirements. 7- Anthropometric measurements and body mass index (BMI). 8- Computer programs. 9- Food composition tables. 10- Nutrition requirements estimation according to age (infancy, childhood and adolescents). 11- Nutrition requirements estimation according to age (adulthood and elderly). 12- Nutrition requirements estimation for pregnancy and lactation. 13- Daily requirements during overweight & underweight. 14- Daily requirements during fasting and hajj. 		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 10% • Final Practical Exam 20% • Final written exam 40% 		

Course Overview

Course code :	1702274-3
Course title:	Principles of Food Microbiology
Level/semester:	2 nd Year - semester 2
Credit hours:	3 hours
Contact hours	4 hours
Language:	English
Course Description:	This is an introductory course in microbiology designed for nutrition students with no previous microbiology background. It consists of the basic principles of bacteriology, virology and mycology, with special emphasis on micro-organisms implicated in food/water-borne infections. At the end of this course the students will be able to acquire the basic knowledge and practical skills related to fundamental principles and techniques on microbiology.
Aims and Goals/Skills of the course:	At the end of this course students must be able to: 1- Identify and discriminate different types of bacteria, viruses and fungi. 2- Learn the structure, classification, genetics, diseases, preventive measures and laboratory diagnosis of these microorganisms (focusing in source of food and water contamination). 3- Understand the concepts of the host-parasite relationships, including the immune response and the pathological changes.
Content of the Course:	<ul style="list-style-type: none"> ▪ Introduction to microbiology and its importance in nutrition ▪ Sterilization and disinfection ▪ Bacterial nutrition, growth and metabolism ▪ Culture and identification of common infectious agents ▪ Indicators of Microbial Food Spoilage ▪ Basic concepts of microbial genetics and biological products ▪ Foodborne Diseases ▪ Types and effects of microorganisms (bacteria , viruses, moulds, yeasts and parasites) ▪ Foodborne Infections and Intoxications ▪ Examples of common infectious disease
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 20% • Semester activity 10% • Final practical exam 20% • Final written exam 40%

Course Overview

Course code :	1702465-2
Course title:	Nutrition And Epidemiology (2)
Level/semester:	4 th Year - semester 2
Credit units:	2CU
Contact hours	2 hours
Language:	English
Course Description:	This course introduces the students to the background of public health which use epidemiological skills to have a Scientific basis for the development of the evidence upon which public action for the health can be implemented. This course also describes analytical approaches for completing a clinical research with emphasis on the interpretation of this data in clinical practice. This can be done by applying the public health nutrition cycle guide. Finally, the students will be encouraged to have a comprehension of individuals and ecological studies design advantages and implementations.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Identify the basics of public health nutrition as a division of the nutrition and dietetics science. • Define the practical programs and survey using the epidemiology approaches for the most common diseases such as diabetes obesity etc. • Recognize the steps for designing, implementing and completing an ecological studies at the individual and group levels
Content of the Course:	<ol style="list-style-type: none"> 1. Overview of the public health nutrition 2. Health promotion 3. The public health nutrition cycle 4. The key public health problems :Overnutrition 5. The key public health problems: Undernutrition 6. Strategies for intervention at the individual level 7. Strategies for intervention at the ecological level 8. Title: Public health and participation or involvement of population
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity 20% • Final written exam 50%

Course Overview

Course code :	1702427-2
Course title:	New trends in nutrition
Level/semester:	4 th Year - semester 2
Credit units:	2 CU
Contact hours	2 hours
Language:	English
Course Description:	This course is designed to help the students to study some concepts new trends or up –to-date topics in nutrition such as probiotics, antioxidants, natural antitoxin ,bioavailability of vitamin and minerals addition ,studying the role of macronutrients substitutes in modern nutrition , nutrition for sports and athletic ,nutrition for oral health , nutrition for developmental disabilities.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Discuss some concepts of new trends and up-to-date topics: nutrition • Recognize the concepts of cancer, probiotics ,natural antioxidants, coffee, energy beverage, Autism, effect of food modest.. ,and any up-to-date nutritional topics • Identify the effect of the previously mentioned topics (in no.2) on health and nutritional status
Content of the Course:	1- Oxidative stress and cancer 2- Carcinogenic agents in food 3- Nutrition care in cancer treatment 4- Effect of some nutrients in cancer treatment. 5- Effect of different types of coffee beverage on human health 6- Energy beverage on human health 7- Autism 8- Autism and nutrition 9- Food on mode 10- Food on mode 11- Alzheimer diseases 12- Effect of nutrition on Alzheimer diseases 13- Effect of Carnitine on human 14- Effect of Carnitine on human
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 20% • Final written exam 50%

Course Overview

Course code :	1702251-2		
Course title:	Food Analysis		
Level/semester:	2 nd Year - semester 2		
Credit hours:2	2CU	Theoretical: 1CU	Practical:1 CU
Contact hours:3	3 hour	Theoretical : 1 hr	Practical: 2hr
Language:	English		
Course Description:	This is course is designed to introduce the students to prepare food samples for analysis; this will determine CHO, protein, fat and ash. Chemical and physical characteristics of food such as PH, texture or tender, viscosity and color will be determined in foods using Kjeldahk unite, Soxhlet extraction unite, PH meter, colorimeter and spectrometer as examples.		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Discuss the importance methods of food analysis. • Assess the nutrients content of food. • Recognize and analyze the simple problems in food. 		
Content of the Course:	1- Introduction of course and instructors 2- Concepts of food analysis 3- Nutrition Labeling 4- Moisture determination in food samples using drying oven under vacuum or Drying oven 5- Ash determination in food samples using Muffle.. 6- Carbohydrates determination in food samples. 7- Determine protein using Kjeldahl unite (protein digestion and distiller). 8- Protein Quality Tests. 9- Fat determination in food samples using Soxhlet extraction unites (fats determination). 10- Fat Characterization. 11- Determine food texture or tender using penetrometer. 12- Determine food viscosity 13- Determine food PH using PH meter. 14- Determine food coloring using colorimeter and Spectrometer.		
Examination:	<p>Periodical Exams (Quizzes) Two theoretical + one practical 30%</p> <ul style="list-style-type: none"> • Semester activity 10% • Final Practical Exam 20% • Final written exam 40% 		

Course Overview

Course code :	1702261-2
Course title:	Food Economics
Level/semester:	2 nd Year - semester 2
Credit hours:	2CU
Contact hours	2hr
Language:	English
Course Description:	Course introduces the students to the concepts, background and the dynamics relationship between foods in general term and nutrition in specific level to the economy and agriculture. The economy of any nation is strongly associated with food availability and food security.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Recognize the relationship between food and economy. • Determine fundamentals of food economics. • Ability to recall, understand and present the information and facts of food and economy. • Define the basic food and economy theories and its application. • Identify the skills needed to analyses nutritional situations related to economics. • Discuss the relation between nutrition and food at global levels and other sciences. • Recognize the elements, basis and principles of health and food economics
Content of the Course:	<ol style="list-style-type: none"> 1. Over all view of the course contents and first lecture: 2- Historical background of food production: 3- Basics of economics 4- Basics and theories of economy; The Microeconomics: Demand, 5- Factors affecting demand, Elasticity of demand 6- Basic theory of economy; microeconomics: 7-Prices as signals : Aims, Rationing system, Market equilibrium 8- Basics and theories of economy; The Macroeconomics 1Civilian labor, Labor and wages, Categories of labor, Women wages, 9- The Macroeconomics 2: GNP, business cycles, Unemployment and inflation 10- Economic growth and countries development: Stages of economic development: 1- primitive equilibrium, What are the obstacles for development? Measurement of the economic growth 11- A link between nutrition and economy: 12- Nutritional consequences of food insecurity and vulnerable food 13- The Nutrition Transition system and famine 14- Food policies and national food planning
Examinat ion:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 20% • Course work-active participation, attendance and active listening in hospital training stage 1 And Group project.....25% • Attendance and behavior in class 5% • Final written exam 50%

Course code :	1702452-2
Course title:	Research Project for Clinical Nutrition
Level/semester :	4 th Year - semester 1and 2
Credit hours:	Contact hours: 3 hours (Theoretical)
Contact hours	3
Language:	English
Course Description:	<p>At the end of this course students must be able to:</p> <p>Determine the basics of developing, managing and conducting a nutritional research.</p> <p>Interpret and analyze data</p> <p>Write a mini-thesis or a dissertation.</p> <p>Discuss the results of the project.</p> <p>Use the finding in future work.</p>
Aims and Goals/Skills of the course:	<p>Recognize the origin and development of research</p> <p>Determine fundamentals of research completion</p> <p>Ability to recall, understand and present the information and facts of research.</p> <p>Define the nutrition research theories and its application.</p> <p>Identify the skills needed to conduct a nutrition research</p> <p>Recognize the nutrition research ethics.</p> <p>Discuss the relation between nutrition research and other sciences.</p>
Content of the Course:	<p>Over all view of the research contents- all the students</p> <p>Problems with research and how to handle it (policies)</p> <p>Managing the research; why it is dark- all the students</p> <p>Writing up stages of thesis drafts;</p> <p>The guideline for setting a medical research;</p> <p>understanding your research and first steps for writing your research protocols</p> <p>training on nutritional research techniques</p> <p>Basics respondents recruiting skills</p> <p>conducting the pilot study (if needed)</p> <p>conducting the project</p> <p>The thesis in final formatting and submission to supervisors for final check up</p> <p>Final thesis submission and viva exam.</p>
Examination:	<p>Periodical Exams (Quizzes) 30%</p> <p>Semester activity..... 20%</p> <p>Final written exam 50%</p>

Course Overview (cont.)

Content of the Course:	<ol style="list-style-type: none"> 1. General introduction of nutrition and Islam 2. Food in Quran 3. Water in Quran (2): 4. Secret of water 5. Water as source of life 6. Water for safety 7. Food and drinks in the prophet life and Hadeeth (1) 8. Food and drinks in the prophet life and Hadeeth (2) 9. Fasting and nutrition (1): 10. Ommra sessions and nutritional changes and requirements 11. Fasting and nutrition (2): 12. Hajj sessions and nutritional changes and requirements 13. scientific evidence as revealed by new current researches of some food and drinks have been mentioned in Quran and Hadeeth 14. Food in Makkah
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 20% • Course work-active participation, attendance and active listening And Group project..... 20% • Activities during lectures and case studies10% • Final written exam 60%

Course code :	1702337-3
Course title:	Nutrition Throughout The Life Cycle (2)
Level/semester :	2 nd Year - semester 2
Credit hours:	2 CU
Contact hours	2 hr
Language:	English
Course Description:	This course provides the students to study dietary recommendations for human throughout the life cycle, daily food plan for human throughout the life cycle, physiologic changes in human throughout the life cycle, and factors affect health.
Aims and Goals/Skills of the course:	At the end of this course the student must be able to: <ul style="list-style-type: none"> • Identify dietary recommendations for human throughout the life cycle. • Identify concerns in the diets of children and adolescents, adult and overcoming them. • Lists ways to encourage healthy eating behavior in children. • Explain causes and guidelines to overcoming childhood obesity. • Develop a list of diet outlines for healthy children and special diet plans for children with special nutritional needs. • Identify nutritional requirements for aging. • List the factors that are associated with successful aging. • Be able to discuss how the factors associated with successful aging interact and Interrelate.
Content of the Course:	<ul style="list-style-type: none"> - Preschool children (2 to 5 y). Nutritional requirement (carbohydrate – protein – fat) – vitamins and minerals supplementation. - common nutritional problems in childhood - Failure to thrive – anemia – obesity – nutritional modification in nutritional problems. -School age children (6 – 12 years). -Nutritional requirement (carbohydrate – protein – fat) – vitamins and minerals requirements. -Title: common nutritional problems - anemia – obesity – nutritional modification in nutritional problems . Adolescent (13 – 18 years). -Physical growth - Nutritional requirement -Eating patterns - Eating disorders (anorexia nervosa – bulimia nervosa) - Teenage pregnancy. -Nutrition for adults -Young adult (20 – 44 years) -Middle adult years (45 – 64). -Nutrition in aging
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes)30% • Semester activity20% • Final written exam50%

Course Overview

Course code :	1702331-4		
Course title:	Principle of Medical Nutrition Therapy		
Level/semester:	3 rd Year - semester 1		
Credit units:	4CU hr	Theoretical: 2 CP	Practical:2 CP
Contact hours	6	Theoretical: 2hr	Practical:4 hr
Language:	English		
Course Description:	<p>At the end of this course, the student should be able to:</p> <p>Recognize the concepts of clinical nutrition program. Understand the food component & its relation to the diseases. Recognize most of the digestive system diseases. Understand the role of food nutrition and nutrients in treatment of GIT diseases. Study the main sources, daily requirements, physiological functions and deficiency symptoms for all nutrients.</p>		
Aims and Goals/Skills of the course:	<p>The ability to act as a decision maker. The ability to discuss the importance of nutrition and nutrients. Application of innovative tools in presenting case studies. The ability to differentiate between good nutrition and malnutrition. The ability to use critical thinking skills in evaluation of benefits of food. The ability to explain the deficiency symptoms of nutrients. Ability to take responsibility for their own learning and continuing personnel development</p>		
Content of the Course:	<p>Concept of Clinical Nutrition Dietician role Constipation and Diarrhea Hiatal Hernia and Gastro esophageal reflux diseases Esophagitis & diseases of the esophagus Indigestion / dyspepsia Lactose intolerance Irritation bowel syndrome (IBS) Pancreatitis & Diseases of Pancreas Gallbladder & Liver disease Ulcerative colitis Obesity and (bulimia nervosa) Under weight and (anorexia nervosa) Nutritional care in pre and post – operative routines</p>		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 20% • Final written exam 50% 		

Course Overview

Course code :	1702467-1
Course title:	Nutrition in Islam
Level/semester:	4 th Year - semester 1
Credit hours:	1 CU
Contact hours	1 hr
Language:	English
Course Description:	<p>This course is a unique in nature and essential for students graduated from Umm Al-Qura University as it reflects the holiness of Makkah and the Greatness of Islam in advising us in all aspect of our daily life. The students should be aware of the basics, background and the characteristics of nutrition in relation to Islam as a religion. The application of nutritional advise by the beloved prophet peace upon him in terms of how and how much and what to eat at individual or group levels.</p> <p>Food affected by seasons and place of consumption, thus Makkah has a special location and importance to the Muslim all over the world. Many of them came in visit to the holy mosque and stayed in Makkah over generations. They brought their food habits and diets with them. This provides a rich mix and combinations of different food plan and tastes.</p> <p>In the short Islamic practices like Ommra and Hajj, visitors to Makkah have to face many food habits changes and got to use to new foods and frequencies of consumption this affect their nutritional availability and changes their food consumption.</p> <p>One of the essential pillars of Islam is fasting and it applies around the globe by Muslim during Ramadan. This course provides the basics to learn how the Changes in food consumption and requirements for Muslims during Ramadan might be measured and affect health and wellbeing. The advice to be given for</p> <p>Fasting, and what to consume and when, is important to be discussed and understood. Nutrition related disease and illnesses need a special diet therapy, thus in Ramadan the advices and planning of a diet for these groups are essential to be covered. In hadeath and Quran many food and drinks are mentioned some are used as medications and some are forbidden to be used. Thus it is important to cover the background for these issues.</p>
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Discuss the importance of studying nutrition in relation to Islam. • Identify the food and drink in Quran and Hadeath including justification of forbidden foods in Islam. • Explain and advise using food that has medical properties from the life of our beloved prophet. • Determine the health and nutritional changes during special Islamic seasons e.g. fasting, Ommra and Hajj.

Course Overview

Course code :	1702325-3
Course title:	Food hygiene and safety
Level/semester:	3 rd Year - semester 1
Credit hours:	3 hours
Contact hours	4 hours
Language:	English
Course Description:	This course will allow students to demonstrate and practice when to determine and estimate the daily requirements to diet planning using a guide to good eating (basic four food groups), food guide pyramid as well as meals descriptions, food exchange, calculation of nutrients in diet from food composition table, diet hospital regular and planning restricted diet.
Aims and Goals/Skills of the course:	<ul style="list-style-type: none"> Recognize the basics of food hygiene and safety and the difference between safety and hygiene. Apprehend the methods and approaches to keep the food safe and clean e.g. general health and personal hygiene. Discuss generally the toxicology and the toxins in the modern society and how this affects work, home and the environment. Identify and separate the most common and important food borne microbes and parasites through contamination of foods and water supplies at home, and work hospital places. Handle home and work waste and safety issues (particularly medical and lab waste).
Content of the Course:	<ul style="list-style-type: none"> Health practice for better hygiene and safe food. International rule and regulations for food safety, production and handling Detailed and in depth study of microbiological food borne infections and intoxications (1): Food sampling. Detailed and in depth study of microbiological food borne infections and intoxications (2): Food spoilage Detailed and in depth study of microbiological food borne infections and intoxications (3): Bacterial food poisoning. safety issue in house and hospital (1). Safety issue in public places and in food factories and firms (2). Infection control for canned food products Infection control for frozen, refrigerated and different levels cooked products. (meat, poultry, fish and fruit and vegetables) Food additives Hazard Analysis and Critical Control points,
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes) 30% Semester activity 10% Final practical exam.....20% Final written exam 40%

Course code :	1702474-1
Course title:	Basic nutritional Biostatistics
Level/semester:	4 th Year - semester 1
Credit units:	1 CU
Contact hours	1 hr
Language:	English
Course Description:	This course will allow the student to know the basics of medical statistics and how to use this knowledge to analyze the medical research data in particular that is related to clinical nutrition. Also how to present the data using tables, curves and graphs. In addition to the use of statistical software in analyzing medical data.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> Recognize the basic statistical terms <ul style="list-style-type: none"> Understand the statistical methods that are used to analyze medical research data in general and in particular that is related to clinical nutrition. Use of statistical software in analyzing medical data.
Content of the Course:	<ol style="list-style-type: none"> Introduction to Biostatistics Data : Definition, primary data and secondary data, processing of data, sources of data, types of data (quantitative data, qualitative data). Presentation of data Measures of central tendency: Measures of dispersion: Tests of hypothesis Non parametric analysis Linear relationships between two variables Logistic regression analysis
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes) 30% Semester activity..... 20% Final written exam 50%

Course Overview

Course code :	1702436-3		
Course title:	Enteral And Parenteral Therapeutic Nutrition		
Level/semester :	4th Year - semester 1		
Credit hours:	3 CU	Theoretical: 2 CU	Practical: 1 CU
Contact hours	4 hr	Theoretical: 2 hr	Practical: 2hr
Language:	English		
Course Description:	This course introduces the students to distinguish between enteral and Parenteral therapeutic nutrition and when to use each of them including oral feeding, tube feeding, indications for enteral and parenteral nutrition, nutrient requirements, formulas for enteral and parenteral feeding, techniques of enteral and parenteral nutrition, administering medications through tubes feeding, complications of enteral and parenteral nutrition.		
Aims and Goals/Skills of the course:	At the end of this course the student must be able to: <ul style="list-style-type: none"> Recognize the enteral therapeutic nutrition. Know parenteral therapeutic nutrition. Understand the tube feeding. Study techniques of enteral and parenteral nutrition. 		
Content of the Course:	<ol style="list-style-type: none"> Oral feeding. Restricted diet. Indications for enteral therapy. Supplementation of the diet with protein. Supplementation of the diet with calories Formulas for enteral feeding. Advantages and disadvantages of various forced enteral feeding. Complications of enteral nutrition. Indications for parenteral nutrition. Critical status. Nutrient solutions for parenteral nutrition. Techniques of parenteral nutrition. Modification of TPN for patients. 		
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes) 30% Semester activity.....10% Final Practical Exam 20% Final written exam 40% 		

