**BIOLOGY 1322 – BASIC NUTRITION**

**CRN # 80720;80345;80236 - SPRING 2014**

**STAFFORD CAMPUS**

**3 HOURS LECTURE**

**COURSE SYLLABUS**

**INSTRUCTOR:** DR. GHIAS SHARIFF

**CONTACT INFORMATION** EMAIL ghias.shariff@hccs.edu

**OFFICE HOURS: ONE HOUR AFTER THE CLASS**

**COURSE DESCRIPTION**

 A course of study covering an introduction to nutrition science, the development of nutrition recommendations, essential nutrients and how they are used by our bodies. The impact of medicines and disease on nutrition are also discussed as well as nutrition in US society and the world at large

**COURSE PREREQUISITE: None**

**BIOLOGY PROGRAM STUDENT LEARNING OUTCOMES (PSLO):**

Program SLO #1

To recognize, identify, and describe the basic structures and functions associated with most life forms.

Program SLO #2

To develop basic laboratory techniques appropriate to the field of Biology.

Program SLO #3

To develop study skills and habits appropriate for pre-professional students interested in health-related fields.

**Student Learning Outcomes and Goals:**

Basic nutrition students succeeding at this course will:

1. Cover each of the six essential nutrients in detail:

 a. their food sources

 b. their digestion and absorption and

 c. their role in the body

2. It will also cover nutritional standards in terms of Food Guidelines, Health Objectives and Dietary Reference Intakes

3.Energy balance and the body’s response to feasting and fasting is presented.

4. Be able to keep a dietary journal with detail including portion/serving size.

5. Be able to use nutritional software (iProfile and mypyramid.gov)

6. Complete a final analysis of your own diet, using iProfile.
7. Be aware of the information contained on food labels and how to use this information in evaluating the product.
8. Be knowledgeable of the different roles of vitamins and minerals and why they are important to overall health.
9. Come to a conclusion about what role, if any, supplements should play in your own food plan.
10. Explain the role of nutrition in exercise performance.
11. Explain the role of nutrition in disease promotion and prevention.

12. Critique a publication for nutritional validity.

13. Be able to analyze and evaluate a particular Diet or food plan.

14.Evaluate your own nutritional / health status

15.Know how antioxidants and phytochemicals are related and what role they play in nutrition and health.

16.Come to a conclusion about what role, if any, supplements should play in your f

Course Calendar:

Week01 Introduction & Module 1

Week02 Module 1

Week03 Module 2 (Assignment 1 will be posted online)

Week04 Quiz 1 ( Module 1) Discuss Diet Analysis; Module 2

Week05 Module 2 and Module 3.

Week06 Module 3..First Assignment Due

Week07 Test 1 (Module 1 & 2) Module 5

Week08 Module 5

Week09 Quiz 2 (Module 3)Module 5 & Module 4

Week10 Module 4

Week11 Module 4 & Module 7 Diet Analysis Due

Week12 Test 2 (Module 3 & Module 4) –Module 7

Week13 Module 7 and Module 6

Week14 THANKSGIVING

Week15 Module 6

Week16 Final (Module 1 to 7)-50% Departmental 50% Class.

Instruction Methods:

The primary focus of the course will be on instructor lectures, a project and assigned textbook chapters. Chapter assignments include an understanding of all material in the chapter, such as graphs, charts, illustrations and captions. Summaries, Key Terms, Questions and Self Tests are also included. Lecture material will correspond to the topics covered in the required textbook, but more detail might be included by the your instructor. Topics and concepts covered during lecture or included in the assigned reading will be included in exams.

