برنامج نظم التغذية

Dietetic Program

Level 4
Eighth-Term

برنامج نظم التغذية
Dietetic Program

Course	**Physical activity in health and disease**
Code Number	**Phy 401**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Compulsory course**

تعريف موجز بالمقرر:

يوضح المقرر للطلاب التعريفِ الرئيسي للجهد البدني واللياقة البدنية والمكافئ الأيضي وضربات القلب القصوي وإحتياطي ضربات القلب والحد الأقصي لاستهلاك الأكسجين .

أهداف المقرر:

بعد انتهاء هذا المقرر من المتوقع أن يتمكن الطالب من:

١- الالمام بالنظرياتَ والمصطلحات الخاصة بالنشاط البدني .
٢- معرفة الحد الأدني للنشاط البدني المعززر للصحة تبعا للعمر .
٣- كيفية اختيار أجهز اللياقة البدنية المنزلية
٤- دراك حساب شدة النشاط البدني .

المحتوي العلمي للمقرر:

مقدمة عن النشاط البدني – تصنيف أنواع الأنشطة البدنية – أهيمة النشاط البدني لصحة الإنسان – أبعاد النشاط البدني المرتبط بالصحة – أسس النشاط البدني – كيفية حساب شدة النشاط البدني – الحد الأدني من النشاط البدني المعزز للصحة تبعا للمرحلة العمرية- وصف النشاط البدني في حالة الصحة والمرض- كيفية اختيار أجهزة اللياقة البدنية المنزلية- نصائح وإرشادات عن ممارسة النشاط البدني .

وسائل التقويم:

١- امتحان تحريري نهائي.
٢- امتحان عملى.
٣- امتحان شفوي.
٤- الأنشطة الفصلة
٥- امتحان نصف الفصل الدراسي

أساليب تدريس المقرر:

١- محاضرات.
٢- حلقة مُناقشة مجموعةِ صغيرةِ للعُصفُ الذهنى.
٣- الساعات المكتبية
٤- التعلم الذاتي.
٥- دراسة حالة

المراجع:

١- الهزاع – هزاع محمد (٢٠٠٦) السمنة والنشاط البدني في مرحلة الطفولة المبكرة. مركز البحرين للبحوث والدرسات المنامة ، مملكة البحرين

١- الهزاع – هزاع محمد – الأحمدي (٢٠٠٤) النشاط البدني وقياس الطاقة المصروفه لدي الإنسان: الأهمية وطرق القياس الشائعة. مركز البحوث التربوية – كلية التربية جامعة الملك سعود.

برنامج نظم التغذية
Dietetic Program

Course	**Meal planning**
Code Number	**Fod409**
Credit Hours	**2**
Prerequisite Course	**Fod301**
Course status	**Compulsory course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Understand general principles of adequate nutrition and balanced diet.
2- Description of nutrients, their sources, functions and how estimates the daily requirements for different age groups by several methods of calculations.
3- Understand how plan and mange appropriate diets for the different identified disorders.
4- Identify nutritive value of different foods using exchange lists and applied actual cases.
5- Recognize modify hospital diet
6- Understand principles of dietary management and rationale for modifying food intake.

2) Scientific Contents

The basic concept of adequate nutrition an measurements, The basic requirements for different age groups, Components of energy expenditure, Estimate energy requirements, Calculate the energy available from foods, Different types of calculating, Diet planning principles, Food labels, The daily values for food labels, Meal planning, Nutritional management for the different disorders, Modifications of hospital diet, identify nutritive value of different foods using exchange lists, Modified diets during illnesses, Mechanically altered diets, Clear liquid diet, Full liquid & cold sem-Liquid, Puree diet, Soft diet, Fat restricted diet, Sodium restricted diet, Protein and electrolyte restricted diet, fluid restrictions, Fiber modified diets, Other modified diets.

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Case studies
6- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1- Maher, A.K. (2012). Simplified diet manual. Wiley-Blackwell. 296 pages.

برنامج نظم التغذية
Dietetic Program

Course	**Weight loss programs**
Code Number	**Dar413**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Compulsory course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Describes the relationship between obesity and cancer, heart disease, diabetes and metabolic syndrome.
2- Includes cutting-edge information about genetics versus environmental causes of obesity.
3- Discuss on the job weight management strategies.
4- Consider claims and controversies surrounding weight loss products, procedures and programs.

