



## Course Syllabus

ATLANTA METROPOLITAN STATE COLLEGE

School of Arts and Sciences

**Math Modeling - MATH 1101 CRN: 80210 (Section 102)**

***Main Campus Course***

**Fall 2025**

**This is a Core IMPACTS course that is part of the Mathematics and Quantitative Skills area.**

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.



<b>Instructor Information</b>	Name: Professor Pitso Senatle
Office location:	Building #100, Room 157
Office telephone:	678-314-4789
Email Address	<a href="mailto:psenatle@atlm.edu">psenatle@atlm.edu</a>
Office Hours:	
<ul style="list-style-type: none"> <li>In Person:</li> </ul>	<b>Monday &amp; Wednesday 12:30 – 1:30PM, Tuesday &amp; Thursday 10:00 – 12:30PM, Friday 12:00 – 1:30PM and Saturday 12:00 – 1:00PM</b>
<ul style="list-style-type: none"> <li>Online</li> </ul>	NA
<ul style="list-style-type: none"> <li>By Appointment</li> </ul>	Office hour disclaimer: If you are not able to meet with the instructor during office hours, you may schedule an appointment based on instructor's availability.
<b>Course Information</b>	
Pre-requisites	None. The corequisite for MATH 1101 is MATH 0998, unless exempt from placement into corequisite with appropriate Accuplacer, SAT, or ACT score.
Credit Hours	<b>3</b>
Catalog Description	This course is an introduction to mathematical modeling using graphical, numerical, symbolic, and verbal techniques to describe and explore real-world data and phenomena. Emphasis is on the use of elementary functions to investigate and analyze applied problems and questions, supported by the use of appropriate technology and an effective communication of quantitative concepts and results. (This course is an alternative in Writing & Mathematics of the Core Curriculum and is not intended to supply sufficient algebraic background for students who intend to take Pre-Calculus or the calculus sequences for mathematics and science majors)
Course Start and End Date	<b>August 18, 2025 – December 4, 2025</b>
Course Brightspace Access	Access the course Brightspace by visiting <a href="http://www.atlm.edu">www.atlm.edu</a> , then click Brightspace (D2L) tab located in the horizontal menu near the top of the page. Click on the red ATLM Login tab, use your AMSC student credentials to access your Brightspace homepage, and click on this course.
Course Textbook	<b><u>Open Educational Textbook: Algebra and Trigonometry by Jay Abramson</u></b> Access: URL: <a href="https://openstax.org/details/books/algebra-and-trigonometry">https://openstax.org/details/books/algebra-and-trigonometry</a>
Required Resources	<ul style="list-style-type: none"> <li><b>Scientific Calculator and Knewton Alta Course Management Access Code.</b> All of the homework, quizzes, and tests will be facilitated through Knewton Alta, and there will be a Proctored Final Exam for MATH 1101.</li> <li>This course is a Day 1 Ready Inclusive Access course. This means that <b><u>the Knewton Alta access code has already been paid with your tuition</u></b>. Click on the Getting Started Module in Brightspace (D2L), then click on Orientation Activities, then click Getting Started with Knewton Alta to access the registration instructions. Then click on Textbook (Day One Access) tab (located in the horizontal menu near the top of the course page in Brightspace) to view the access code.</li> </ul>



