



INSTRUCTIONAL PACKAGE

MAT 155

Contemporary Mathematics

Effective Term

2018—2019 Academic Year

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PART I: COURSE INFORMATION

Effective Term: 2018—2019 Academic Year

COURSE PREFIX: MAT 155

COURSE TITLE: Contemporary Mathematics

CONTACT HOURS: 3.0

CREDIT HOURS: 3.0

RATIONALE FOR THE COURSE:

This course serves as both a review and introduction to basic problem solving techniques, with applications to consumer mathematics, probability and statistics, measurement conversion and geometric concepts.

COURSE DESCRIPTION:

This course includes techniques and applications of the following topics: properties of and operations with real numbers, elementary algebra, consumer mathematics, applied geometry, measurement, graph sketching and interpretations, and descriptive statistics.

PREREQUISITES/CO-REQUISITES:

Credit level [MAT 032](#) Minimum Grade of C* or COMPANION Arithmetic 043 or COMPASS Pre-Algebra 40 or ACCUPLACER Arithmetic 043 or ACT Math 16 or SAT Mathematics 400 or ASSET Math 37

***Online/Hybrid** courses require students to complete the DLI Online Student Orientation prior to completing an online course. The DLI Online Student Orientation can be found in WaveNet, under the My Student tab.

REQUIRED MATERIALS:

1. Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.
[BOOKSTORE](#).

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

2. ALEKS 360 Access Code (recommended 18-week access if MAT 155 is your degree's terminal mathematics course; recommended 52-week access if your degree also requires MAT 101 and/or MAT 102.)

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.
WaveNet and D2L email access.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit: [Online Netiquette](#).

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

- Distinguish between subsets of real numbers
- Add, subtract, multiply, and divide integers, fractions and decimals
- Express portions of a whole as fractions and decimals
- Solve application problems involving integers, fractions, decimals, percentages and ratios
- Convert among percents, fractions, and decimals
- Convert measurements within the English System, and within the Metric System
- Convert measurements between the English & Metric Systems
- Identify geometric concepts and figures
- Calculate perimeter, circumference, and area for two-dimensional geometric and composite figures
- Find volume and surface area of three-dimensional geometric figures
- Solve application problems involving geometry
- Graph and compare integers; find absolute values and opposites
- Use order of operations to simplify expressions
- Apply the order of operations in solving application problems
- Solve single and multi-step linear equations in one variable using the addition and multiplication properties of equality
- Use algebra to solve application problems
- Solve applications pertaining to consumer mathematics
- Determine various measures of center for a set of data
- Interpret pictorial representations of data

UNIT 1: Problem Solving, Number Systems and Linear Equations

1. The Nature of Mathematical Reasoning
2. Estimation and Interpreting Graphs
3. Problem-Solving Strategies

4. The Natural Numbers
5. The Integers
6. The Rational Numbers
7. The Irrational Numbers
8. The Real Numbers
9. Exponents, Algebraic Expressions and the Order of Operations
10. Simplifying Expressions and Combining Like Terms
11. Addition and Subtraction Properties Of Equality
12. Multiplication and Division Properties Of Equality
13. Solving Equations with Multiple Steps
14. Applications and Problem Solving

UNIT 2: Consumer Mathematics

1. Percents
2. Personal Budgeting
3. Simple Interest
4. Ratio, Proportion and Variation

UNIT 3: Measurement and Geometry

1. Measures of Length: Converting Units and the Metric System
2. Measures of Area, Volume and Capacity
3. Measures of Weight and Temperature
4. Points, Lines, Planes and Angles
5. Triangles
6. Polygons and Perimeter
7. Areas of Polygons and Circles
8. Volume and Surface Area

UNIT 4: Introduction to Probability and Statistics

1. Basic Concepts of Probability
2. Tree Diagrams
3. Gathering and Organizing Data
4. Picturing Data
5. Measures of Average

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Cumulative Final Exam	20%
Online Homework (ALEKS)	10%
Remaining graded material (e.g. exams, quizzes, etc.)*	70%
Course Total	100%

**Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.*

GRADING SYSTEM:

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F Below 60%

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. Additionally, students will be withdrawn if they miss more than two weeks of consecutive class meetings. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources

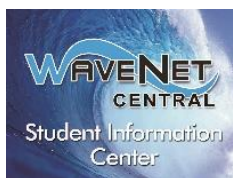


The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

1. **Academic coaches** for most subject areas, **Writing Center Support**, and **college success skills**.
2. **On-line student success and academic support resources**.

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

1. **Getting around HGTC**: General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: [Wavenet Central](#). Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Student Testing:

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Furthermore, tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNOW, our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

Disability Services

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student’s disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student’s responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College’s Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Associate Vice President for Student Affairs.	Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Associate Vice President for Human Resources.
Dr. Melissa Batten, AVP Student Affairs <i>Title IX Coordinator</i>	Jacquelyne Snyder, AVP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i>
Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu