



**ALHS 1060 Diet and Nutrition for Allied Health Sciences
COURSE SYLLABUS
Jenkins County High School
Fall Semester 2019**

COURSE INFORMATION

Credit Hours/Minutes: 2/1500
Campus/Class Location: Jenkins County High School
Class Meets: 1:20 pm to 2:13 pm Monday- Friday
Course Reference Number (CRN): 20327
Preferred Method of Contact: EMAIL

INSTRUCTOR CONTACT INFORMATION

Adjunct Instructor Name: Casey Garvin, LPN
Adjunct Instructor College Email: cgarvin@jchs.com
Campus/Office Location: Jenkins County High School
Office Hours: By Appointment
Phone: 912-538-3252
Fax Number: 478-289-2249

Full-Time Instructor: Tiffany Thompson, BSN, RN
Email Address: tthompson@southeasterntech.edu
Campus/Office Location: Swainsboro Campus/ Building 8, Office 8134
Office Hours: Monday & Wednesday 3:00 to 5:30 pm
Phone: 912-538-3252
Fax Number: 478-289-2249
Tutoring Hours: speak with course instructor for appointment

SOUTHEASTERN TECHNICAL COLLEGE (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php) (<http://www.southeasterntech.edu/student-affairs/catalog-handbook.php>).

REQUIRED TEXT

Nutrition and Diet Therapy, 10th Edition by Ruth Roth.

REQUIRED SUPPLIES & SOFTWARE

Pen, pencil, paper, highlighter, notebook, and computer access are utilized for this course.

Students should not share login credentials with others and should change passwords periodically to maintain security.

COURSE DESCRIPTION

A study of nutritional needs of the individual. Topics include: nutrients, standard and modified diets, nutrition throughout the lifespan, and client education.

MAJOR COURSE COMPETENCIES

1. Nutrients
2. Nutrition Throughout the Lifespan
3. Client Education
4. Standard and Modified Diets

PREREQUISITE(S)

Program admission

COURSE OUTLINE

Nutrients

1. Describe the food guide pyramid and the daily amounts needed.
2. Identify the source and functions of foods and nutrients in maintaining good health.
3. Identify food fallacies.
4. Describe the clinical signs of good nutritional status.
5. Identify the energy producing nutrients including their fuel value.
6. Calculate the energy needs of an individual based on age, sex, activity level, and health status.
7. Discuss the results of over or under consumption of kilocalories.
8. Identify the functions, sources, RDA, and classifications of carbohydrates.
9. Discuss the function of fiber including food sources.
10. Identify the functions, sources, RDA, and classifications of fats.
11. Explain the difference between saturated and unsaturated fatty acids including food sources.
12. Identify the functions, sources, RDA, and classifications of proteins.
13. Compare the effects on health of inadequate or excessive protein intake.
14. Discuss the general functions and classifications of vitamins.
15. Identify the functions, sources, RDA, and deficiency states of fat and water soluble vitamins.
16. Identify the function, sources, RDA, and deficiency states of both major and trace minerals.
17. Discuss the function, requirements, movement, and distribution of water in the body.
18. Describe mechanical and chemical digestion.
19. Describe the pathway of nutrients and the digestive processes that occur in the mouth, stomach, small intestine, and large intestine.
20. Develop a menu that includes variety and is nutritionally balanced.
21. Describe the appropriate methods for handling, storing, processing, and preparing food to conserve nutrients.
22. Promote food habits and cultural diversity by altering a standard diet to accommodate the individual.

Nutrition throughout the Lifespan

1. Identify the nutritional needs for the infant, child, pregnant, lactating, and aged individual.

Client Education

1. Demonstrate client education as it relates to nutrition and diet therapy.

Standard and Modified Diets

1. Define the principles of diet therapy.

2. Explain the objectives of diet therapy.
3. Identify general and special diets.
4. Serve the correct diet, appropriately, to the client.

GENERAL EDUCATION CORE COMPETENCIES

Southeastern Technical College has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS

Students are expected to complete all daily assignments as specified in the lesson plan. Students are expected to know the answers to the Chapter Review Questions at the end of each chapter.

TRADITIONAL ATTENDANCE GUIDELINES

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Macy Gay, \(mgay@southeasterntech.edu\)](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

Vidalia Campus: [Helen Thomas, \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

SPECIFIC ABSENCES

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Macy Gay, \(mgay@southeasterntech.edu\)](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

Vidalia Campus: [Helen Thomas, \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

GUIDELINES FOR MENU ASSIGNMENT

5 Day Food Diary

Student will document food intake through myfitnesspal.com for 5 days. As food items are recorded into myfitnesspal.com, the program will automatically calculate caloric intake, carbohydrates, fats, proteins, cholesterol, sodium, sugars, and fiber. The student is to print the 5 day Food Diary and give to instructor on or before due date. This assignment due date can be found in the lesson plan/syllabus. Each day in the Food Diary is worth a maximum of 14 points. A maximum of 70 points can be earned with the 5 Day Food Diary.

