

**Viewing Life Mathematically
Math 135 Online – 3 Credits**

Prerequisite/Co-Requisites: Placement Evaluation Score or Completion of MATH 097 with “C” or higher



Course Description

This course is a survey of a wide range of topics that gives students the opportunity to apply mathematics to the solution of everyday problems. Students become proficient in arithmetic, algebra, converting measurements using dimensional analysis, graphing and solving linear equations in two variables, working with formulas, collecting and interpreting data, measures of central tendency, and translating real world situations into math to make decisions. A scientific calculator is required for this course.



Course Goal

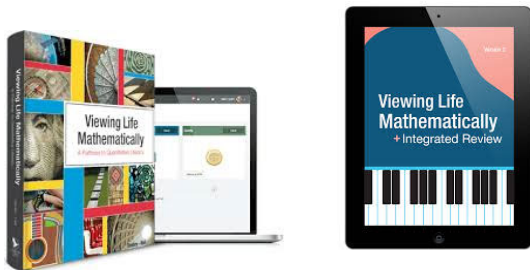
Students will learn a variety of mathematical tools that can be used to solve everyday problems.



Required Learning Tools

Hawkes Learning Access Code

Viewing Life Mathematically Software and EBook.
Hawkes Learning.(2015) ISBN: 978-1-941552-99-5.



Viewing Life Mathematically Software + EBook + Guided Notebook. Hawkes Learning. (2015)
ISBN: 978-1-64277-126-8

Hawkes Learning Software

You must have a full access code by Class 2 to continue in the course. All work must be completed in HAWKES LEARNING.

The Learn portion of Hawkes Learning is a multimedia presentation that includes the information to help

successfully answer each question in the assignments. Each lesson includes definitions, rules, properties, and examples, along with instructional videos. *This is the section that goes with the Guided Notebook.*

The Practice (or Pre-Certify) portion of Hawkes Learning provides unlimited opportunities to practice the types of problems given in the Certify portion. In Practice, learning aids are available to assist students through the Interactive Tutor. The Step-By-Step feature breaks problems down into smaller steps to assist in finding the solution, the Solution feature offers guided solutions to each problem, and Explain Error provides targeted feedback specific to individual mistakes.

The Certify portion of Hawkes Learning is the credit component of your homework. Students will answer problem sets using your knowledge and the foundation built in Learn and Practice portions of the program. Students will have the opportunity to try again with no penalty an unlimited amount of times if mastery is not demonstrated in the initial attempt. Pay close attention to any due dates for homework assignments as there is a penalty for completing this portion of homework late.



Calculator

Texas Instrument’s TI-30XIIS, which costs approximately \$10 -\$15. If you already have a TI-83 or TI-84 calculator, you can use it for this course.



Student Learning Outcomes and Assessment Methods

| <i>Learning Outcomes</i> | <i>Assessment Methods</i> |
|--|--|
| 1) Apply formulas containing percentages, fractions, and decimals to calculate solutions to consumer mathematics. | Pre-Certification Certification Quiz Exam |
| 2) Demonstrate the use of perimeter, area, volume, and surface area to compare rates, pricing comparisons, and project planning. | Pre-Certification Certification Quiz Exam |
| 3) Illustrate, label, and solve conversions within | Pre-Certification Certification |

| | |
|--|--|
| the metric and/or household measurement systems using dimensional analysis. | Quiz Exam |
| 4) Collect, display, describe, and analyze data. | Pre-Certification Certification Quiz Exam |
| 5) Solve, construct, and interpret graphs of linear equations and exponential growth in two variables. | Pre-Certification Certification Quiz Exam |

- acting ethically and with integrity,
- demonstrating foundational knowledge pertaining to the learned coursework,
- advancing the level and depth of learning.