Course code :	1702337-3		
Course title:	Diet planning		
Level/semester:	3 rd Year - semester 1		
Credit units:	3 CU	Theoretical: 2 CU	Practical: 1 CU
Contact hours	4 hr	Theoretical: 2 hr	Practical: 2hr
Language:	English		
Course Description:	This course will allow students to demonstrates and practice when to determine and estimate the daily requirements to diet planning using a guide to good eating (basic four food groups), food guide pyramid as well as meals descriptions, food exchange, calculation of nutrients in diet from food composition table, diet hospital regular and planning restricted diet.		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> Determine the daily requirements. Know a guide to good eating (basic four food groups). Recognize the food guide pyramid. Know the description of main meals. Understand the food exchange list and diet hospital regular. 		
Content of the Course:	<ol style="list-style-type: none"> Determining nutrients needs Food composition table Dietary planning use food groups The food guide Pyramid. Food exchange system. Description of main meals. Cultural Aspects Of Dietary Planning. Vegetarian diets Food labeling Diet therapy Diet therapy Special diet therapy. Special diet therapy Dietary planning during fasting and hajj 		
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes) 30% Semester activity..... 10% Final Practical Exam 20% Final written exam 40% 		

Course Overview

Course code :	1702342- 3		
Course title:	Nutritional Assessment		
Level/semester:	3 rd Year - semester 1		
Credit units:	3CU	Theoretical: 2CU	Practical: 1 CU
Contact hours	4r	Theoretical: 2 hr	Practical: 2 hr
Language:	English		
Course Description:	This course is designed to enable students to recognize the various methods that can be used to assess the nutritional status of an individual, specific or vulnerable groups ,and population. The course will focus on the ABCD approach which discuss the anthropometric measurements, biochemical and body composition analysis, clinical examinations, and dietary assessment of individuals and population.		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> Recognize the basis and importance of nutritional assessment Identify the proper subjective and objective methods of assessing nutritional status of various target groups or individuals Acknowledge the skills required for different devices and techniques essential for assessment. 		
Content of the Course:	<p>1- Introduction to nutritional assessment 2- Anthropometric measurements 3- Weight measurements 4- Height measurements 5- Interpretations of weight and height measurements. 6- determination of body size. 7- Anthropometric assessment of body composition. 8- Biological Assessment. 9- Clinical Examinations. 10- Dietary Assessment 11- Household measurements 12- Individuals Dietary Assessment. 13- New methods for assessing nutritional status.</p>		
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes) 30% Semester activity..... 10% Final Practical Exam 20% Final written exam 40% 		

Course code :	1702433-4		
Course title:	Medical Nutrition Therapy 2 (MNT2)		
Level/semester:	4 nd Year - semester 1		
Credit units:	4 CU	Theoretical: 2 CU	Practical hours: 2 CU
Contact hours	5 hr	Theoretical: 2 hr	Practical hours: 3hr
Language:	English		
Course Description:	This course is designed to introduce the students to study the etiology of diseases, symptoms & diagnosis of diseases, risk factors of diseases, prevalence, daily nutritional requirements – daily diet planning for metabolic disorder and diseases, food allergy, children with low birth weight as well as the nutritional care in intensive care unit (ICU).		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to</p> <ul style="list-style-type: none"> Understand the nutritional care for metabolic disorders, food allergy, children with low birth weight and nutritional care in intensive care unit (ICU). Know daily nutritional requirements for metabolic disorder, food allergy, children with low birth weight and nutritional care in intensive care unit (ICU). Demonstrate skills in the daily diet planning for metabolic disorder, food allergy, children with low birth weight and nutritional care in intensive care unit (ICU). 		
Content of the Course:	<ol style="list-style-type: none"> Disorder of organic acid metabolism Disorder of urea cycle metabolism. Disorder of amino acids metabolism – Phenylketonuria (PKU) Disorder of carbohydrates metabolism – galactosemia. Disorder of fatty acids oxidation. Premature or low birth weight infants. Food allergy and Food intolerance Medical Nutrition Therapy for Anemia Medical nutrition therapy for pulmonary disease – (asthma). Human immunodeficiency virus (HIV) disease Nutritional care in intensive care unit (ICU). 		
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes)20% Semester activity..... 10% Practical. 30% Final written exam 40% 		

