



Syllabus: *Bio 127N Human Nutrition and Biology*

| Course Information | |
|---|---|
| Course Prefix/Number: BIO 127N Semester: Spring 2019 Class Days/Times: Tuesdays and Thursdays 12:30-3:15pm | Credit Hours: 4 Lecture periods: 3 Lab periods: 3 Course Title: Human Nutrition and Biology Main Campus Room: I-We:mta Ki., Room 5 (IWK 5) |
| Instructor Information: Name: Teresa DeKoker | E-mail: tdekoker@tocc.edu Office Hours: Before or after class |
| Course Description: Principles of nutrition presented in the context of human biology. Includes chemistry, digestion, absorption, and metabolism of nutrients. Also includes biological and nutritional perspectives on various health issues such as cardiovascular disease, hypertension, cancer, diabetes, and osteoporosis. | |

Student Learning Outcomes (SLOs)

Upon completion of the course, the student will be able to do the following:

1. Demonstrate improvement in the general education goals of communication and critical thinking.
2. Evaluate the design, results, and conclusions of various nutritional studies.
3. Explain the purpose and significance of dietary recommendations.
4. Describe the biology of human digestion and absorption in general, as well as the nutritional, metabolic, and physiological significance of carbohydrates, proteins, amino acids, lipids, vitamins, major minerals, trace elements, and non-nutrient substances.
5. Describe several nutrient-nutrient and drug-nutrient interactions.
6. Elaborate on basic aspects of clinical nutrition, and various nutrition related issues.
7. Describe how nutrient needs change during human development from the embryonic period through adulthood, along with the nutritional needs during pregnancy and lactation.
8. Competently use dietary analysis software.

Texts and Materials:

Required: *Nutrition Essentials: A Personal Approach* by Wendy J. Schiff, 2nd edition. Ebook required. Once you have purchased access to the Ebook, you have the option to purchase a loose leaf version (full color print/3 ring binder ready). Instructions for book orders will be given the first week of class. iPad or laptop/computer required. iPad will be available for checkout in the TOCC library.

Evaluation and Grading:

Evaluation:

| Evaluation | Points | Percentage of total grade |
|------------|-------------------|---------------------------|
| Exams | 200 (2 @ 100 pts) | 20% |

| | | | | | | | | | | | | | |
|--|----------|------|--|---------------|----------|--------------|----------|--------------|----------|--------------|----------|-------------------|----------|
| Labs and participation | 300 pts | 30% | | | | | | | | | | | |
| Quizzes, Readings & Homework Assignments | 400 pts | 40% | | | | | | | | | | | |
| Final Presentation | 100 | 10% | | | | | | | | | | | |
| TOTAL | 1000 | 100% | | | | | | | | | | | |
| <table border="1"> <tr> <td>100-90</td> <td>A</td> </tr> <tr> <td>89-80</td> <td>B</td> </tr> <tr> <td>79-70</td> <td>C</td> </tr> <tr> <td>69-60</td> <td>D</td> </tr> <tr> <td>59 + below</td> <td>F</td> </tr> </table> | | | | 100-90 | A | 89-80 | B | 79-70 | C | 69-60 | D | 59 + below | F |
| 100-90 | A | | | | | | | | | | | | |
| 89-80 | B | | | | | | | | | | | | |
| 79-70 | C | | | | | | | | | | | | |
| 69-60 | D | | | | | | | | | | | | |
| 59 + below | F | | | | | | | | | | | | |

Himdag Cultural Component:
Tohono O’odham traditions and cultural beliefs will be discussed as relevant to topics of nutrition and only as appropriate to the Tohono O’odham Nation’s traditional standards for sharing information.

The traditional foods project will give students the opportunity to examine Tohono O’odham food and medicine traditions as they relate to nutrition and health.

Policies and expectations-

Course Policies Requirements: (1) Attend class regularly; (2) Complete in-class and out-of-class assignments and submit to the instructor; (3) Attend all field trips; (4) Take all exams; (5) Complete all class projects & presentations.

Attendance: You are expected to arrive to class on time and actively participate each class period. Quizzes and exams are given out at the beginning of class time. Field trips and class activities begin at the start of class and may be missed if you do not arrive to class on time. Because exams, labwork and/or other assignments potentially occur every class period, points potentially will be lost each class period missed. If you miss all or a portion of a class, then you are solely responsible for obtaining missed class material from fellow students. Complete attendance is mandatory during student project presentations; otherwise presentation points will be forfeited. Four unexcused absences may result in withdrawal. You may request to be excused from class for religious observances and practices, for illness, for travel or for personal or family emergency. If you will be absent or have been absent, please notify the instructor as soon as possible.

Make-up policy: If you have an excused absence and miss an exam, you can make it up within two days of the exam date. Late assignments that can be made up will be accepted but will be penalized 25%. Laboratories cannot be made up. At the instructor's discretion, extra credit opportunities and optional activities may be provided.

Academic Integrity: Violations of scholastic ethics are considered serious offenses by Tohono O'odham Community College, the Student Services Department, and by your instructor. Students may consult the TOCC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure. Copies are available at Tohono O'odham Community College.