Homework + Integrated Review:

Homework will be done online using the Hawkes Learning software. Complete the homework assignments for the sections that are discussed each week in class before the *next* class meeting. *You must complete the homework online on Hawkes Learning and earn at least an 80% on the Certify portion of each assignment in order to receive credit.* If you do not earn above an 80% on the Certify portion of any assignment, you will be directed to practice problems that must be completed correctly before you can re – attempt to Certify. Any grade of 80% or higher in Certify will receive full credit.

Integrated Review Assignments

Each topic we learn about has corresponding integrated review that reminds students about fundamental math topics for the upcoming content. Students without a strong math background are ***strongly encouraged*** to purchase and use the corresponding Guided Notebook to help them with the integrated review assignments.

Grading Policy

Your performance in this course is assessed using multiple, varied methods in the areas listed below and based on the expectations as described in this syllabus. If you do not understand these expectations, it is your responsibility to ask questions.

| | |
|-------------------------------|-------------|
| Exam 1 | 10% |
| Exam 2 | 10% |
| Exam 3 | 10% |
| Quizzes | 15% |
| Homework Assignments | 20% |
| Integrated Review Assignments | 10% |
| Cumulative Final Exam | 25% |
| Total: | 100% |



Exams and Cumulative Final Exam:

The purpose of exams is to confirm mastery of a unit or body of work spanning multiple topics or concepts. Each unit exam and the cumulative final exam will assess for mastery of the integration of concepts and real-world applications. No exams can be retaken and there is no extra credit. No exam grade is dropped. Students must be prepared and make their best effort on each exam. *Students are encouraged to take exams early in the week that they are assigned because if the exam is not complete by 11:59 pm on its due date, it will not be accepted. No extensions will be given. Exams are not to be open notes or book. That is cheating and academic fraud. The math from this course will need to be performed as students move throughout programs at Goodwin. Cheating will only hurt students and potentially waste a lot of your money.*

Late Penalty

The late penalty only applies to homework assignments and integrated review assignments. There will be a graduated late penalty when homework and integrated review is completed past the due date. *All uncompleted homework assignments will become a zero on the last day of class.*

| | |
|--------------------------|------------------|
| Up to 1 Day Late | 2% late penalty |
| Up to 2 Days Late | 4% late penalty |
| Up to 3 Days Late | 6% late penalty |
| Up to 4 Days Late | 8% late penalty |
| Up to 5 Days Late | 10% late penalty |
| Up to 6 Days Late | 20% late penalty |
| Greater than 6 Days Late | 50% late penalty |



Quizzes:

The purpose of the quizzes is to confirm mastery on what students have learned and to call attention to topics that need more focus. Students will complete quizzes that are based on weekly assignments. The quizzes are to be done with formulas sheet given if applicable. *Each quiz must be completed on or before the due date at 11:59 pm.*



Coursework Expectations

Course expectations focus on demonstrating mastery and application of topics. In this course, you will be assessed based on the following criteria:

Miscellaneous Tips

To earn full credit, be sure to be actively engaged in using Hawkes Software. Be sure to have or do the following.

- a) Have a full access code by week 2 of the course,
- b) log in for 30-45 minutes daily at minimum,
- c) complete the Learn and Pre-Certify portions of each assignment
- d) demonstrate mastery of topics in the Certify portion of each assignment
- e) complete all assignments (homework, quizzes, and exams) on time, and
- f) use the online "Send To Instructor" button for questions in the Practice (Pre-Certify).

Class Policies



Hawkes Learning

Instructions for setting up your Hawkes Learning account are in Blackboard. *You must use your Goodwin email account to setup Hawkes Learning. Please follow the instructions. If you have any questions or need assistance with setting up your account, please contact me. To establish attendance, you must attend an online session or complete (certify) in one assignment on or before Sunday at 11:59 pm.* Log in multiple times during the week to complete the assignments due for the next week. Due dates are in Hawkes and this syllabus and will also be discussed during class. At minimum, you should spend 30-45 minutes per day in Hawkes Learning. If you have an emergency that can be documented and need to miss an assignment, please contact me immediately. *Hawkes is like Blackboard therefore it contains an accurate reflection of your current grade at that point in time.*