Course Overview

Course code :	1702452-2		
Course title:	Functional Foods		
Level/semester r:	4 nd Year - semester 1		
Credit hours: 2	Contact hours: 3 hours	Theoretical: 1 hr	Practical: 1hr
Language:	English		
Course Description:	This course provides the students to know the role of functional foods in order to help them identify and understand the umbelliferous herbs, labiaceous herbs, rutaceous fruits, zingiberaceae herbs, plant rich in vitamin A and carotene, plant rich in vitamin C, plant rich in sulfur, phytochemicals, flavonoids, fixed oils (omega 3 and/or omega 6), probiotics and bee honey.		
Aims and Goals/Skills of the course:	<p>Understand the functional foods (definition - Functional food science).</p> <ul style="list-style-type: none"> Recognize the chemical composition of some wild plants and herbs of widely spread trees in Arabic countries and KSA. Clarifying the possible medicinal (and nutritional) benefits of certain functional foods as remedies for certain diseases such as diabetes, kidney disease, anemia, elevated serum triglycerides, hypertension, and peptic ulcer. 		
Content of the Course:	<p>1- Functional foods 2- Plants Originated Functional Foods (Tea and cinnamon) 3- Plants Originated Functional Foods (Licorice, mints and thymes) 4- Plants Originated Functional Foods (ginger, ginseng and cranberry) 5- Plants Originated Functional Foods (citrus fruits) 6- Plants rich in vitamin A and vitamin C (grape, pomegranate and tomatoes). 7- Plants Originated from Cruciferous vegetables (cabbage, cauliflowers, broccoli) 8- Plants rich in sulfur (garlic and onion) 9- Plants high in fibers (Oat) 10- Omega family 11- Food rich in fixed oils from plants and animals oils 12- Microbial originated functional foods (Probiotics and Prebiotics) 13- Animal originated functional foods (milk and dairy products) 14- Revision and discussion of presentations</p>		
Examination:	<ul style="list-style-type: none"> Periodical Exams 30% Semester activity..... 10% Final Practical Exam 20% Final written exam 40% 		

Course code :	1702338-3		
Course title:	Meals Preparation		
Level/semester:	3 rd Year - semester 2		
Credit hours:	3 hours	Theoretical: 1CU	Practical: 2 CU
Contact hours	5hr	Theoretical: 1hr	Practical: 4
Language:	English		
Course Description:	This course introduces the student to the practical aspects of food items that consumed in everyday meal to edible portions of various food items. Recognize the effect of various methods of cooking & processing on the weight of many foods & recipes. Preparation and evaluation restricted diet for patient.		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> Be familiar with household measurements Be acquainted with the methods of estimation of edible portions of foods Recognize the effect of various methods of cooking & Processing on the weight of many foods & recipes. Preparation and evaluation restricted diet for patient. 		
Content of the Course:	<p>Studying of the standard household measurements The average weight of edible foods. Comparison between raw and cooked weights Factors affecting of nutritional value Methods of cooking & processing Methods of cooking & processing Cooking & processing of fruits & vegetables Cooking & processing of meat Cooking & processing of cereals Preparation restricted diet Preparation restricted diet Preparation restricted diet Preparation diet during fasting and hajj Preparation diet hospital regular</p>		
Examination:	<ul style="list-style-type: none"> SEMESTER ACTIVITIES..... 10% THEORETICAL quizzes..... 20% PRACTICAL quizzes..... 10% FINAL PRACTICAL EXAM..... 20% FINAL EXAM..... 40% 		

Course Overview

Course code :	2-1702374
Course title:	Human Body Defense on Nutrition
Level/semester:	3 rd Year - semester 2
Credit hours:	2 CU
Contact hours	2 hr
Language:	English
Course Description:	This course provides an overview on the human immune system and how could food initiate the allergic reaction. In addition will allow the student to recognize how can diet be used to prevent allergic reaction.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> Define and Identify the basic science of immunology and how the individuals could be allergic to certain food and how diet could be used to prevent allergic disease. Recognize the relationship between food and immunity Explain diet and prevention of allergic disease.
Content of the Course:	<p>Introduction to Immunology, Innate Immunity Humoral Immunity Cell-Mediated Immunity Mucosal Immunity (Surface Barriers) Entities of the Adaptive Immune Response: Lymphoid System Immunogens(Antigens) Autoimmunity Immunodeficiency Disorders Immunological Test Hypersensitivity Type I (Allergy) Nutrition and the Immune System Food Allergy The Most Common Food Allergies</p>
Examination:	<ul style="list-style-type: none"> SEMESTER ACTIVITIES 20% THEORETICAL Quizzes 30% Final written exam 50%

Course code :	1702362-3		
Course title:	NUTRITION IN COMMUNITY		
Level/semester:	3 rd Year - semester 2		
Credit units:	3 CU	Theoretical: 2 CU	Practical: 1 CU
Contact hours:	4hour	Theoretical: 2 hr	Practical: 2hr
Language	English		
Course Description:	<p>This course introduces the students to the basics background and the characteristics of the role of nutritionist as important one to be studied at the local, national and international levels. More emphasis on nutrition education, food habits survey, methodology and current topics in the area of community nutrition will also be enclosed. The student must then be able to run a survey for current public health nutrition problems in community. This is important particularly for the vulnerable groups.</p> <p>Discussion of the nutritional dimension of these problems and of community programs to compact them, such as obesity and coronary heart disease would be a paramount to the students to take hold of.</p> <p>The course also focus in food related behavior, organization and delivery of nutrition services, program design and implementation, evaluation strategies and Nutrition assessment of populations. Some specific aspect of nutrition at community level will be addressed such as sport nutrition</p>		
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> Define the important of nutrition and community. Acknowledge the skills and to be able to work in and with communities. Elect, plan, and deliver nutritional solution to the problems in community. Use nutrition education programs to provide solution such as sport and diet planning to solve main problem in communities such as diabetes. 		
Content of the Course:	<ol style="list-style-type: none"> Over all view of the course contents: Opportunities in Community Nutrition Assessing Community Resources The teaching-learning process Principles of Nutrition Education Mothers and Infants: Nutrition Services, and Programs Children and Adolescents: Nutrition Issues, and Programs Growing Older: Nutrition Assessment, Services, and Programs Local, national, regional and international organizations associated with community nutrition. Marketing Nutrition and Health Promotion Identification and studying the relationship between sport and nutrition community Identification and studying the relationship between sport and nutrition and how its affect the community (2). All day visit to a community site for nutrition programs development or assessment 		
Examination:	<ul style="list-style-type: none"> Periodical Exams (Quizzes) 25% Semester activity..... 20% Final Practical Exam 10% Final written exam 40% 		

