



**ALMA 1000 – Allied Health Math Applications
COURSE SYLLABUS
Summer Semester 2020**

COURSE INFORMATION

Credit Hours/Minutes: 0 Credit Hours/2250 Minutes:

Campus/Class Location: Georgia Virtual Technical Connection (GVTC)/Blackboard

Class Meets: Via Internet for 9 weeks. Blackboard Collaborate sessions will be held for lecture.

Course Reference Number (CRN): 60225

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Tiffany Thompson, BSN, RN

Office Location: Swainsboro- Building 8, Office 8164, Vidalia-Gillis Medical Bldg, Office 834

Office Hours: Monday through Thursday 9:00am to 12:00pm

Email Address: [Tiffany Thompson \(ttompson@southeasterntech.edu\)](mailto:ttompson@southeasterntech.edu)

Phone: 912-538-3252 or 912-538-3293

Fax Number: 478-289-2249

Tutoring Hours: please schedule an appointment via email

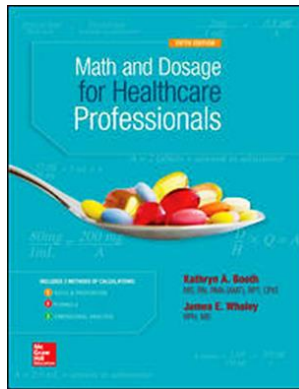
All communication with faculty should be completed using STC email. Please note that emails sent during business hours will be answered within 24-48 hours. Emails sent during holidays and on weekends may not be answered until the next business day.

SOUTHEASTERN TECHNICAL COLLEGE'S (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 ETEXT – PROVIDED BY STC

- Booth, K., & Whaley, J. (2016). *Math and Dosage Calculations for Healthcare Professionals. (5th edition)*. New York, NY: McGraw-Hill Education. ISBN 978-0-07-351380-5



- McGraw-Hill CONNECT online access

REQUIRED SUPPLIES & SOFTWARE

Paper, Pens/Pencils, Folder, and Computer Access

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

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

COURSE DESCRIPTION

ALMA 1000 prepares students in understanding the application of mathematics in their health science program courses. The topics included are basic mathematics, medical terminology, mathematical conversions, weight and measurement applications used in health science programs. Additionally, problem-solving strategies, basic principles of medication administration, and research in health science will be incorporated into the course competencies.

MAJOR COURSE COMPETENCIES

1. Problem Solving Strategies
2. Basic Mathematics in Health Science
3. Medical Terminology Used in Health Science Math Applications
4. Conversion Applications in Health Science
5. Weight and Measurement in Health Science
6. Basic Principles of Medication Administration
7. Research in Allied Health

PREREQUISITE(S)

- Certificate Programs with a math component: MATH 1012 with a C or better
- Diploma Programs: MATH 1012 with a C or better
- Degree Programs: Appropriate algebra placement test score

COURSE OUTLINE

Problem Solving Strategies

Order	Description	Learning Domain	Level of Learning
1	Use problem solving strategies to solve application problems (See Definition Section)	Cognitive	Application

Basic Mathematics in Allied Health

Order	Description	Learning Domain	Level of Learning
1	Perform operations and comparisons with fractions, decimals, and percent.	Cognitive	Application
2	Convert between and interpret the medical application of Arabic Numerals and Roman Numerals	Cognitive	Comprehension
3	Perform basic allied health applications using ratios, rates and proportions	Cognitive	Application
4	Develop mental calculations skills through drill & practice, contextualization, etc.	Cognitive	Application

Medical Terminology Used in Allied Health Math Applications

Order	Description	Learning Domain	Level of Learning
1	Demonstrate an understanding of medical terminology used in allied health math	Cognitive	Application
2	Interpret medical abbreviations as related to allied health math	Cognitive	Application

Conversion Applications in Allied Health

Order	Description	Learning Domain	Level of Learning
1	Demonstrate an understanding of the systems of measurement and their equivalencies	Cognitive	Application
2	Convert among and between measurement systems (metric, apothecary, household/American/English) using formulas, mental calculations, proportions, dimensional analysis, and means/extremes	Cognitive	Comprehension