Blackboard

Blackboard contains class materials, such as the login to Hawkes Learning, Hawkes TV, formula sheets, and additional course materials. Be sure to *check Blackboard often* to stay up to date on announcements, new course materials, and other important information. *All assignments are completed in Hawkes Learning. Once instructor has reviewed assignments, they will import grades into Blackboard.*



Late Assignments

Deadlines are an integral part of all professional careers. You must manage your time and complete all coursework thoroughly and on time (e.g., pre-certification, certification, quizzes, and exams). ***Per department policy for online course, any exam or quiz not submitted in Hawkes Learning on or before the due***

date will result in a zero for that exam or quiz. Late exams, quizzes, or make-up exams are not permitted except when there are documented extenuating circumstances (i.e., medical and family emergencies), and the instructor has been notified 24 hours before or after the deadline. These are circumstances in which the instructor or Director of the Math department will extend due dates.



Course Decorum

We will create a positive learning environment in this course. There is an expectation of respect and professionalism. The professional conduct policy includes, but is not limited to:

- 1) abiding by Goodwin's academic integrity policy,
- 2) actively working on assignments in Hawkes Learning,
- 3) planning outside activities to avoid conflicts with the due dates outlined in the syllabus, and
- 4) demonstrating respect for your instructor through appropriate communications (see below).



Communication and E-mail

Students are expected to communicate in a professional manner (i.e., verbal, written, and electronic). Remember to use your Goodwin email account for all course communications. I will send course updates and announcements through Blackboard so please ***check your Goodwin e-mail account regularly.*** Please do not text me and only call in an emergency. I check email regularly and will get back to you as soon as possible.

Goodwin University Policies and Services

This course adheres to all policies outlined in the Goodwin University catalog.

General academic policies of Goodwin University may be found on the University web site at and in the University catalog at

<http://www.goodwin.edu/academics/catalogs.asp>.

Student services information may be found on the Goodwin University website at <https://www.goodwin.edu/student-affairs/> and <http://www.goodwin.edu/library/>.

Course Outline/Class Schedule M125 ONLINE 7.5 WEEKS

| | Weekly Topics | Assignments to be completed <i>before</i> Sunday/Wednesday at 11:59 PM in HAWKES LEARNING |
|--|---|--|
| 1 Due March 7, 2021 | <p><u>Integrated Review:</u> Introduction to Fractions & Mixed Numbers, Introduction to Decimal Numbers, U. S. Measurements, and U. S. and Metric Equivalents</p> <p><u>New Topics:</u> Rates and Unit Rates, Ratios</p> | <p><u>Integrated Review Homework + Guided Notebook:</u> 4.R.1, 4.R.2, 12.R.4, and 12. R.6</p> <p><u>Certification (Mastery) – Homework:</u> 4.1 – 4.2</p> <p><u>Quiz:</u> 4.1 – 4.2</p> <p><u>Pre-test</u></p> |
| 1 Due | <p><u>Integrated Review:</u> Decimals & Percent, Fractions & Percent, and Solving Percent Problems Using Proportions</p> <p><u>Homework:</u> Proportions & Percentages Using Percentages</p> | <p><u>Integrated Review Homework + Guided Notebook:</u> 4.R.3 – 4.R.5</p> <p><u>Certification (Mastery) – Homework:</u> 4.3 – 4.4</p> <p><u>Quiz:</u> 4.3 – 4.4</p> |
| 2 Due | <p><u>Integrated Review:</u> The Cartesian Coordinate System, Exponents, Order of Operations, Translating English Phrases and Algebraic Expressions, and Solving Linear Equations</p> <p><u>Homework:</u> The Language of Linear Growth</p> | <p><u>Integrated Review Homework + Guided Notebook:</u> 5.R.1, 1.R.3, 1.R.5, and 1.R.6</p> <p><u>Certification (Mastery) – Homework:</u> 5.1</p> <p><u>Quiz:</u> 5.1</p> |
| 2 Due | <p><u>Integrated Review:</u> Graphing Linear Equations in Two Variables</p> <p><u>Homework:</u> Linear Growth</p> | <p><u>Integrated Review Homework + Guided Notebook:</u> 5.R.2</p> <p><u>Certification (Mastery) – Homework:</u> 5.2</p> <p><u>Quiz:</u> 5.2</p> |
| 3 Due | <p><u>Integrated Review:</u> Rules for Exponents</p> <p><u>Homework:</u> Exponential Growth</p> | <p><u>Integrated Review Homework + Guided Notebook:</u> 5.R.3</p> <p><u>Certification (Mastery) – Homework:</u> 5.4</p> <p><u>Quiz:</u> 5.4</p> |
| 3 Due | <p>Rates & Unit Rates; Ratios; Proportions & Percentages; Using Percentages; The Language of Linear Growth; Linear Growth; Exponential Growth</p> | <p>EXAM 1 4.1 – 4.4, 5.1 – 5.2, and 5.4</p> |
| 4 | <p><u>Integrated Review:</u> Angles, Triangles, Square Roots, Pythagorean Theorem, and Simplifying Algebraic Expressions</p> | <p><u>Integrated Review Homework + Guided Notebook:</u></p> |