	<ul style="list-style-type: none"> <li>• If you choose to option out of the Day 1 Ready Access Program for this course, please click on the Textbook (Day One Access) tab (located in the horizontal menu near the top of the course page in Brightspace), then click on the Opt Out option. This option will end after the add and drop period for the current semester.</li> </ul>
Recommended Resources	Blank paper and pencils
<b>Core IMPACTS</b>	<p><b>MATH 1101 – Mathematical Modeling</b>  <b>This is a Core IMPACTS course that is part of the <u>Mathematics</u> area.</b></p> <p>Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students’ broad academic and career goals.</p> <p>This course should direct students toward the following broad <b><u>Orienting Question</u></b>:</p> <ul style="list-style-type: none"> <li>• How do I measure the world?</li> </ul> <p>Completion of this course should enable students to meet the following <b><u>Learning Outcome</u></b>:</p> <ul style="list-style-type: none"> <li>• Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.</li> </ul> <p>Course content, activities and exercises in this course should help students develop the following <b><u>Career-Ready Competencies</u></b>:</p> <ul style="list-style-type: none"> <li>• Information Literacy</li> <li>• Inquiry Analysis</li> <li>• Problem-Solving</li> </ul>
Program Learning objectives	Non-Applicable
Course Learning Objectives	Upon successful completion of MATH 1101 students will be able to: Use mathematical operations and concepts to solve problems related to practical situations.
Chapters Covered	<ul style="list-style-type: none"> <li>• <b>Unit 1:</b> Ratio, Proportions, Operations of Polynomials, Solution of Linear Equations, Inequalities and it’s Applications</li> <li>• <b>Unit 2:</b> Factoring Polynomials, Quadratic Equations, System of Equations, Distance and midpoint between two points, Slope, Equation of the line, Graphing Equations, Applications</li> </ul>







<b>Attendance Verification (No Show)/Reinstatement</b>	<p>Atlanta Metropolitan State College has a "No-Show" Reporting (Attendance Verification) policy. This policy is to comply with Federal Financial Aid regulations. Financial Aid recipients at Atlanta Metropolitan State College may become ineligible for funds by not attending class session (per enrolled course). Students who do not complete Mandatory Attendance Assignments and attend class sessions are NOT entitled to keep their financial aid award. The Registrar's Office will notify the students and faculty when the Attendance Verification Period has opened. The established "No-Show" Reporting (Attendance Verification) procedure will enable Atlanta Metropolitan State College to adjust financial aid awards before funds are issued to students (thereby eliminating liability for both the College and the student). A student reported as non-attending a course must seek the approval of the instructor in order to be reinstated. Once approved, the student will complete the Reinstatement form and submit it. The Office of Registrar will notify students when course reinstatement process has been completed during Reinstatement Period.</p> <p>The student can demonstrate compelling reason (s) that have prevented attendance and the instructor believes that there is a strong probability that the student can catch up in the class OR The instructor made an error, and the student was in attendance prior to being dropped.</p>
<b>Artificial Intelligence (AI) Resources</b>	<p>Students must indicate an AI resource in case of which it is applied or used for the assignments.</p>
<b>Computer Hardware &amp; Software Requirements:</b>	<p>One of the challenges many encounter with enrolling in and completing an online course is the accessibility to the required and recommended software and hardware. Different institutions, and even different courses within the same institution, have varying technology requirements. Check your hardware and software systems to determine its compatibility with the online course you have selected.</p>
<b>Minimum Hardware Recommendations to take courses:</b>	<p>D2L System Requirement Internet Connection:</p> <ul style="list-style-type: none"> <li>· Ethernet Network Capability required</li> <li>· Wireless Network Capability required</li> </ul> <p>Operating System Requirements</p> <ul style="list-style-type: none"> <li>• PC: <ul style="list-style-type: none"> <li>• Compatible Operating System:</li> <li>• Web Browser: Firefox, Chrome</li> </ul> </li> <li>• Mac: <ul style="list-style-type: none"> <li>• Compatible Operating System:</li> <li>• Web Browser: Firefox, Chrome, Safari</li> </ul> </li> </ul> <p>Hardware requirements: Minimum Technical Specifications for Hardware:</p> <ul style="list-style-type: none"> <li>• A processor of 2GHz or faster</li> <li>• 4GB RAM or greater</li> </ul>