Weight and Measurement Applications in Allied Health

Order	Description	Learning Domain	Level of Learning
1	Interpret medical measurement devices (scales, tape measure, syringes, wound measurement devices, etc.)	Cognitive	Comprehension
2	Demonstrate weight and measurement literacy	Cognitive	Application

Basic Principles of Medication Administration

Order	Description	Learning Domain	Level of Learning
1	Interpret and translate orders for medication	Cognitive	Comprehension
2	Use ratios, rates, and proportions to perform allied health applications and mixture/concentration problems	Cognitive	Application

Order	Description	Learning Domain	Level of Learning
3	Perform basic dosage calculations.	Cognitive	Application

Research in Allied Health

Order	Description	Learning Domain	Level of Learning
1	Demonstrate an understanding of the importance of the scientific method in research	Cognitive	Application
2	Interpret statistical measures used in the allied health field	Cognitive	Comprehension

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 homework assignments, chapter exams, discussion boards and participate in blackboard collaborate as required by the instructor. Online students are responsible for checking e-mails and BLACKBOARD announcements daily. This is an online course, therefore it is the student's responsibility to ensure that they have computer/Wifi access to complete their assignments. College email is accessed at <https://portal.office.com>, under Quick links on our webpage, or in the menu of our Blackboard course.

The eTextbook is provided by Southeastern Technical College through the McGraw-Hill online learning management system called CONNECT™. Students will be given a CONNECT code for this course. Students are expected to complete all homework assignments/tests online through CONNECT™. Weekly assignments and Exams are listed on the attached lesson schedule and are posted on the CONNECT™ website. Homework Assignments and Chapter Exams are due every Tuesday at 11:59pm. Failure to complete homework assignments and chapter exams by Tuesday at 11:59pm will result in a zero. All CONNECT™ assignments may be repeated, as many times as the student needs for practice, however, the homework score will be recorded every Tuesday at 11:59pm. It is highly recommended students complete homework prior to the interactive webinar and chapter exam. Chapter Exams are due every Tuesday at 11:59pm. Students get **ONE** attempt at each chapter exam. No chapter exams will be dropped.

Handout/Worksheets and Power Points will be available under the Student Resource Tab if applicable to the chapter. Handout/Worksheets will consist of chapter information or practice and are not graded.

Lecture Material and Interactive Lectures: Lectures will be recorded using Blackboard Collaborate Ultra. All recorded Lectures will be located in Blackboard under the Lecture Material and Webinar Tab. Lectures for the coordinating chapters will be posted weekly. Once students enter Blackboard Collaborate Ultra, they will click on the Menu Tab, then click recordings. Each Recording will be labeled according to the chapter. If an additional lecture was needed it will be labeled, for example Chapter 7 Part 2.

In addition to the recorded lectures a Question and Answer Interactive Webinar will be provided every **Monday at 1:00 PM**. Students will log into blackboard and click on the Lecture Material and Webinar Tab. A link will be provided for students to join the webinar under sessions. The Interactive Session is Highly Recommended for all students to participate in and ask questions over the content provided. For every interactive session a student participates in, 3 points will be added to a single homework assignment per

chapter unit.

A final **chapter exam average of 70 or higher** is required to take the final exam which also counts as your proctor exam for this course. Grades will not be rounded up, example 69.9 will not be rounded to 70). If the student has below a 70 average, the student will receive a grade of ZERO for the final exam (proctor exam) and will fail the course. Students are responsible for keeping up with their chapter exam average.

Tentative Lab Days: If Covid-19 restrictions are lifted, students will be required to participate in a 4-6 hour lab day on either the Vidalia or Swainsboro Campus. Potential lab days will be listed on the syllabus. Lab Days, if allowed will be mandatory for this course. Labs will consist of equipment demonstration, drug calculations, and interpreting medical measurements using equipment learned in this course.