Weekly Topics

**Assignments
to be completed *before*
Sunday/Wednesday at 11:59
PM in HAWKES LEARNING**

| | | |
|------------------|--|---|
| Due | <u>Homework:</u> Angles, Circles & Polygons | 11.R.3, and 6.R.2 – 6.R.3 <u>Certification (Mastery) – Homework:</u> 6.1 – 6.2 <u>Quiz:</u> 6.1 – 6.2 |
| 4 Due | <u>Integrated Review:</u> Evaluating Algebraic Expressions, Working with Formulas, and The Metric System: Length & Area <u>Homework:</u> Perimeter, Area, Volume & Surface Area | <u>Integrated Review Homework + Guided Notebook:</u> 6.R.4, 6.R.5, and 12.R.5 <u>Certification (Mastery) – Homework:</u> 6.2 – 6.3 <u>Quiz:</u> 6.2 – 6.3 |
| 5 Due | Angles; Circles & Polygons; Perimeter & Area; and Volume and Surface Area | EXAM 2 6.1 – 6.3 |
| 5 Due | <u>Integrated Review:</u> Decimals and Percent's <u>Homework:</u> Collecting Data | <u>Integrated Review Homework + Guided Notebook:</u> 8.R.1 <u>Certification (Mastery) – Homework:</u> 8.1 <u>Quiz:</u> 8.1 |
| 6 Due | <u>Integrated Review:</u> Working with Formulas, The Cartesian Coordinate System, and Graphing Linear Equations in Two Variables <u>Homework:</u> Displaying Data | <u>Integrated Review Homework + Guided Notebook:</u> 8.R.3, 8.R.4, 8.R.5 <u>Certification (Mastery) – Homework:</u> 8.2 <u>Quiz:</u> 8.2 |
| 6 Due | <u>Integrated Review:</u> Slope-Intercept Form and Evaluating Radicals <u>Homework:</u> Describing and Analyzing Data | <u>Integrated Review Homework + Guided Notebook:</u> 8.R.6 and 8.R.7 <u>Certification (Mastery) – Homework:</u> 8.3 <u>Quiz:</u> 8.3 |
| 7 Due | Collecting, Displaying, Describing and Analyzing Data | EXAM 3 8.1 – 8.3 |

Weekly Topics

**Assignments
to be completed *before*
Sunday/Wednesday at 11:59
PM in HAWKES LEARNING**

| | | |
|------------------------|------------|------------------------------|
| 7 Due | All Topics | Final Exam Review |
| 8 Due | All Topics | CUMULATIVE FINAL EXAM |

**This syllabus is subject to change at the discretion of the instructor*