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| Student Assignments: | Students are required to read assigned chapters and complete projects on schedule. Additional announced and unannounced quizzes during lecture may be conducted throughout the semester. |
| Student Assessments: | Students will be assessed via lecture, tests, quizzes, and a comprehensive final examination. |
| Instructional Materials: | Textbook:*NUTRITION – Your Life Science,* Jennifer Turley & Joan Thompson

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|  | ISBN:  | 9781285050249 |

Included with the book is an iProfile CD: *Assessing Your Diet and Energy Balance*ISBN# 978-0-470-52404-6Included with iProfile CD is an information guide: *Nutrient Composition of Foods*ISBN# 978-0-470-55501-9 |

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| HCC Policy Statement: ADA | Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Instructors are authorized to provide only the accommodations requested by the Disability Support Services Office. If you have any special needs or disabilities that may affect your ability to succeed in college classes or participate in any college programs or activities, please contact the DSS office for assistance. At Southwest College, contact: Dr. Becky Hauri5407 GulftonHouston, Texas 77081Phone: 713-718-7909Fax: 713-718-7781TTY: 713-718-7909 |
| HCC Policy Statement: Academic Honesty | Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Disciplinary proceedings may be initiated by the college system against a student accused of scholastic dishonesty. Penalties can include a grade of "0" or "F" on the particular assignment, failure in the course, academic probation, or even dismissal from the college. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. |
| HCC Policy Statement: Student attendance, 3-peaters, withdrawal deadline | **Attendance**Students are expected to attend classes regularly. Students are responsible for materials covered during their absences, and it is the student's responsibility to consult with instructors for make-up assignments. Instructors check class attendance daily. **A student may but not necessarily be dropped from a course for excessive** absences after the student has accumulated absences in excess of 12.5% of the hours of instruction (including lecture and laboratory time). Note that 12.5% is approximately 4 classes or labs for a 4-semester hour course. Habitual tardiness will not be tolerated. Students are expected to be in attendance for the entirety of the scheduled class and are responsible for completing assignments scheduled during their absence/s. It is the responsibility of each student to amend their professional/personal schedule to meet the class schedule **Repeaters**Students who repeat a course for a third or more times may soon face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor / counselor about opportunities for tutoring / other assistance prior to considering course withdrawal or if you are not receiving passing grades.**Withdrawals** Withdrawal from the course after the official day of record (see current catalog) will result in a final grade of “W” on the student transcript and no credit will be awarded. It is the student’s responsibility to initiate and complete a request for withdrawal from any course. Students will be required to formally request a drop from their instructors prior to the administrative drop date deadline (April 21, 2011**)**. Abandoning the course or failing to formally drop, will result in a grade being given based on the work completed for the entire course (including missed exams). The State of Texas has begun to impose penalties on students who drop courses excessively. For example, if you repeat the same course more than twice, you have to pay extra tuition. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than SIX total course withdrawals throughout their educational career in obtaining a certificate and/or degree. Receiving a "W" in a course may affect the status of your student Visa. Once a W is given for the course, it will not be changed to an F because of the visa consideration. Please contact the International Student Office at 713-718-8520 if you have any questions about your visa status and other transfer issues |

***Instructor’s Requirements:***

**Basic requirements**

Students should be on time for class and be prepared (having read and studied the assignments) with required materials including textbook and project manuals. Full class attendance is required. Full attention during lecture is required. No food or drink is allowed in the classroom.

**Phones/electronic devices**

***Absolutely no phone or other personal electronic devices are to be used during class. This includes making or taking a call, reviewing messages, texting, playing games, checking email, surfing the web, anything that involves a phone or other personal electronic device***. If your work or family situation requires that you be available via phone, your phone can be on vibrate mode and you can take the call during our regular scheduled breaks or you can exit the class to review the call. Notify your friends, family, employers, and anyone else who regularly contacts you that you will be in class and that you should be contacted only when necessary. The taking of calls during class is not only disruptive but it is also discourteous to classmates and the instructor.

If you exit the classroom to take a call, please take your books and other belongings with you so that if class is over before your call is done, you can leave the building after your call. The instructor will not stay after class is dismissed to watch your belongings.

**Testing procedures**

***Be sure to arrive early for your examinations. There are time limits for exams. You will not be given extended time for testing if you arrive late.***

Entering and exiting the classroom is not permitted once exams have begun. Please be sure to use the bathroom before or after.