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

Students will NOT be allowed a make-up exam. Students are given at least one week to complete all assignments and exams. All chapter exams and assignments are due by 11:59pm on Tuesday of each week. The proctored exam/final exam will have a different date and time. Students are strongly encouraged to work ahead to ensure due dates are not missed since there are no make-ups in this course.

PLEASE NOTE: The final exam (proctor exam) will be due Wednesday, July 29th by 11:59pm.

ONLINE ATTENDANCE

It is the student's responsibility to be academically engaged each week doing course related 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" (Failing 0-59) in a course.

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. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

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.

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

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

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.

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

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

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up.

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 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.

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

PROCTORED EVENT

Due to the uncertainties of COVID-19, this event will not be proctored for Summer Semester 202016. Students will complete the event, but will not be required to come on campus to do it.

The event may be a major exam, assignment, or presentation, etc. that will count a minimum of 20% of the course grade. Students who do not complete the event as scheduled must submit a valid documented excuse within three business days after the scheduled event. If the excuse is approved by the instructor of the course, students must make arrangements with the instructor to makeup/reschedule the missed event. The penalty and makeup instructions will be at the instructor's discretion. Events will be given after the 65% point of the semester. **Students who do not complete the event on the scheduled date and do not present a valid documented excuse within three business days of the scheduled event will be withdrawn from the course with a "WF" (Withdrawn Failing). If the event is scheduled during final exams, any student who misses the event will be issued an "F" (Failing) for the course.**

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 Student 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:

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

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 Test Average	60%
Homework /Lab	20%
Final Exam/Proctor Exam (due to the uncertainties of COVID-19, this event will not be proctored for Summer Semester 202016. Students will complete the event, but will not be required to come on campus to do it).	20%

GRADING SCALE

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

ALMA 1000 – Allied Health Math Applications

Spring Semester 2020 Lesson Plan

SUBJECT TO CHANGE AT INSTRUCTOR'S DISCRETION

Date/Week	Chapter/ Lesson	Content	Assignments and Tests Due Dates	Competency Area
Week 1 5/26-6/2	Chapter 4 and 5	<p>By 5pm Thursday, May 28th students are required to do the following: 1. Go to "Getting Started" on the left side of the course page. Complete the "Pledge Acknowledgment Requirement" If this is not done on time you will be "No Showed" and dropped from the course.</p> <p>Chapter 4: Metric System Chapter 5: Other Systems of Measurement</p> <p>We will not cover grains or drams for these chapters.</p>	<p>*By 5pm Thursday, May 28th students are required to do the following: Go to "Getting Started" on the left side of the course page. Complete the "Pledge Acknowledgment Quiz". If this is not done on time you will be "No Showed" and dropped from the course. *PRINT your syllabus. *Watch the "Introduction to Course" Video which will cover the syllabus and accessing Connect.</p> <p>→Watch the Lecture over Chapters 4 & 5. → Print Conversion Sheet from Student Resource Tab →Read and study applicable chapters. →Webinar Monday (Mon), June 1st at 1 pm. →Complete Homework (HW) over Chapter (Ch.) 4 and Ch. 5. and Take Chapter Exam over Ch. 4-5 by Tuesday, June 2nd at 11:59pm.</p>	1 a-c
Week 2 6/2-6/9	Chapter 6 and 7	<p>Chapter 6: Converting Units Chapter 7: Temperature & Time</p> <p>We will not cover conversions of temperature (Celsius/Fahrenheit)</p>	<p>→Watch the Lecture over Chapters 6 & 7. →Print Ch. 6 & 7 worksheets from Student Resource Tab → Read and study applicable chapters. →Webinar Mon, June 8th at 1 pm. → Complete HW over Ch. 6 and Ch. 7. And Take Ch. Exam over Ch. 6-7by Tuesday, June 9nd at 11:59pm.</p>	