Sample Menu Assignment

Student will choose a diet from the textbook that he/she is interested in or student may choose a diet that he/she wishes to explore further. Some examples include, but not limited to, are the Low Sodium diet and the Low Cholesterol diet. Student will create a one day menu plan that will include breakfast, lunch, dinner, and a snack. Student should be creative and implement concepts learned in the food guidance system, MyPlate as well as concepts learned in this course. The one day menu assignment should contain a minimum of 1200 kilocalories. This menu assignment is also recorded in myfitnesspal.com. A maximum of 30 points can be earned with the one day menu assignment. Student will print a copy of the menu assignment and turn in to instructor on or before the deadline as specified in the lesson plan/syllabus.

EXAMS

During an exam, students are required to place all textbooks and personal property on the counter located in the classroom. Students are to be seated with an empty seat between each student, if possible. No talking is allowed once the test begins. Students found with their cell phone or any other personal communication device during a test will be considered cheating and given a zero for the exam grade.

Final Exam

A comprehensive final exam will be administered at the end of the semester as designated on the lesson plan. A chapter exam average must be at least a 70 to be eligible to take the final exam. If the student is not eligible to take the final exam, a grade of "0" will be recorded.

MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC...)

In the event of an excused absence on an exam day, the student will be allowed to make-up one exam (excluding the final exam) which will be given at the discretion of the instructor. A grade of "0" will be given to all subsequent exams missed. The make-up exam may or may not be the same as the original exam. It may also be a different test format. Failure to show up for a make-up exam results in a grade of zero.

An excused absence is jury duty, military duty, court duty, or required job training. Other excused absences may also include illness, hospitalization or a death in the student's immediate family. Official, written documentation such as a subpoena or a doctor's excuse must be provided by the student prior to taking the make-up exam. The instructor reserves the right to refuse for the student to take the make-up exam based on the merit of the documentation.

Any exceptions to the makeup guidelines for this class will require instructor approval and would only be allowed for exceptional circumstances.

ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that all forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the Southeastern Technical College Catalog and Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

The procedure for dealing with academic misconduct and dishonesty is as follows:

1. First Offense

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

2. Second Offense

Student is given a grade of "WF" (Withdrawn Failing) for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

3. Third Offense

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or

citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

<p>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</p>	<p>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</p>
<p>Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1st Street, Vidalia Office 165 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu</p>	<p>Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Lanie Jonas ljonas@southeasterntech.edu</p>

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College’s website.

ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORGIA (TCSG) GUARANTEE/WARRANTY STATEMENT

The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State

Technical College at no charge for instructional costs to either the student or the employer.

GRADING POLICY

Assessment/Assignment	Percentage
Chapter Exams	70%
Final Exam	25%
5 Day Food Diary & One Day Menu Assignment	05%
Total	100%

GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

5 DAY FOOD DIARY

Assignment	Maximum Points
Day 1	14
Day 2	14
Day 3	14
Day 4	14
Day 5	14

70 Points

ONE DAY MENU ASSIGNMENT

Assignment	Maximum Points
Breakfast	7.5
Lunch	7.5
Dinner	7.5
Snack	7.5

30 Points

ALHS 1060 Diet and Nutrition for Allied Health Science
FALL Semester 2019 Lesson Plan