**Department Guidelines:**

Students are expected to conduct themselves as adults. This includes courteous and respectful behavior towards instructor and classmates. Disruptive behavior or any behavior that interferes with any educational activity being performed by the instructor will not be allowed. Additionally, no student may interfere with his/her fellow students’ right to pursue their academic goals to the fullest in an atmosphere appropriate to a community of scholars. Disruptive behavior may result in removal from the class.

**Grades and Exams**

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| HCC Grading Scale: | A = 90-100% B = 80-89% C = 70-79% D = 60-69% F = less than 60% |

Testing Schedule

Students must adhere to testing schedule. Failure to take a test will result in a “0” for the missed exam. Exceptions include work, family, or personal (health) emergency, and must be documented.

Only one make-up exam per semester is allowed (with proper documentation) and must be arranged with the instructor ASAP. There is no repeating of examinations or “dropping” of lowest grade/s.

Examination format

Exams will include multiple choice questions and essay/short answer questions.

Grade Calculation

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| --- | --- |
| Exam 1 | 18 |
| Exam 2 | 18 |
| Final Exam 3 | 18 |
| Quizzes 2 | 16 |
| Assignment |  8 |
| PopQuizes/home tests | 10 |
| Diet Analysis | 12  |
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| **Total Score**  | **100** |

**Final Note**

The Instructor reserves the right to modify any part of this syllabus when necessary with adequate notification to the students.

**HCC POLICY STATEMENT – EGLS3 -- Evaluation for Greater Learning Student Survey System**

At Houston Community College, during a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

Scoring Rubrics:

Your grade will be determined by your scores on the assessments given by your instructor.  These grading rubrics are just a general guide to student performance

The following Student Learning Outcomes with their associated assessment criteria are not meant to be all inclusive, and are meant to be used along with all other course learning outcomes and assessment devices, listed under Course Objectives, in the determination of the student's final course grade. Completion of the specific Student Learning Outcomes listed below, at any assessment grading level, **does NOT and will NOT** guarantee the student that final course grade at the end of the semester!