2) Scientific Contents

Introduction, Current obesity trends, Assessment of body weight and body composition, Causes of obesity, Health and economic consequences of obesity, dietary interventions for obesity prevention and management. Healthy weight loss stories, Nutrient –richness can help you lose weight, Nutrient –rich world's healthiest foods are the key to health and healthy weight loss, World's healthiest foods help you manage adverse food reactions, World's healthiest foods promote energy production, World healthiest foods promote optimal metabolism, World's healthiest foods promote digestive health, World's healthiest food promote liver health, World's healthiest foods balance blood sugar levels, World's healthiest food reduce inflammation, healthy weight loss eating plan, Practical tips for continued healthy weight loss, The healthiest way of cooking, Recipes, The role of calorie intake in weight management, Organic foods important to healthy weight loss, The healthiest way of losing weight similar to the Mediterranean diet, Atknis diet, Vegetarian diets, Weight control diets, Crash diets, Detox diets, Belief-based diets, Diets followed for medical reasons, Alkaline diet, Blood type diet, Eat-clean diet, Fit for life diet, Food combining diet, Gerson therapy, The Graham diet, Hay diet, High- protein diet, High residue diet, The IF diet, Inuit diet, Jenny craig, Locavore diet, Low carbon diet, Low-fat diet, Low glycemic index diet, Low-protein diet, low sodium diet, low-sulfur diet, Montignac diet, Negative calorie diet, Okinawa diet, Omnivore, Paleolithic diet, Prison loaf, Pritikin program for diet and exercise Raw foodism, Scarsdale medical diet, Shngri-La diet, Slimming world diet, Slow-carb diet, Sonoma diet, Spark people diet, sugar busters, Tongue patch diet, Warrior diet, zone diet.

3) Teaching and learning methods

1- Lectures

2- Practical lessons
3- Self learning
4- Cooperative learning
5- Case studies
6- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1- Mateljan, G. (2010). Healthy weight loss without dieting. George Mateljan foundation. 228 pages.
2- Kazaks, A. and Stern, J. S. (2013). Nutrition and Obesity. Hrdcover. 208 pages.

برنامج نظم التغذية
Dietetic Program

Course	**Food-drug interactions**
Code Number	**Pha406**
Credit Hours	**3**
Prerequisite Course	**Pha304**
Course status	**Compulsory course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Identify new foods, supplements, and ethnic dishes that may contribute significantly to food-drug interactions.
2- Provide practical models and tools for learning, planning and implementing programs to prevent interactions.
3- Know the medicines exhibiting poor bioavailability in presence of food.

2) Scientific Contents

Introduction, Biopharmaceutics of orally ingested products, Monitoring nutritional status in drug regimens, Gastrointestinal and metabolic disorders and drugs, Drug interactions in nutrition support, Alcohol and nutrition, Taking drugs on a full or empty stomach, Food and drug transporters, Foods and drug-metabolizing enzymes, Effect on nutritional status on drugs, Food effect on drug disposition, Effects of drugs on nutrition status, Medicines exhibiting poor bioavailability in presence of food, Nutrition and drug regimens in older persons, Obesity and appetite drugs, Nonprescription drug and nutrient interaction, Herbal and dietary supplement interactions with drugs, Dietary counseling to prevent food-Drug interactions, Prevention of food-drug interactions, Drug-nutrient interactions and JCAHO, Computers in nutrient-drug interaction management..

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Case studies
6- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1- Sellers, B. M. , Frankel, E. H. and Wolfe, J. J. (2003). Handbook of food-drug interactions. CRC press. 584 pages.

Course	**Project management**
Code Number	**Unv411**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Compulsory course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Develop an in-depth critical understanding of the current key political, social, cultural, environmental, economic and ethical issues which inform international events management and to apply such understandings to a wide range of international events including cultural, promotional, special interest and major events.
2- Develop knowledge and understanding of the principles, roles and techniques of project management.
3- Apply key concepts, theories, and principles to create, define and control a project using a range of technologies and analytical tools to arrive at a solution.
4- Recognize and apply relevant project management skills and analytical tools and apply them to a range of projects and project specialism's, such as: planning and scheduling, negotiation and people management.
5- Demonstrate knowledge, understanding, critical thinking, and analysis of fundamental issues relating to a project management practitioner.

2) Scientific Contents

Introduction to project management, The project management and information technology context, Project integration management, Project plan development Project scope management, Project time management, Project cost management, Project quality management, Project human resource management, Project communications management, Stakeholder management, Project risk management, Project procurement management, change management, Earned value management.

