

### Atlanta Metropolitan State College School of Arts & Sciences

1630 Metropolitan Pkwy SW Atlanta, Georgia 30310 404-756-4033

# **Course syllabus**

# FORS 1201 201 Analytical Meth Forensic Sci I CRN:80200

**Fall 2025** 

## **Online Course**

This is a Core IMPACTS course that is part of the Technology, Mathematics & Sciences (STEM)

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 will support students' broad academic and career goals.

Instructor Information	Name: Professor Janet Jones		
Office location:	N/A		
Office telephone:	Microsoft Teams to call <a href="mailto:JWJones@atlm.edu">JWJones@atlm.edu</a> or send a chat message		
Email Address	JWJones@atlm.edu (Please email me within D2L which enables a faster response)		
Office Hours:	Monday and Tuesday at 5-7 pm or by appointment;		
	Teams link (link information in Announcements within D2L)		
• In Person:	N/A		
in reison.			
Online	CENGAGE OWLv2		
By Appointment	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.		
Course Information			
Pre-requisites	CHEM 1212K		
Credit Hours	4		
Course Textbook	<ul> <li>Textbook is a virtual book that allows you access to the interactive materials needed to navigate and complete the course. Please do not buy the physical book. It does not work for this course. It is best to buy the virtual OwL2 platform through D2L.</li> <li>One book (Lecture and Lab), remember the platform: OWLv2 for Skoog/West/Holler/Crouch's Fundamentals of Analytical Chemistry, 1 term Instant Access, ISBN: 9780357450536, which is available, electronically, through D2L, Cengage</li> <li>This course is a Day 1 Ready Inclusive Access course. This means that these books have already been paid with your tuition. Click on the Start Here Module in Brightspace (D2L), then click on Cengage Course to access the registration instructions.</li> <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>		
Course Start and End Date	08/18/2025 - 12/11/2025		
Orienting Questions	How do I obtain a forensic sample and analyze the sample using various analytical instrumentation?		
Career-Ready Competencies	Competency analyzing a sample from start to finish using various analytical instrumentation.		
Recommended Resources	Study Guide ISBN 0131493876; Solutions Manual ISBN 01319973432		

Core Impact Learning Outcomes Program Learning objectives	Students will use the scientific method and laboratory procedures or mathematical and computation methods to analyze data, solve problems, and explain natural phenomena.						
Course Learning Objectives	The learning objectives for this course are given chapter by chapter. The primary vehicle for the instruction of these objectives will be the working and understanding of the assigned homework problems. These assigned problems are designed to re-enforce topics presented in course work. The student is responsible for working on all study problems and learning all key terms within the chapter text. <b>Group study is strongly encouraged</b> (work problems with someone else). Regularly attending <b>Office Hours</b> is necessary and strongly encouraged as a support to course work. Upon completion of this course the student should be able to:  A. Demonstrate proficiency operating various analytical instruments.  B. Demonstrate in writing the basic principles, concepts of Spectroscopy.  C. Demonstrate an improved competency in (1) obtaining an intact sample, (2) select appropriate sample prep, and (3) analyzing the sample.						
Important Dates	Holidays	Attendance Verification (No Show Date)	Last Day to Reinstate	Midterm	Last Date to Withdraw Without Penalty	Last Day of Class	Final Exam
	September 01 November 27 - 28	August 22- August 27	August 28- September 2	October 04	October 20	December 06	Decemb 4