All work done for this class must be your own. While you may discuss assignments with other class members, the final written project must clearly be your own. You may use work from books and other materials if it is properly cited. Copying from a book without proper reference or from a person under any circumstances will result in an "F" for the assignment, and at the instructor's discretion, possibly an "F" for the course.

ADA Compliance:

Tohono O'odham Community College strives to comply with the provisions of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. If you have a learning problem, physical disability, or medical illness that requires you to have any special arrangements, please inform your instructor at the beginning of the semester so your academic performance will not suffer because of the disability or handicap.

Classroom Behavior:

- Because of insurance limitations, non-registered visitors are not allowed at class sessions or on field trips.
- Possession of drugs, alcohol or firearms on college property is illegal.
- Food and beverages are allowed in classrooms.
- Pets, **cell phones**, pagers and other electronic devices that distract students are **not allowed in classrooms**.
- Students creating disturbances that interfere with the conduct of the class or the learning of others will be asked to leave.

Course Feedback:

All assignments, written papers and quizzes will be graded and returned to the students one week after the assignment is due. E-mail and phone messages will be returned within two days. A student or the instructor may request a student conference at any time during the semester. A mid-semester grade report will be provided to each student by March 29th.

Instructor Withdrawals:

Students who have missed four consecutive classes, not submitted any assignments nor taken any quizzes by the 45th day census report are assumed NOT to be participating in the class and will be withdrawn. Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by March 29th, if you do not expect to complete the class, otherwise you may receive an "F" grade.

Incomplete (I) grade:

Incomplete "I" grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. There must be an unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance.

Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an "F" if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the "I" grade is awarded, is not completed.

Final Grades: Students will receive a grade transcript from the college mailed to the address given with registration materials at the end of the semester when all grades have been recorded.

SPECIAL NOTE TO STUDENT:

For privacy and security reasons, instructors are advised **NOT** to give grades over the telephone. Grades will only be emailed with written permission from the student.

Your instructor will make every attempt to follow the above procedures and schedules, but they may be changed in the event of extenuating circumstances.

Students submitting assignments through the mail or by email are advised to make copies for their own protection.

If you move during the semester, please file a change of address form with the Student Services Office, and inform your instructor.

GOOD LUCK!

Bio 127N Course Schedule

| Date | Topic | Text reading | Assignments due |
|-------------|--|--|--|
| January 15 | Introduction, nutrition activities, short film | Read an article about nutrition that is of interest to you and bring it to class on 1/17 | |
| January 17 | Article discussions, Intro to on-line portion of class, computer lab | Read syllabus | |
| January 22 | Why it's important to learn about nutrition, nutrient basics | Unit 1 | |
| January 24 | Nutrients, dietary supplements | | |
| January 29 | Dietary recommendations, Scientific method | Unit 2 | Unit 1 Assignment and quiz due by 12:00 pm in Canvas |
| January 31 | Nutrition research, nutrition misinformation | | |
| February 5 | Seeking reliable nutrition information | Unit 3 | Unit 2 assignment and quiz due by 12:00pm in Canvas |
| February 7 | Meal planning, MyPlate | | |
| February 12 | Supplements, functional foods, Tohono O'odham food medicine | Unit 4 | Unit 3 assignment and quiz due by 12:00pm in Canvas |
| February 14 | Cells to systems, digestive tract | | |
| February 19 | Digestive system disorders | | |
| February | Metabolism | Unit 5 | Unit 4 assignment |

| | | | |
|---------------|---|---------|---|
| 21 | | | and quiz due by 12pm in Canvas |
| February 26 | Carbohydrates | | |
| February 28 | Carbohydrates and health, diabetes, metabolic syndrome | Unit 6 | Unit 5 assignment and quiz due by 12pm in Canvas |
| March 5 | Exam 1 Lipids | | |
| March 7 | Dietary fat and cholesterol | | |
| March 12 & 14 | Spring Break –No Class | | |
| March 19 | Cardiovascular disease | Unit 7 | Unit 6 assignment and quiz due by 12pm in Canvas |
| March 21 | Proteins | | Dietary Analysis assignment due |
| March 26 | Proteins in foods, vegetarianism | | |
| March 28 | Vitamins | Unit 8 | Unit 7 assignment and quiz due by 12pm in Canvas |
| April 2 | Vitamins, fat-soluble vitamins | | |
| April 4 | Minerals | Unit 9 | Unit 8 assignment and quiz due by 12pm in Canvas |
| April 9 | Minerals | | |
| April 11 | Water, alcohol | Unit 10 | Unit 9 assignment and quiz due by 12pm in Canvas |
| April 16 | Nutrition for healthy weight | | |
| April 18 | Eating disorders, physical fitness | Unit 11 | Unit 10 assignment and quiz due by 12pm in Canvas, Meal Planning Assignment due |
| April 23 | Nutrition in the lifecycle (pregnancy, lactation, older adults) | | |
| April 25 | Food safety, genetically modified foods, food | | Presentation outlines due in class |

| | | | |
|----------|--|--|---|
| | born illnesses, pesticides | | |
| April 30 | Global nutrition, feeding the world | Read articles on GM and pesticides | Unit 11 assignment and quiz due by 12pm in Canvas, Presentations due in class |
| May 2 | Food and the environment | Review chapters, study for exam! | |
| May 7 | Exam 2 | | |

DISCLAIMER: This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.