3) Teaching and learning methods

1- Lectures
2- Self learning
3- Cooperative learning
4- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Mid – Term
3- Sheet examination
4- Oral examination

5) References

1-Schwalbe, K. (2008) Information technology project management. Paperback. 680 pages.

Course	**Principles of Marketing**
Code Number	**Ecn 404**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Compulsory course**

أهداف المقرر:

بعد انتهاء هذا المقرر من المتوقع أن يتمكن الطالب من:

١- الإلمام بالمفاهيم الأساسية للتسويق ومكونات البيئة التسويقية.
٢- الإلمام بالأدوات التي تساعده في القيام بتجزئة السوق .
٣- تحليل سلوك المستهلك وكيفية تحديد المزيج التسويقي المناسب

المحتوي العلمي للمقرر:

تعريف التسويق وتطوه وأهميته، المداخل الرئيسية لدراسة التسويق، البيئة التسويقية وتحليلها، تحليل سلوك المستهلك، استراتيجيات تحديد السوق المستهدفة وتجزئة السوق، عناصر المزيج التسويقي، تخطيط المنتجات، التسعير أهميته ومداخله، الترويج ، التوزيع .

وسائل التقويم:

١- امتحان تحريري نهائي.
٢- امتحان عملى.
٣- امتحان شفوي.
٤- الأنشطة الفصلة
٥- امتحان نصف الفصل الدراسي

أساليب تدريس المقرر:

١- محاضرات.
٢- حلقة مُناقشة مجموعةِ صغيرةِ للعْصفُ الذهنى.
٣- الساعات المكتبية
٤- التعلم الذاتي.
٤- دراسة حالة

المراجع:

١- محمد صالح المؤذن(٢٠١١). مبادئ التسويق. دار الثقافة لنشر والتوزيع.٤٤٢ صفحة.

برنامج نظم التغذية
Dietetic Program

Course	**Graduation project**
Code Number	**Dar411**
Credit Hours	**1**
Prerequisite Course	**-**
Course status	**Compulsory course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Identify current nutrition probles in the community and how to formulate the proble in the form of " an essential question"
2- Find general background about this problem
3- Use the library catalog, Mirlyn to find books
4- Use article indexes to find and follow the research regarding this problem.
5- Consider using the internet to find scientific research paper, review ariticles and e-book related to this topic belong to problem.
6- Collect, read, evaluate and write what you have learned.
7- Cite the information you have found so that others will be able to follow your research trail.
8- Practicing team work and synergy with other students and with the advisors and the program coordinator.
9- Applying the nutrition knowledge and skills earned throughout the program.
10- Perform the project management fundamentals.

2) Scientific Contents

Select a research topic, Define the problem, form a hypothesis, Set up an experimental design, Statistical data analysis, Draw conclusion, How to write a research paper, , How to present a scientific data.

3) Teaching and learning methods

1- Self learning

2- Cooperative learning

3- Case studies

4- Office hours (tutorial)

4) – Student Assessment Methods

1- Term - paper

2- Oral examination

برنامج نظم التغذية
Dietetic Program

Course	**Food toxicity**
Code Number	**Dar414**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Elective course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1-Combine general principles of toxicology with the characterization of food borne toxicants.

2-Explain the biochemistry and chemistry required for thorough understanding of toxicological principles

3-Feature a comprehensive catalog of all of the most important food borne toxicants.

4-Present a systematic review of the most important food-borne toxicants.

5-Know the basic of energetics food and their effect on the human health.

6-Know the food quality and quantity in traditional Chinese medicine.

2) Scientific Contents

Basic of toxicology connected to food, Routes of xenobiotics in an organism, , Mani groups of food-borne toxicants endogenous plant toxicants, Lectins or hemagglutinins, Enzyme inhibitors, Alkaloids, Cyanogenic glycosides. Toxicity mechanisms of HCN, Phytoestrogens, Glucosinolates Coumarin, Thujones, Toxic amino acids, Toxic lipids, Oxalates, Fluoroacetates, Bracken toxins, Saponins, Grayanotoxin, soybean as a potential source of versatile toxicants, Mushroom toxins, Miscelleaneous, Geochemical pollutants that plants absorb from soil (Arsenic, Selenium, Fluorine), Mycotoxins (Aflatoxins, Ochratoxins, Sterigmatocystin, Zearalenone, Fumonisins, Trichothecenes, Patulin, Citrinin and citreoviridin, Ergot toxins, Other mycotoxins, Combined toxicity of mycotoxins), Animal endogenous poisons (Prions, Lactose, Phytanic acid, Avidin, Vitamins of animal origin), Food toxicants from aquatic animals, Pesticide residues, Veterinary drugs and feed additives, Toxicants unintentionally entering food during processin, storage and digestion of food, Food additives, Food adulterations, Bacterial toxicity, Viral poisoning.