TENTATIVE TO CHANGE

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
8/2/18 Fri		Introduction to course, ALHS 1060 Review Menu Assignment	<ul style="list-style-type: none"> • Set up account for myfitnesspal.com • Read Chapters 1 & 2 	1,2,3,4 a, b, c
8/5/19 Mon	5-Day Food Diary and Menu Assignment	Set up account for myfitnesspal.com	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/6/19 Tues	5-Day Food Diary and Menu Assignment	Set up account for myfitnesspal.com	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/7/19 Wed	Chapter 1	The Relationship of Nutrition and Health	<ul style="list-style-type: none"> • Read Chapters 1, 2, & 3 	1,2,3,4 a, b, c
8/8/19 Thurs	Chapter 2	Planning a Healthy Diet	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/9/19 Fri	Chapter 3	Digestion, Absorption, and Metabolism	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
8/12/19 Mon	Chapter 1-3	EXAM 1 (Chapters 1-3)	<ul style="list-style-type: none"> • Exam 1 (Ch. 1-3) • Read Ch. 4-6 	1,2,3,4 a, b, c
8/13/19 Tues	Chapter 4	Carbohydrates	<ul style="list-style-type: none"> • Read Chapters 4-6 	1,2,3,4 a, b, c
8/14/19 Wed	Chapter 5	Lipids (Fats)	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/15/19 Thurs	Chapter 6	Proteins	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/16/19 Fri	Chapter 4-6	EXAM 2 (Chapters 4-6)	<ul style="list-style-type: none"> • Exam 2 (Ch. 4-6) • Read Ch. 7-9 	1,2,3,4 a, b, c
8/19/19 Mon	Chapter 7	Vitamins	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/20/19 Tues	Chapter 8	Minerals	<ul style="list-style-type: none"> • Complete Chapter Review Questions at the end of the chapter. • Study for Exam 	1,2,3,4 a, b, c
8/21/19 Wed	Chapter 9	Water	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/22/19 Thurs	Chapters 7-9	EXAM 3 (Chapters 7-9)	<ul style="list-style-type: none"> • Exam 3 (Ch. 7-9) • Read Chapters 10-12 	1,2,3,4 a, b, c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
8/23/19 Fri	Chapter 10	Foodborne Illnesses and Allergies	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/26/19 Mon	Chapter 11	Nutrition During Pregnancy and Lactation	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/27/19 Tues	Chapter 12	Nutrition During Infancy	<ul style="list-style-type: none"> • Complete Chapter Review Questions at the end fo the chapter • Study for Exam 	1,2,3,4 a, b, c
8/28/19 Wed	Chapters 10-12	EXAM 4 (Chapters 10-12)	<ul style="list-style-type: none"> • Exam 4 (Ch. 10-12) • Read Ch. 13-15 	1,2,3,4 a, b, c
8/29/19 Thurs	Chapter 13	Nutrition for Children and Adolescents	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
8/30/19 Fri	Chapter 14	Nutrition Young and Middle Adulthood	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/2/19 Mon	Holiday	Holiday		
9/3/19 Tues	Chapter 15	Nutrition During Late Adulthood	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/4/19 Wed	Chapters 13-15	EXAM 5 (Chapters 13-15) Diet and Weight Control	<ul style="list-style-type: none"> • Exam 5 (Chapters 13-15) • Read Chapters 16-18 	1,2,3,4 a, b, c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
9/5/19 Thurs	Chapter 16	Diet and Weight Control	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/6/19 Fri	Chapter 17	Diet and Diabetes Mellitus	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/9/19 Mon	Chapter 18	Diet and Cardiovascular Disease	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/10/19 Tues	Chapters 16-18	EXAM 6 (Chapters 16-18)	<ul style="list-style-type: none"> • Exam 6 (Ch. 16-18) • Read Chapters 19-21 	1,2,3,4 a, b, c
9/11/19 Wed	Chapter 19	Diet and Renal Disease	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/12/19 Thurs	Chapter 20	Diet and Gastrointestinal Problems	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/13/19 Fri	Chapter 21	Diet and Cancer	<ul style="list-style-type: none"> • Complete chapter Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/16/19 Mon	Chapter 19-21	Exam 7 (Chapters 19-21)	<ul style="list-style-type: none"> • Exam 7 (Ch. 19-21) • Read Chapters 22-23 	1,2,3,4 a, b, c

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
9/17/19 Tues	Chapter 22	Diet and Client With Special Needs Sample Menu/5 Day Food Diary Assignment Due	<ul style="list-style-type: none"> • Complete Review Questions at the end of the chapter • Study for Final Exam 	1,2,3,4 a, b, c
9/18/19 Wed	Chapter 23	Nutritional Care of Clients	<ul style="list-style-type: none"> • Complete Review Questions at the end of the chapter • Study for Exam 	1,2,3,4 a, b, c
9/19/19 Thurs	Chapters 22-23	Exam 8 (Chapters 22-23)	<ul style="list-style-type: none"> • Exam 8 (Ch. 22-23) • Review for Final Exam 	1,2,3,4 a, b, c
9/20/19 Fri	Chapters 1-23	Final Exam Review Make up Missed Exam	<ul style="list-style-type: none"> • Study for Exam • Make Up Exam 	1,2,3,4 a, b, c
9/23/19 Mon	Chapters 1-23	Final Exam Review	<ul style="list-style-type: none"> • 	
9/24/19 Tues	Chapters 1-23	Final Exam Review	<ul style="list-style-type: none"> • Final Exam Review 	1,2,3,4 a, b, c
9/25/19 Wed	Chapters 1-23	Comprehensive Final Exam: Chapters 1-23	<ul style="list-style-type: none"> • Final Exam 	1,2,3,4 a, b, c
9/26/19 Thurs	Chapters 1-23	Comprehensive Final Exam: Chapters 1-23	<ul style="list-style-type: none"> • Final Exam 	1,2,3,4 a,b,c
9/27/19 Fri		Turn in books		

Competency Areas:

1. Nutrients
2. Nutrition Throughout the Lifespan
3. Client Education
4. Standard and Modified Diets

General Core Educational Competencies

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.