

**Class Schedule:** TTR 6:20pm-7:35pm (75 minutes, period 8)  
**Class Room:** 317 Goodwyn Hall

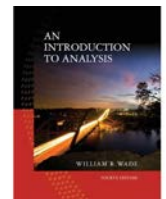
**Professor:** Dr. Jerome Goddard II  
**Office:** 310 R Goodwyn Hall  
**Phone:** 334-244-3023  
**E-mail:** [jgoddard@aum.edu](mailto:jgoddard@aum.edu)  
**Website:** <http://www.jeromegoddard2.com>



**Office Hours:** TTR 9:25am-10:40am, 5:15pm – 6:00pm & W 9:25am-10:40am (others by appointment)

**Important Dates:**

January 20-21	MLK holiday & student holiday!
March 10-14	Spring Break!
March 19	Last day to drop/resign classes
April 29	Last day of classes
Thursday, May 1, 5:00pm-7:30pm	Final Exam



**Text:** **An Introduction to Analysis.** Wade (4e), Prentice Hall 2010

**Catalog Description:**

*MATH 4220*

*3 credit hours*

*Analysis II*

A continuation of MATH 4210. Limits, derivatives, theory of the Riemann integral, sequences of functions, uniform convergence and power series. Emphasis on the development of proofs by students.

**Prerequisite(s):** MATH 4210 (Analysis I)

**Course Objectives:**

Selected topics from chapters 4-12. Upon successful completion of this course the student will demonstrate an understanding of and ability to apply each of the following topics (time permitting):

- Differentiation
  - Definitions & differentiability theorems
  - Mean Value Theorem, l'Hopital's Rule, & Inverse Theorems
- Riemann Integration
  - Definitions & Riemann sums
  - Fundamental Theorem of Calculus
- Infinite Series
  - Real numbers: Convergence
  - Functions: Uniform convergence & power series
- Introduction to Metric Space theory
  - Interior, closure, & Boundary
  - Compact sets, connected sets, & continuity

**Methods of Instruction:** The format of class meetings will consist of interactive lectures, in-depth discussion, & group activities. Student participation is highly encouraged.

**Calculator:** According to AUM Department of Mathematics Calculator Policy, students are encouraged to possess a graphing calculator. A Texas Instrument's TI-84 (TI-83 or TI-82) is recommended. **Calculators are NOT allowed on assignments/exams** but may be used for homework and in-class discussion.

**Electronic Devices:** Cell phones, computers, tablets, and other electronic devices (except approved calculators) should be powered off, set to emit no audible sound (including vibration and messaging), and put away during class. **\*\*\*Use of cell phones for any purpose during class is in violation of class policy\*\*\***

**Free Tutoring:** Free one-on-one tutoring is available in the Learning Center (LC), located in 225 Library Tower (Phone: 334-244-3470). Students can call or stop in for an appointment. In addition, the LC hosts several calculator workshops. The Instructional Support Lab (ISL) located in 203 Goodwyn Hall (Phone: 334-244-3265) is another free tutorial center that is available to assist AUM students. Tutorial services at the ISL are available on a first come, first serve basis--no appointment necessary. Also, please feel free to come by my office during regular office hours for help.

**Academic Integrity:** As a student in this class you are committed to abide by the standards of academic integrity stated in the AUM catalog. Cheating of any form is not tolerated. Violators will receive an “F” course grade for any offense.

**Attendance:** Class attendance is mandatory and will be taken at each class by your signing an attendance sheet. Failure to sign the attendance sheet will be counted as an absence. A student is considered to be absent if they come in after attendance has been taken or leave early. **Students are solely responsible for catching up on material that they miss due to any absence.**

**Assignments:** Homework problems will be assigned in class on a weekly basis. These problems will be due on at the beginning of Thursday’s class of the week following the one in which they are assigned (unless otherwise noted). **NO LATE SUBMISSIONS WILL BE ACCEPTED.** It is recommended that all homework assignments be typed using the typesetting software LaTeX. In addition, students will be required to present solutions to specified homework questions in class.

**Grades:**

25%	Mid-term exam
40%	Homework average
10%	Class presentation(s)
25%	Comprehensive final exam

Final grades will be assigned as follows:

<b>90% – 100%</b>	<b>A</b>
<b>80% – 89%</b>	<b>B</b>
<b>70% – 79%</b>	<b>C</b>
<b>60% – 69%</b>	<b>D</b>
<b>0% – 59%</b>	<b>F</b>

\* Grades in this course are a direct measure of a student’s performance in demonstrating attainment of course objectives. All rights are reserved to adjust these ranges downward or make appropriate scaling for all students, if necessary, due to excessive difficulty of assignments or tests. Additionally, all borderline cases will be determined according to student participation, class attendance, and overall student performance.

**Midterm Grade:** Your midterm grade will consist of the average of the mid-term exam and the homework grade average to date. *This grade is only meant to be an estimate of current progress in the class and can be quite different than your final class grade.*

**Makeup Work:** NO makeup tests are allowed. Should you miss a test, the final exam scaled to a 100 point grade will replace only **one** missed test for “excused” absences as outlined in the AUM Attendance Policy and only with appropriate verification. There are no makeups allowed on homework assignments. However, the lowest homework grade will be dropped.

**Accommodation Notice:** It is the policy of AUM to provide appropriate modifications, accommodations or auxiliary aids to any student with a documented disability as defined by Section 504 of the Rehabilitation Act of 1973, as amended, and by the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act of 2008. It is the student's responsibility to request accommodations and provide appropriate documentation. Students with disabilities are encouraged to contact the Center for Disability Services (CDS) in Room 101 Taylor Center or call CDS at (334) 244-3631 prior to or upon enrollment at AUM.