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1- Pussa, T. (2013). Principles of food toxicology. CRC Press. 414 pages.

برنامج نظم التغذية
Dietetic Program

Course	**Nutrition and chronic disease managements**
Code Number	**Dar415**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Elective course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Understanding of the complex nature of chronic diseases.
2- Reveal how poor diet and a lack of physical activity may be the predominant risk for chronic diseases.
3- Illustrate that a comprehensive targeting of both diet and physical activity may produce the greatest reduction in risk for chronic disease.
4- Discuss biological mechanisms of neurological diseases and emphasize the molecular basis of prevention by diet.

2) Scientific Contents

Role of nutrition and lifestyle in diabetes, Dietary carbohydrates and type 2 diabetes, Dietary fatty acids in the etiology of type 2 diabetes, Proteins, amino acids, and type 2 diabetes, Micronutrients and type 2 diabetes, Dietary patterns and type 2 diabetes, Artificially sweetened beverages and coffee, Nutrition in type1 diabetic children, Gestational diabetes mellitus, Nutrition in complications of diabetes, Complementary and alternative medicine therapy for diabetes, Leucine supplementation and insulin resistance, Branched chain amino acids in chronic obstructive pulmonary disease, allergy and immunological disorder, HIV infection, Juvenile rheumatoid arthritis, Cancer, Congenital heart disease and lipid disorders, Chronic renal disease , Sickle cell anemia, Gastrointestinal disorders, Cholesterol, Liporoteins and lipid transport, Plama cholesterol and risk of heart disease, dietary management, Osteopenia and bone mineral density, Factors contributing to bone mass, Nutritional aspects of chronic kidney disease, Nutritional aspects of neurodegenerative disease.

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Case studies
6- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1- Ardies, C. M. (2014). Diet, exercise, and chronic disease: the biological basis of prevention. CRC Press. 449 pages.

Course	**.Nutrition and mental health**
Code Number	**Fod410**
Credit Hours	**2**
Prerequisite Course	**Md413**
Course status	**Elective course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Address practical and applied issues in nutritional neuroscience.
2- Innovative new technologies that assess brain function.
3- Effect of glucose, omega 3s, vitamins and minerals, nutraceuticals and flavonoids on cognitive performance
4- Use of technology such as neuroimaging and noninvasive brain stimulation to capture nutrition effects on cognition and brain function.

2) Scientific Contents

Nutrition for brain health, Nutrition and cognition in the context of ageing, Genetics of brain and cognition and their interactions with dietary and environmental factors, Process and methods for measuring brain function and cognition, Cognitive assessment: Principles, paradigms and pitfalls, Measuring mood: Considerations and innovations for nutrition science, Role of omega-3 fatty acids in cognitive and emotional development, Research on the effects of vitamins and minerals on cognitive function in older adults, Herbal extracts and nutraceuticals for cognitive performance, Flavonoids and cognitive function, use of neuroimaging techniques in the assessment of nutraceuticals for cognitive enhancement, Metal energy and fatigue, Hydration and brain function, Diet as an analgesic modality, Breakfast and adult and child behaviors, Diet, physical activity and substrate oxidation: Implications for appetite control, weight loss and body composition, Implications for obesity and other eating disorder, Homocysteine, B vitamins and cognitive function, Creatine, brain functioning and behavior, Theanine, Mood and behavior, caffeine effects on aggression and risky decision making

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Case studies
6- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1-Best, T. and Dye, L. (2015). Nutrition for brain health and cognitive performance. CRC press. 373 pages .

2- Kom, L. and Lake, J. (2016). Nutrition Essentials for Mental Health. Norton& company.464 pages.

Course	**Health informatics**
Code Number	**Cis401**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Elective course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1- Explore healthcare legal issues, such as HIPAA and the legal electronic health record.
2- Define of the informatics field are explained in detail, as well as associated functions.
3- Analyze of data types, standards, data quality and the interpretation and display of information..