## **ASSESSMENT RUBRICS**

## **INTRODUCTORY NUTRITION - BIOLOGY 1308**

Performance Factors Rating Scale

F

 D C B

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| --- | --- | --- | --- | --- | --- |
| 1. Determine percent calories from fat, carbohydrate, and protein of a food label, identify and explain a nutrient or health claim.
 | Consistently cannot determine correct percent calories from macronutrient sources nor identify and explain a nutrient or health claim. | Occasionally can determine correct percent calories from macronutrient sources nor identify and explain a nutrient or health claim. | Consistently determines correct percent calories from macronutrient sources nor identify and explain a nutrient or health claim. | Consistently determines correct percent calories from macronutrient sources nor identify and explain a nutrient or health claim. Attempts to perform some appropriate corrective action or explain some appropriate action; needs some assistance from instructor. | Consistently determines correct percent calories from macronutrient sources nor identify and explain a nutrient or health claim. Takes appropriate steps or explains appropriate steps independently and correctly. |
| 1. Use a diet analysis software program to input food data, and generate reports. Apply these reports to analyze the food plan in terms of adequacy, balance, calorie control, moderation and variety.
 | Unable to input food data and generate reports. Cannot apply data from these reports to analyze the food plan in terms of adequacy, balance, calorie control, moderation and variety. | Able to input some food data correctly. Can generate reports requested. Cannot apply data from these reports to analyze the food plan in terms of adequacy, balance, calorie control, moderation and variety. | Able to input food data correctly. Can generate reports requested. Can apply data from these reports to analyze the food plan for three of the five categories listed: adequacy, balance, calorie control, moderation and variety. | Able to input food data correctly. Can generate reports requested. Can apply data from these reports to analyze the food plan for four of the five categories listed: adequacy, balance, calorie control, moderation and variety. | Able to input food data correctly. Can generate reports requested. Can apply data from these reports to analyze the food plan for all categories listed: adequacy, balance, calorie control, moderation and variety. |
| 1. Critique a publication for nutritional validity using the CARS (credibility, accuracy, reasonable, support) checklist.
 | Unable to demonstrate knowledge of CARS checklist. | Occasionally able to demonstrate knowledge of CARS checklist. | Able to critique a publication for nutritional validity using the CARS (credibility, accuracy, reasonable, support) checklist for two of the four categories. | Able to critique a publication for nutritional validity using the CARS (credibility, accuracy, reasonable, support) checklist for three of the four categories. | Able to critique a publication for nutritional validity using the CARS (credibility, accuracy, reasonable, support) checklist for all four categories. |
| 1. Explain two main physiological functions of each of the six nutrients (carbohydrates, fat, protein, vitamins, minerals and water.) Calculate the minimum and maximum gram intake of each of the energy-yielding nutrients according to the Institute of Medicine Goals for a given calorie intake.
 | Unable neither to explain physiological function nor to perform calculations.  | Able to explain one main physiological functions of each of the six nutrients (carbohydrates, fat, protein, vitamins, minerals and water.) Cannot calculate the minimum and maximum gram intake of each of the energy-yielding nutrients according to the Institute of Medicine Goals for a given calorie intake. | Able to explain one main physiological functions of each of the six nutrients (carbohydrates, fat, protein, vitamins, minerals and water.) Can calculate the minimum and maximum gram intake of one or two of the three energy-yielding nutrients according to the Institute of Medicine Goals for a given calorie intake. | Able to explain one main physiological functions of each of the six nutrients (carbohydrates, fat, protein, vitamins, minerals and water.) Can calculate the minimum and maximum gram intake of each of the energy-yielding nutrients according to the Institute of Medicine Goals for a given calorie intake. | Able to explain two main physiological functions of each of the six nutrients (carbohydrates, fat, protein, vitamins, minerals and water.) Can calculate the minimum and maximum gram intake of each of the energy-yielding nutrients according to the Institute of Medicine Goals for a given calorie intake. |
| 1. Identify the physiological pathways of how exercise can improve or prevent chronic heart disease, hypertension and diabetes.
 | Unable to identify the physiological pathways of how exercise can improve or prevent each of the following chronic diseases--heart disease, hypertension and diabetes. | Occasionally able to identify the physiological pathways of how exercise can improve or prevent one of the following chronic diseases--heart disease, hypertension and diabetes. | Able to identify the physiological pathways of how exercise can improve or prevent one of the following chronic diseases--heart disease, hypertension and diabetes. | Consistently able to identify the physiological pathways of how exercise can improve or prevent two of the following chronic diseases--heart disease, hypertension and diabetes. | Consistently able to identify the physiological pathways of how exercise can improve or prevent each of the following chronic diseases--heart disease, hypertension and diabetes. |
| 1. Define nutrient density by giving its formula. Identify nutrient dense foods from each of the food groups on the mypyramind.gov web site.
 | Unable to neither define nutrient density by giving its formula nor identify nutrient dense foods from each of the food groups on the mypyramind.gov web site. | Occasionally able to either define nutrient density by giving its formula or identify nutrient dense foods from each of the food groups on the mypyramind.gov web site. | Consistently able to define nutrient density by giving its formula.Can identify nutrient dense foods from each of the food groups on the mypyramind.gov web site with 70% accuracy. | Consistently define nutrient density by giving its formula. Can identify nutrient dense foods from each of the food groups on the mypyramind.gov web site with 80% accuracy. | Consistently define nutrient density by giving its formula. Can identify nutrient dense foods from each of the food groups on the mypyramind.gov web site with 100% accuracy. |
| 1. Students will be able to identify how nutritional needs change through the lifespan and explain why.
 | Unable to identify how nutritional needs change through the lifespan. | Occasionally able to understand the techniques used in biotechnologyUnable to explain why. | Occasionally able to identify how nutritional needs change through the lifespan. Occasionally able to explain why. | Consistently able to identify how nutritional needs change through the lifespan. Occasionally able to explain why. | Consistently able to identify how nutritional needs change through the lifespan and explain why. |