<b>Email Preference</b>	D2L email for course related correspondence.		
Online Courses	Please use the internal course e-mail for general correspondence. I provide my external e-		
	mail address for emergencies only. I cannot answer questions, accept assignments, or		
	discuss grades via external e-mail so please use it for emergencies only.		
On Campus Courses	Please use Brightspace (D2L) Email for communication.		
<b>Email Response Time</b>	Unless you are notified otherwise, I will strive to respond to all student questions and emails within 24 hours during the week and within 48 hours during the weekend.		
Attendance:	Attendance is required at Atlanta Metropolitan State College. Students may view their attendance record by going to the Brightspace course page and clicking on "Attendance" from the "Assessments" menu at the top. It is the responsibility of each student to ensure that his or her recorded attendance is accurate. Any errors need to be brought to the attention of the instructor as soon as they are discovered.		
Online Attendance and Participation Policy	Being "Present" in class is determined by the student's active attendance and participation in an "academically related activity" which includes actual presence in a virtual class, submission of an assignment, group projects, completion of an exam or quiz and discussion forum posting.		
Conduct:	Refer to AMSC College Catalog, page 54		
Late Policy:	For Assignments: not accepted late; Quizzes: not accepted late; nothing accepted late		
Enrollment Status:	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 must 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 reinstatement in this course) following those outlined in the AMSC catalog.		
Attendance Verification (No Show)/Reinstatement	Atlanta Metropolitan State College has a "No-Show" Reporting (Attendance Verification) policy. This policy is to comply with Federal 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.		
	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.		
Computer Hardware &	One of the challenges many encounter with enrolling in and completing an online course is the		
Software Requirements:	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.		
Minimum Hardware	D2L System Requirement		
Recommendations to take	Internet Connection is required for this asynchronous class. If you do not have access to the internet		
courses:	you will need to take this class when you are ablet to have stable access to the internet. If you lose		
	access during this class it is recommended to drop and attend when you are able to have access to the internet.		
	· Ethernet Network Capability required		
	· Wireless Network Capability required		
	Operating System Requirements		
	• PC:		
	Compatible Operating System:		
	Web Browser: Firefox, Chrome		
	• Mac:		
	Compatible Operating System:  W. L. D. G.		
	Web Browser: Firefox, Chrome, Safari  Hardware requirements:		
	Hardware requirements: Minimum Technical Specifications for Hardware:		
	A processor of 2GHz or faster		
	4GB RAM or greater		
	• 500 GB of Hard Drive space		
	<ul> <li>Monitor and video card with a minimum resolution of 1024x768</li> </ul>		
	Keyboard and mouse		
	Minimum Technical Specifications for Computer Peripherals:		
	• Speakers		
	• Headphones		
<u> </u>	Microphone		

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	• Webcam		
	Software requirements:		
	Browser Requirements/Supported Browsers		
	Compatible Browsers:		
	<ul> <li>Apple Safari - <a href="https://support.apple.com/downloads/safari">https://support.apple.com/downloads/safari</a> (Mac)</li> </ul>		
	• <u>Google Chrome</u> - <u>https://www.google.com/chrome/</u> (Mac or PC)		
	• <u>Mozilla Firefox</u> - <u>https://www.mozilla.org/en-US/firefox/new/</u> (Mac or PC)		
	Application Software		
	<ul> <li>Microsoft Office 2016 (Word, Excel, PowerPoint) (Mac or PC)</li> </ul>		
	<ul> <li>Adobe Reader - <a href="https://get.adobe.com/reader/">https://get.adobe.com/reader/</a></li> </ul>		
	Plug-ins		
	• <u>Java</u> - <u>https://www.java.com/en/download/</u>		
	<ul> <li>Adobe Flash Player - <a href="https://get.adobe.com/flashplayer/">https://get.adobe.com/flashplayer/</a></li> </ul>		
	• Windows Media Player - https://www.microsoft.com/en-		
	us/download/details.aspx?id=20426		
	<ul> <li>Apple QuickTime - https://support.apple.com/downloads/%2523quicktime</li> </ul>		
	<ul> <li>Microsoft Silverlight - <a href="https://www.microsoft.com/getsilverlight/Get-">https://www.microsoft.com/getsilverlight/Get-</a></li> </ul>		
	Started/Install/Default		
	Accessibility: Wi-Fi is also available for use in the campus parking lots.		
<b>Tutoring Services</b>	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:		
	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>		
	❖ Tutor.com 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.		
	❖ TutorOcean is a tutorial for students enrolled in STEM courses such as Biology, Chemistry,		
	Mathematics, and Computer Science. Access TutorOcean and sign up at <a href="https://atlm.tutorocean.com">https://atlm.tutorocean.com</a>		

Americans with Disabilities Act (ADA) Statement	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 & 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.  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 cours materials for this class, please notify the instructor immediately.
	Accommodation cannot be provided until a reasonable accommodation plan is in place. To the greatest extent possible, all college representatives shall observe confidentiality.
Office of Counseling and Accessibility Services	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.
	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
	https://www.atlm.edu/students/counseling-and-disability-services.aspx.
	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.

Withdrawal	Withdrawal from a course is solely the responsibility of the student. Instructors will not initiate student withdrawals. A student who wishes to withdraw from a course MUST submit a completed Withdrawal Form (Schedule Reductions Form) to the Registrar's Office before mid-term in order to receive a grade of "W" for the course.
	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
Incomplete Grade Policy	An incomplete may be awarded at the instructor's discretion for non-academic reasons which preven 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.
Time Commitment	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.
Student Expectations	Students are expected to be fully invested and engaged in their learning. The following guidelines are included to facilitate your course success.
	<ul> <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> </ul>
	• Please speak with your instructor <u>in advance</u> 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' notice, all assignments missed will be scored as zero.
	<ul> <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> </ul>

	Be courteous, polite and respectful to faculty, staff and fellow students.
	For online courses, the instructor will use Brightspace D2L email for all course related correspondence. Check <b>Brightspace D2L email</b> as well as <b>Ginger email daily</b> to stay abreast of what is going on in class.
Online Discussion Protocol	<ul> <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> <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, except when instructed otherwise,</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>
	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
Degree Relevance and Enrollment Status	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>
Emonnent Status	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
Abandoning a Course	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.
Academic Honesty	Only the epitome of professionalism is expected of each student. Cheating or the abetment of cheating is not tolerated.

	Per page 91-93 of the 2019-2020 Atlanta Metropolitan State College Catalogue the Penalties for Academic Misconduct states:
	<ul> <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.</li> <li>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.</li> </ul>
	The maximum penalty the instructor may impose is a grade of "F" for the course.
Class Cancellation	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 MUST 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.
	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.
	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
Class Schedule	See D2L for assignments
Grading Scale	A 90.00% – 100% B 80.00% – 89.99% C 70.00% – 79.99% D 60.00% – 69.99%

	F < 60		
Grade Distribution		20% (Including Midterm)	
		15%	
		20%	
		30%	
		15 %	
Grade Appeals and Student Complaint Policy and	Please follow the Grade	Appeals Process outlined in the AMSC Student Catalog, Pages 61/62.	
Process	You can also refer to the	Grade Appeal brochure at:	
		wnloads/advisement/CAAS%20Grade%20Appeal%20Brochure.pdf	
	For student complaint po	olicy and process, refer to AMSC student catalog pages 51/52.	
Frequently Asked Questions and Helpful Links			
I need:	LINK		
What is Brightspace (D2L)	Face2Face class resource	virtual space where students access their online courses and some es, quizzes, assignments, etc.  ace (D2L) from <a href="https://atlm.view.usg.edu/">https://atlm.view.usg.edu/</a>	
and how can I access it?	You can also access Brig on top.	thtspace (D2L) from the <u>College's webpage</u> and click on Brightspace (D2L)	
Who is my Advisor? Where can I receive Advisement and Tutoring assistance?	Center for Academic Advising and Success (CAAS)		
What do I do if I face	https://d2lhelp.view.usg.e	edu/ You can reach the GaView Helpdesk 24/7/365 days at 18557724423	
technical issues while taking a quiz or turning in an assignment in Brightspace	University System of Geo 365 days. If your issue c	mit a quiz or assignment or face a technical glitch, please contact the orgia's GaView Helpdesk at 1855 772 4423. The Helpdesk is open 24/7 all cannot be resolved right away, the Helpdesk will issue a ticket to your Atlm hat ticket needs to be forwarded to your instructor to prove that you faced a d you to miss a deadline.	

I can't download Respondus	If you are unable to download Respondus to your computer, please email the Office of Testing at		
Lockdown Browser. What do	Testing@atlm.edu at least 24 hours in advance requesting a testing appointment at the Testing Lab.		
I do?	For Respondus issues, please contact <a href="https://web.respondus.com/contact/">https://web.respondus.com/contact/</a> .		
Where do I go for ADA Accommodations	https://www.atlm.edu/students/counseling-and-disability-services.aspx		
I have a complaint. Where do I go?	Fill out and submit the <u>Student Complaint form</u>		
I have an issue with my grade. How may I appeal my grade.	Read the brochure and follow the instructions to appeal your grade.		
How do I Withdraw from a Course	Follow the Course Withdrawal Process <u>here</u>		
I have a Hardship. How do I do a Hardship Withdrawal?	Follow the Hardship Withdrawal Process <u>here</u>		
To Know the Campus Carry/HB 280 Policy	House Bill 280 Guidelines		
Disclaimer	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.		

#### **TOPICS AND LEARNING OBJECTIVES:**

#### **Chapters Covered**

The following techniques/instrumentation will be covered in this course:

• Atomic absorption spectrometry is a robust, simple, and well-established technique in analytical laboratories. Within

- forensic practice, this technique is widely used in gunshot residue (GSR) analysis and in toxicological examinations in cases of suspected poisoning by elements such as arsenic
- Liquid chromatography-mass spectrometry (LC/MS) is a forensics technique frequently used by toxicologists to analyze substances for suspected illicit drugs and to confirm the findings of presumptive drug tests.
- In cases involving poisoning or suspicious deaths, HPLC is an indispensable tool for forensic toxicologists. It enables the detection and quantification of toxic substances in biological samples, helping investigators understand the cause of death and gather evidence for legal proceedings.
- Solvent and Standard preparation, including calculations
- Typical operating software such as Agilent Mass Hunter Software, Chemstation, etc.