Course Overview

Course code :	1702464-2
Course title:	Nutrition And Epidemiology (1)
Level/semester:	4 th Year - semester 1
Credit units:	2 CU
Contact hours	2 hr
Language:	English
Course Description:	This course introduces the students to the basics, background and the characteristics of epidemiology, which provides a Scientific basis for the development of the evidence upon which public action for the health can be implemented. In this course, using epidemiology, the students will be able to evaluate and monitor the effectiveness of nutritional programs. The only setting to ask questions about factor-effect relationship at the population level is run through epidemiology. This course also describes the analytical approaches for interpreting clinical research data with emphasis on the interpretation of this data in clinical practice. The students will also have a clear understanding of biological variation experimental designing, data and fact differences, matching analysis design integrity in analysis and bias in design and analysis.
Aims and Goals/Skills of the course:	<p>By the end of this course, students should be able to:</p> <ul style="list-style-type: none"> • Recognize the basic of epidemiology. • Identify probability and non-probability samples • Evaluate the different types of study designs and research protocols. • Recognize the major sources of errors in measurement of disease • Analyze and interpret data collected at the level of a small study sample or at the community level. • Identify the basics of evidence based practice
Content of the Course:	<ol style="list-style-type: none"> 1. Epidemiologic orientation to health and disease 2. Epidemiologic concepts 3. Measurement of morbidity and mortality 4. Sources of data on community health 5. Sampling methods 6. Types of epidemiologic studies 7. Major sources of errors in measurement of disease 8. Screening in the detection of disease 9. Sample size determination 10. Evidence based practice
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity.....20% • Final written exam 50%

Course code :	3-1702335		
Course title:	Food Services & Quality Control In Hospital		
Level/semester	3 rd Year - semester 1		
Credit hours:	3 CU	Theoretical: 2 hr	Practical: 1
Contact hours	4 hr	Theoretical: 2hr	Practical: 2 hr
Language:	English		
Course Description:	This course provides the students to study food systems management, consideration basic to good diet planning in hospital, maintenance of food safety, quality management in food service establishments and food industries and quality assurance and food service in hospital. The use of hazard control system protocol (HACCP) to be used at food manufacturer to control food poisoning is essential to the nowadays nutritionist.		
Aims and Goals/Skills of the course:	<p>At the end of this course the student must be able to:</p> <ul style="list-style-type: none"> • Identify food systems management. • Recognize basic consideration to good diet planning in hospital. • Determine quality management in food service establishments and food industries. • Recognize quality assurance and food service in hospital. • Apply the Hazard Control System Protocol (HACCP) in the field of food manufacturing. 		
Content of the Course:	<p>Introduction to Food Service System Foodservice Management: Menu Planning Food service Management: Ordering and Purchasing Control Food service Management: Receiving Control Food service Management: Storage and Inventory Control Food service Management: Preparation and Production Control Human Resources Management Total Quality Management: Quality Control and Quality Assurance Food Safety: Hazard Analysis and Critical Control Points HACCP Prerequisite Hazardous Microorganisms and Parasites Food Service Operation Cycle Personal Hygiene/Health Practices</p>		
Examination:	<p>Semester activities 10% Theoretical quizzes 20% Practical quizzes.....10% Final practical exam 20% Final practical exam 40%</p>		

Course Overview

Course code :	1702339-2
Course title:	DISEASES OF MALNUTRITION
Level/semester:	3 rd Year - semester 2
Credit units	2 CU
Contact hours:	2 hours
Language:	English
Course Description:	This course is designed to introduce the students to the basics, background, symptoms and characteristics of malnutrition diseases. More focus will be provided into the prevalence of the diseases and the daily nutritional requirements and daily planning for malnutrition diseases.
Aims and Goals/Skills of the course:	At the end of this course, the student should be able to: <ul style="list-style-type: none"> • Recognize the certain health problems are related to inadequate or excessive nutrients intake. • Recognize the basic and symptoms of malnutrition diseases • Acknowledge the role of nutrients in malnutrition diseases.
Content of the Course:	<ul style="list-style-type: none"> • Malnutrition • Nutritional deficiency diseases (Vitamins deficiency) • Vitamin A deficiency (Xerophthalmia – Night blindness) • Vitamin B1 – Thiamine deficiency. (Beriberi) • Vitamin B12 deficiency (Pernicious anemia). • Vitamin B3 - niacin deficiency (Pellagra) • Vitamin C deficiency (Scurvy) • Iron deficiency (Iron deficiency anemia) • Calcium deficiency (Osteoporosis) • Iodine deficiency (Goiter) • Protein deficiency (Quashiorkor) • Protein – energy malnutrition (PEM) (Marasmus) • Over nutrition and Under nutrition
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 20% • Final written exam 50%