	<ul style="list-style-type: none"> <li>• 500 GB of Hard Drive space</li> <li>• Monitor and video card with a minimum resolution of 1024x768</li> <li>• Keyboard and mouse</li> </ul> <p>Minimum Technical Specifications for Computer Peripherals:</p> <ul style="list-style-type: none"> <li>• Speakers</li> <li>• Headphones</li> <li>• Microphone</li> <li>• Webcam</li> </ul> <p><b>Software requirements:</b>  Browser Requirements/Supported Browsers  Compatible Browsers:</p> <ul style="list-style-type: none"> <li>• <a href="https://support.apple.com/downloads/safari">Apple Safari</a> - <a href="https://support.apple.com/downloads/safari">https://support.apple.com/downloads/safari</a> (Mac)</li> <li>• <a href="https://www.google.com/chrome/">Google Chrome</a> - <a href="https://www.google.com/chrome/">https://www.google.com/chrome/</a> (Mac or PC)</li> <li>• <a href="https://www.mozilla.org/en-US/firefox/new/">Mozilla Firefox</a> - <a href="https://www.mozilla.org/en-US/firefox/new/">https://www.mozilla.org/en-US/firefox/new/</a> (Mac or PC)</li> </ul> <p>Application Software</p> <ul style="list-style-type: none"> <li>• Microsoft Office 2016 (Word, Excel, PowerPoint) (Mac or PC)</li> <li>• <a href="https://get.adobe.com/reader/">Adobe Reader</a> - <a href="https://get.adobe.com/reader/">https://get.adobe.com/reader/</a></li> </ul> <p>Plug-ins</p> <ul style="list-style-type: none"> <li>• <a href="https://www.java.com/en/download/">Java</a> - <a href="https://www.java.com/en/download/">https://www.java.com/en/download/</a></li> <li>• <a href="https://get.adobe.com/flashplayer/">Adobe Flash Player</a> - <a href="https://get.adobe.com/flashplayer/">https://get.adobe.com/flashplayer/</a></li> <li>• <a href="https://www.microsoft.com/en-us/download/details.aspx?id=20426">Windows Media Player</a> - <a href="https://www.microsoft.com/en-us/download/details.aspx?id=20426">https://www.microsoft.com/en-us/download/details.aspx?id=20426</a></li> <li>• <a href="https://support.apple.com/downloads/%2523quicktime">Apple QuickTime</a> - <a href="https://support.apple.com/downloads/%2523quicktime">https://support.apple.com/downloads/%2523quicktime</a></li> <li>• <a href="https://www.microsoft.com/getsilverlight/Get-Started/Install/Default">Microsoft Silverlight</a> - <a href="https://www.microsoft.com/getsilverlight/Get-Started/Install/Default">https://www.microsoft.com/getsilverlight/Get-Started/Install/Default</a></li> </ul> <p><b><u>Accessibility:</u></b> Wi-Fi is also available for use in the campus parking lots.</p>
<b>Tutoring Services</b>	<p>Students improve their self-confidence and increase their chances of excelling in their courses when they utilize their college/university academic support services. The following tutoring services are available to AMSC students:</p> <ul style="list-style-type: none"> <li>❖ The AMSC Writing Center is open year-round to support students, staff, and faculty at AMSC. It offers virtual and in-person tutoring for various writing projects, assists at any stage of the writing process, and increases improvement in structure, use of sources, style, grammar, and more. The Writing Center is located in Building 100, Room 211. Students can walk in during hours of operation or schedule an appointment at <a href="https://calendly.com/amscwritingcenter/30min">https://calendly.com/amscwritingcenter/30min</a></li> <li>❖ <a href="https://www.tutor.com">Tutor.com</a> is a virtual space for students to access writing tutors outside of AMSC faculty. Access tutor.com in Brightspace by logging into your course. Next, click the 'Free Tutoring' tab and choose Tutor.com from the dropdown options. Students are granted five (5) hours per semester, and registration is not required. Contact the Center for Student Success and Advising at (404) 756-5690 for assistance.</li> <li>❖ TutorOcean is a tutorial for students enrolled in STEM courses such as Biology, Chemistry, Mathematics, and Computer</li> </ul>