Date/Week	Chapter/ Lesson	Content	Assignments and Tests Due Dates	Competency Area
Week 3 6/9-6/16	Chapter 8 and 9	Chapter 8: Equipment for Dosage Measurement Chapter 9: Interpreting Medication Orders	<ul style="list-style-type: none"> → Watch the Lecture over Chapters 8 & 9. → Print Ch. 8 & 9 worksheets from Student Resource Tab → Read and study applicable chapters. → Webinar Mon., June 15th at 1 pm. → Complete Homework over Ch. 8 and Ch. 9. and Take Ch. Exam over Ch. 8-9 by Tuesday, June 16nd at 11:59 pm. 	
Week 4 6/16-6/23	Chapter 10	Chapter 10: Interpreting Medication Labels and Package Inserts	<ul style="list-style-type: none"> → Watch the Lecture over Chapters 10. → Print Ch. 10 worksheets from Student Resource Tab → Read and study applicable chapters. → Webinar Mon, June 22nd at 1 pm. → Complete Homework over Ch. 10 Take Ch. Exam over Ch. 10 by Tuesday, June 23rd at 11:59 pm. 	
Week 5 6/23-6/30	Chapter 12	Chapter 12: Methods of Dosage Calculation Dimensional Analysis	<ul style="list-style-type: none"> → Watch the Lecture over Chapters 12. → Print Ch. 12 worksheets from Student Resource Tab → Read and study applicable chapters. → Webinar Mon, June 29th at 1 pm. → Complete Homework over Ch. 12 Take Ch. Exam over 12 by Tuesday, June 30th at 11:59 pm. 	

Date/Week	Chapter/ Lesson	Content	Assignments and Tests Due Dates	Competency Area
Week 6 6/30-7/7	Chapter 13 & 14	Chapter 13: Oral Dosages Chapter 14: Parenteral Dosages	<ul style="list-style-type: none"> → Watch the Lecture over Chapters 13 & 14. → Print Ch. 13 & 14 worksheets from Student Resource Tab → Read and study applicable chapters. → Webinar Mon, July 6th at 1 pm. → Complete Homework over Ch. 13 and Ch. 14 and Take Ch. Exam over Ch. 13-14 by Tuesday, July 7th at 11:59 pm. 	
Week 7 7/7-7/14	IV Calcul.	IV Calculations NOTE: Homework and Exam over IV Calculations is scheduled for Tuesday, July 21 st .	<ul style="list-style-type: none"> → Watch the Lecture over IV Calculations → Print IV Calculation worksheets from Student Resource Tab → Read and study applicable chapters. → Webinar Mon, July 13th at 1 pm. → Complete Homework over IV Calculations Take Ch. Exam over IV Calculations by Tuesday, July 21st at 11:59 pm. 	
Week 8 7/14-7/21	IV Calcul cont'd	IV Calculations See Syllabus for information on Lab Days. Scheduled lab if allowed will be Wednesday, July 22nd 12:30pm to 4:30pm on the Vidalia Campus, Gillis Medical Bldg. Room to be announced.	<ul style="list-style-type: none"> → Complete Homework over IV Calculations and take Ch. Exam over IV Calculations by Tuesday, July 21st at 11:59pm. → Start studying for Final Exam → Webinar is replaced by lab days <p>*STC Vidalia Campus, Gillis Medical Building Wed., July 22nd from 12:30pm to 4:30pm.</p>	

Date/Week	Chapter/ Lesson	Content	Assignments and Tests Due Dates	Competency Area
Week 9 7/21-7/29		Final Exam due by 11:59pm Wednesday, July 29	<p>→ Study for Final Exam (Proctor Exam), use past worksheets and homework in Connect.</p> <p>→ Take the Final Exam by Wednesday, July 29 at 11:59pm</p>	

COMPETENCY AREAS: (WILL VARY FOR EACH COURSE/TAKEN FROM STATE STANDARDS)

1. Problem Solving Strategies
2. Basic Mathematics in Health Science
3. Medical Terminology Used in Health Science Math Applications
4. Conversion Applications in Health Science
5. Weight and Measurement in Health Science
6. Basic Principles of Medication Administration
7. Research in Health Sciences

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.