Course code :	1702332-4		
Course title:	MEDICAL NUTRITION THERAPY(MNT) (1)		
Level/semester:	3 rd year Semester 2		
Credit units	4 CU	Theoretical:2	Practical hours 2 CU
Contact hours	6 hr	Theoretical:2	Practical hours4 hr
Language:	English		
Course Description:	This course is designed to introduce the students to study the etiology of diseases, symptoms & diagnosis of diseases, risk factors of diseases, prevalence, daily nutritional requirements, daily diet planning for chronic diseases such as diabetes mellitus, coronary heart diseases, liver diseases, renal diseases, peptic ulcers and gout .		
Aims and Goals/Skills of the course:	At the end of this course the student must be able to: <ul style="list-style-type: none"> • Recognize the nutritional care for chronic diseases. • Know daily nutritional requirements for chronic diseases. • Demonstrate skills in the daily diet planning for chronic diseases. 		
Content of the Course:	<ul style="list-style-type: none"> • Medical Nutrition Therapy (MNT) in Diabetes Mellitus • MNT in Cardio Vascular Diseases (CVD) • MNT in Liver Diseases • MNT in Renal Diseases • MNT in Upper Gastro Intestinal Tract (UGIT) • MNT in Cancer • MNT in Rheumatic disorder (gout). • MNT in Dental and Bone Health 		
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes)20% • Semester activity..... 10% • Practical(Case studies) 30% • Final written exam 40% 		

Course Overview

Course code :	1702363-2
Course title:	Nutrition Counseling
Level/semester:	3 rd year/ 2 nd semester
Credit hours:	2 hr
Contact hours	Theoretical: 2 hr
Language:	English
Course Description:	The course include the basics and general background of nutrition care process (NCP), principles of nutrition counseling theories, behavior change models, approaches for nutrition counseling, communication skills development and application in nutrition counseling setting.
Aims and Goals/Skills of the course:	<p>The student will:</p> <ol style="list-style-type: none"> get a foundation of knowledge about NCP, nutrition counseling goals, models, and theories. Demonstrate an understanding of the basic principles of an effective counseling relationship. Demonstrate a greater understanding of personal traits and interpersonal skills that can impact the counseling relationship. Direct the counseling relationship through the use of a counseling model and a motivational strategy Plan and implement an effective counseling intervention. Explain techniques useful to beginning nutrition counselors, including procedures for handling difficult, client behaviors and group counseling. Explain the use of various behavior change strategies and basic relapse prevention techniques.
Content of the Course:	<p><u>1. Nutrition Care Process (NCP) [1,2 and 3 weeks]</u> The basics and general background in : - Steps of NCP (A-D-I-M-E) - Nutrition screening and assessment(A) - Nutrition diagnosis(D) - Nutrition intervention(I) <i>Classifications(4 sets) :</i> - Food and/or Nutrient Delivery - Nutrition Education - Nutrition Counseling - Coordination of Nutrition Care - Monitoring (M) and Evaluation of NCP (E)</p>

Course Overview (cont.)

Content of the Course:	<p><u>2-Community system and eating habits[4 and 5 weeks]</u> - Origins of Food Habits or Behaviors - Food Knowledge and Beliefs - Health Beliefs. <u>3-Nutrition counselling[6 week]</u> - Definition of Nutrition Counseling - Importance of Nutrition Counseling in the NCP - Counseling Skills <u>4- Nutrition Counseling Skills for the (NCP)[7,8 and 9 weeks]</u> <u>1-Communication Skills</u> - Effective Counselor – Client Relationships - Nonverbal Communication - Verbal Communication - Listening Responses - Action Responses - Sharing Responses - Teaching Responses - Choosing the Appropriate Response <u>2- Nutrition Counseling Theories and Strategies to Facilitate Behavior Modification and Self-Managements :[10,11,12,13 and 14 weeks]</u> - Theories of Nutrition Counseling : - Behavior Modification (ABCs theory) - Cognitive - Behavioral theory(CBT) and Rational-Emotive Therapy (RET). - The Precede-Proceed Model - Trans theoretical model of Change (Stages of Change Models) - Motivational Strategies - Activities that Facilitate behavior Change - Expressing empathy - Developing discrepancy - Avoiding arguments or defensiveness - Rolling with resistance - Motivational Intervention Model - Not-Ready-to-Change Counseling Sessions - Unsure-about- Change Counseling Sessions - Ready-to- Change Counseling Sessions - Resistance Behaviors and Potential Strategies to Modify them <u>5- Application of Nutrition Counseling Skills for the NCP [15 and 16 week]</u></p>
Examination:	<ul style="list-style-type: none"> • Periodical Exams (Quizzes) 30% • Semester activity..... 20% • Final written exam 50%