2) Scientific Contents

Overview of health inforamtics , Key players in health information technology, Organizations involved with HIT, health informatics programs, Healthcare data, information and knowledge, Converting data to information to knowledge, Clinical data warehouses (CDWs), Electronic health records, Electronic health record key components, Computerized physician order entry (CPOE), Clinical decision support systems (CDSS), Electronic health record examples, Practice management systems, Clinical and administrative workflow in a medical office, Practice management systems and EHRs, Health information exchange , Data standards, Architectures of information systems, health information privacy, Health information security, Health informatics ethics, Consumer health infromatics, Mobile technology, Patient safety and health information technology, Electronic prescribing, Telemedicine, Picture archiving and communication systems.

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Case studies
6- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Sheet examination
5- Oral examination

5) References

1-Hoyt, R. E., Bailey, N. and Yoshihashi, A. (2012). Health informatics: Practical guide for healthcare and information technology professionals. Lulu.com. 490 pages.

برنامج نظم التغذية
Dietetic Program

Course	**Food spoilage**
Code Number	**Fod411**
Credit Hours	**2**
Prerequisite Course	**Dar302**
Course status	**Elective course**

1) General instructional objectives (GIO)

On completion of this course you will be able to

1-Examine chemical reactions which can negatively affect food quality and measurement.

2-Review quality deterioration associated with physical changes such as moisture loss, gain and migration and crystallization.

3-Identify of deterioration in specific food and beverage products including bakery products, frozen foods.

2) Scientific Contents

Introduction, The ecology of fungal food spoilage, Methods for isolation, enumeration and identification, Spoilage of fresh and perishable foods, Spoilage of stored, Processed and preserved foods, Chemical deterioration of foods and beverages: oxidative rancidity, Protein oxidation, The maillard reaction and quality deterioration, Flavour deterioration during storage, Light- induced quality changes, Physical deterioration of foods and beverages: Moisture loss, gain and retrogradation of starch and its implications, Syneresis in food gels and its implications, Chemical and physical deterioration in specific food and beverage products: Bakery products, Bulk oils and shortenings, spreads and frying oils, Chemical processes responsible for quality deterioration in fish, meat, fruit and vegetables, Enzymatic deterioration of plant foods, Stability of vitamins during food processing and storage, Forzen foods, Food powders, The effect of non-meat ingredients on quality parameters in meat and poultry, Quantitative detection and identification methods for microbial spoilage, Detection, Identification and enumeration methods for microbial spoilage, Managing microbial spoilage in dairy industry, Managing microbial spoilage in cereal and baking products, Managing microbial spoilage in meat industry, Spoilage yeasts, Spoilage moulds, Spoilage bacteria.

3) Teaching and learning methods

1- Lectures
2- Practical lessons
3- Self learning
4- Cooperative learning
5- Office hours (tutorial)

4) – Student Assessment Methods

1- Written examination
2- Practical examination
3- Mid – Term
4- Oral examination

5) References

1-Skibsted, Risbo and Sndersen. (2010). Chemical deterioration and physical instability of food and beverage. Woodhead publishing, 824 pages.

2- Blackburn, C (2006). Food spoilage microorganisms. Woodhead publishing. 736 pages.

برنامج نظم التغذية
Dietetic Program

Course	**Marketing research**
Code Number	**Ecn405**
Credit Hours	**2**
Prerequisite Course	**-**
Course status	**Elective course**

أهداف المقرر:

بعد انتهاء هذا المقرر من المتوقع أن يتمكن الطالب من:

١. التعرف علي المفاهيم الأساسية للبحوث التسويقية وأهميتها في إتخاذ القرارات التسويقية.
٢. إكساب الطالب مهارات جمع وتحليل وتفسير البيانات التسويقية.
٣. كيفية إجراء البحوث التسويقية بأنواعها المختلفة.

المحتوي العلمي للمقرر:

مفهوم البحوث التسويقية ونظم المعلومات التسويقية، أهمية البحوث التسويقية، أنواع البحوث التسويقية، مراحل إعداد البحث التسويقي، تصنيف وتحليل البيانات التسويقية، العينات وطرق اختيارها، بحوث تطوير السلع والخدمات، بحوث الإبتكار والتطوير، بحوث المستهلك، كتابة التقرير النهائي للبحث التسويقي.

وسائل التقويم:

١- امتحان تحريري نهائي.
٢- امتحان عملي.
٣- اختبار شفوي.
٤- امتحان نصف الفصل الدراسي
٤- أنشطة فصلة.

أساليب تدريس المقرر:

١- محاضرات.
٢- مجاميع نقاش صغيرة للعصف ذهني.
٣- دروس عملية

المراجع:

١- يحي عيد، أيمن محمد ميدان (٢٠٠٧). بحوث التسويق المعاصر. دار الأمين