	Science. Access TutorOcean and sign up at <a href="https://atlm.tutorocean.com">https://atlm.tutorocean.com</a> .
<b>Americans with Disabilities Act (ADA) Statement</b>	<p>Atlanta Metropolitan College is committed to providing support for all students and making their college experience an enriching opportunity. In compliance with Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, The Department/Office of Counseling and Accessibility Services, located in the Student Services &amp; Success Center, building 650-Suite 252, oversees the coordination of services for students with documented disabilities. The Coordinator of Disability Services collaborates with faculty and staff to offer provisions for reasonable accommodation to students who meet the requirements.</p> <p>It is the policy and practice of AMSC to make all Web information accessible to students with disabilities. If you, as a student with a disability, have difficulty accessing any part of the course materials for this class, please notify the instructor immediately.</p> <p>Accommodation cannot be provided until a reasonable accommodation plan is in place. To the greatest extent possible, all college representatives shall observe confidentiality.</p>
<b>Office of Counseling and Accessibility Services</b>	<p>The Office of Counseling and Accessibility Services operates under the Americans with Disabilities Act (ADA) laws in order to assist in leveling the playing field for students who have disabilities with those who do not.</p> <p>The amended ADA, otherwise known as ADAAAA defines “disability” as a physical or mental impairment that substantially limits one or more major life activities. If you feel that you have a disability or impairment that may limit your academic functioning, please contact Dr. Dorothy Williams, the Director of Counseling and Accessibility Services at 404-756-4016 or at</p> <p><a href="https://www.atlm.edu/students/counseling-and-disability-services.aspx">https://www.atlm.edu/students/counseling-and-disability-services.aspx</a>.</p> <p>The Coordinator of Counseling and Accessibility Services reviews all accommodation requests. In order to receive accommodation, the student’s illness or disability must be verified in writing by a physician, psychiatrist, or some other health care provider or specialist. Students choosing to access disability support services should contact the Coordinator as soon as possible after acceptance to AMSC. Please be aware that late notifications may result in complications for establishing accommodation in a timely fashion.</p>
<b>Withdrawal</b>	<b>Withdrawal from a course is solely the responsibility of the student.</b> Instructors will not initiate student withdrawals. A student who wishes to withdraw from a course <b>MUST</b> submit a completed Withdrawal Form (Schedule Reductions Form) to



	<p>the Registrar's Office before mid-term in order to receive a grade of <b>“W”</b> for the course.</p> <p>A student who withdraws after the Midterm date receives a “WF” unless the Vice President for Academic Affairs determines that it is a hardship case, then a “W” will be recorded. The possibility that a student may fail the course will not be considered a hardship</p>
<b>Incomplete Grade Policy</b>	An incomplete may be awarded at the instructor's discretion for non-academic reasons which prevent the student from completing the course requirements. The student must be passing the course at the time that the Incomplete is awarded and must sign an "Awarding of Incomplete" agreement. Unless otherwise stated, the incomplete should be removed by the end of the following semester; otherwise, the instructor will change the grade to an “F” grade.
<b>Time Commitment</b>	To successfully complete this course it requires discipline, devoted time and commitment. A student must arrange his / her schedule to allow for the required time for this course. Expect to spend a minimum of seven (7) to ten (10) hours per week to thoroughly read each chapter and complete the required chapter assignments. Additional time most likely will be required to complete quizzes and exams.
<b>Student Expectations</b>	<p>Students are expected to be fully invested and engaged in their learning. The following guidelines are included to facilitate your course success.</p> <ul style="list-style-type: none"> <li>• Participate in this course by following the guidelines of this syllabus and any additional information the instructor provides by email, telephone, discussion forums, etc.</li> <li>• Please speak with your instructor <b><u>in advance</u></b> if you have extenuating circumstances that prevent you from completing your assignments by the designated due dates. If a medical emergency occurs, you will need to provide a written medical / doctor's notice for the period in which you are unable to participate in class or complete any of the assignments (discussion, case studies, quizzes, exams, etc.). Without a medical / doctor's notice, all assignments missed will be scored as zero.</li> <li>• Sign-in to Brightspace D2L and / or Courseware to complete assignments regularly.</li> <li>• Read, study, and complete all assignments by the due dates.</li> <li>• Monitor Brightspace D2L course calendar.</li> <li>• Have access to a computer and the Internet. Make certain computer meets the technical requirements for computer course.</li> <li>• Be courteous, polite and respectful to faculty, staff and fellow students.</li> </ul> <p>For online courses, the instructor will use Brightspace D2L email for all course related correspondence. Check <b><u>Brightspace D2L email</u></b> as well as <b><u>Ginger email daily</u></b> to stay abreast of what is going on in class.</p>
<b>Online Discussion Protocol</b>	<ul style="list-style-type: none"> <li>• The purpose of the discussion forum is to have interactive online discussions with our class community about specific topics, assignments, or readings.</li> <li>• Be constructive and positive. You can challenge ideas and course content yet avoid becoming negative online. When you disagree respectfully and politely, you stimulate and encourage great discussion.</li> <li>• You are expected to conduct yourself in a mature, courteous, and mutually respectful manner.</li> </ul>



	<ul style="list-style-type: none"> <li>• Always sign your name.</li> <li>• Postings should be well written with proper punctuation, spelling and grammar. Avoid the use of all caps or multiple punctuation elements (!!!???). Postings should be a minimum of 3 – 4 sentences.</li> <li>• Check postings for responses from others and respond in kind.</li> <li>• Postings should be evenly distributed throughout the week. Avoid making only weekend postings.</li> <li>• Encourage further discussion by building on current threads.</li> </ul> <p>The instructor may not respond to every post but will be monitoring each discussion. A response may be made to contribute to a discussion, clarify a situation or redirect the conversation</p>
<b>Degree Relevance and Enrollment Status</b>	Students are ultimately responsible for ensuring that the course(s) in which they enroll are included in the approved degree plan and program map for their program of study. Students <b>must</b> periodically check their enrollment status in this course during the semester. The student is responsible for determining changes, if any in enrollment status and taking necessary steps (e.g. pursuing re-instatement in this course) following those outlined in the AMSC catalog.
<b>Abandoning a Course</b>	Abandoning a course should be avoided at all cost. Abandoning a course instead of following official drop procedures will result in a grade of —F at the end of the course. It is the student’s responsibility to initiate and complete the withdrawal process.
<b>Academic Honesty</b>	<p>Only the epitome of professionalism is expected of each student. Cheating or the abetment of cheating is not tolerated.</p> <p>The Academics Standards section of the Atlanta Metropolitan State College Catalog (page 49), the Penalties for Academic Misconduct states:</p> <ul style="list-style-type: none"> <li>• In cases where a student is found guilty of cheating or exhibiting academic misconduct involving an instructor-generated assignment or examination, the instructor may impose a penalty. Types of penalties may include, but are not limited to, the instructor assigning a grade of “F” for the assignment, the instructor not accepting the work, the student being assigned additional work, or the student receiving a grade reduction for the assignment. The maximum penalty the instructor may impose is a grade of “F” for the course.</li> <li>• In cases where a student is guilty of cheating or exhibiting academic misconduct during an institutional or System examination or assignment, the results of the examination will be voided. Additionally, depending on the severity of the misconduct, the student may receive additional penalties from the Provost/Vice President for Student Success or designee, not to exceed suspension for one semester from Atlanta Metropolitan State College.</li> </ul>
<b>Class Cancellation</b>	Procedure regarding long-term emergency closure of the college (attendance policy): In the event of an emergency that forces the college to close for an extended period, students <b>MUST</b> contact the instructor of this class within 48 hours using the contact information (e.g., email address in BrightSpace/D2L) on the syllabus to obtain directions for continuing the course. The instructor will provide directions for the transmission and submission of course assignments and course assessments, including due dates.



	<p>The student is responsible for submitting valid, accurate contact information, including an active AMSC email address to the instructor by the end of the first week of the course. Students can obtain an Atlanta Metropolitan State College Student email address in the Academic Support Center on the third floor of the Library Building.</p> <p>If the instructor for the course cannot be reached within the specified period (within 48 hours), the Dean of the School responsible for the course can be reached at the email address posted on the college’s website</p>		
Class Schedule	Please view schedule listed on the course Brightspace website.		
Grading Scale	100% - 90% of maximum points awarded = <b>A</b> 89% - 80% of maximum points awarded = <b>B</b> 79% - 70% of maximum points awarded = <b>C</b> 69% - 60% of maximum points awarded = <b>D</b> Below 60% of maximum points awarded = <b>F</b>		
Grade Distribution	Grade Evaluation		
	Category	Weight/Points	Assignment
	Lecture Exams	50%	<ul style="list-style-type: none"><li>The four (4) Lecture Exams will be announced in the course Brightspace calendar and/or within the Knewton Alta course</li></ul>
	Knewton Alta Homework	25%	<ul style="list-style-type: none"><li>To be announced in the course Brightspace calendar and/or within the Knewton Alta course</li></ul>
	Knewton Alta/Group Quizzes	10%	<ul style="list-style-type: none"><li>To be announced in the course Brightspace calendar and/or within the Knewton Alta course</li></ul>
	Final Exam (Comprehensive; Proctored)	15%	<ul style="list-style-type: none"><li>12/11/2025 (Proctoring instructions will be listed on the course Brightspace webpage.)</li></ul>
Grade Appeals and Student Complaint Policy and Process	<p>Please follow the Grade Appeals Process outlined in the AMSC Student Catalog, page 53.</p> <p>You can also refer to the Grade Appeal brochure at: <a href="https://www.atlm.edu/downloads/advisement/CAAS%20Grade%20Appeal%20Brochure.pdf">https://www.atlm.edu/downloads/advisement/CAAS%20Grade%20Appeal%20Brochure.pdf</a></p> <p>For student complaint policy and process, refer to AMSC Student Catalog.</p>		



Frequently Asked Questions and Helpful Links	
<b>I need:</b>	<b>LINK</b>
What is Brightspace (D2L) and how can I access it?	<p>Brightspace(D2L) is the virtual space where students access their online courses and some Face2Face class resources, quizzes, assignments, etc.</p> <p>You can access Brightspace (D2L) from <a href="https://atlm.view.usg.edu/">https://atlm.view.usg.edu/</a></p> <p>You can also access Brightspace (D2L) from the <a href="#">College's webpage</a> and click on Brightspace (D2L) on top.</p>
Who is my Advisor? Where can I receive Advisement and Tutoring assistance?	<a href="#">Center for Academic Advising and Success (CAAS)</a>
What do I do if I face technical issues while taking a quiz or turning in an assignment in Brightspace	<p><a href="https://d2lhelp.view.usg.edu/">https://d2lhelp.view.usg.edu/</a> You can reach the Brightspace Helpdesk 24/7/365 days at 18887720325</p> <p>If you are unable to submit a quiz or assignment or face a technical glitch, please contact the University System of Georgia's Brightspace Helpdesk at 18887720325. The Helpdesk is open 24/7 all 365 days. If your issue cannot be resolved right away, the Helpdesk will issue a ticket to your Atlm Ginger email address. That ticket needs to be forwarded to your instructor to prove that you faced a technical issue that forced you to miss a deadline.</p>
I can't download Respondus Lockdown Browser. What do I do?	<p>If you are unable to download Respondus to your computer, please email the Office of Testing at <a href="mailto:Testing@atlm.edu">Testing@atlm.edu</a> at least 24 hours in advance requesting a testing appointment at the Testing Lab.</p> <p>For Respondus issues, please contact <a href="https://web.respondus.com/contact/">https://web.respondus.com/contact/</a>.</p>
Where do I go for ADA Accommodations	<a href="https://www.atlm.edu/students/counseling-and-disability-services.aspx">https://www.atlm.edu/students/counseling-and-disability-services.aspx</a>
I have a complaint. Where do I go?	Fill out and submit the <a href="#">Student Complaint form</a>
I have an issue with my grade. How may I appeal my grade.	Read the brochure and follow the instructions to <a href="#">appeal your grade</a> .



How do I Withdraw from a Course	Follow the Course Withdrawal Process <a href="#">here</a>
I have a Hardship. How do I do a Hardship Withdrawal?	Follow the Hardship Withdrawal Process <a href="#">here</a>
To Know the Campus Carry/HB 280 Policy	<a href="#">House Bill 280 Guidelines</a>
<b>Disclaimer</b>	<i>Information contained in this syllabus and schedule was, to the best knowledge of the instructor, considered correct and complete when distributed for use at the beginning of the semester. This syllabus should be considered only a guide for instructor and students, not a formal contract between Atlanta Metropolitan State College and any student. The instructor reserves the right, acting within the policies and procedures of AMSC, to make changes in course content or instructional techniques.</i>