

Syllabus

Course Information

Course Number: Math618

Course Title: Complex Variables II

Section: 600

Time: TR 12:45 - 2:00

Location: BLOC 123

Credit Hours: 3

Instructor Details

Instructor: Emil Straube

Office: BLOC 601M

Phone: NA

E-Mail: e-straube@tamu.edu

Office Hours: MWF 1:00 - 2:00

Course Description

Infinite products, Weierstrass factorization theorem, Mittag-Leffler's theorem, normal families, Riemann mapping theorem, analytic continuation, Picard's theorems and selected topics.

Course Prerequisites

Math617

Course Learning Outcomes

Students will understand classical topics from the theory of functions of a complex variable (listed in the course content section below). They will also learn about the history of the subject and they will be able to place the subject in the broader context of mathematics.

Textbook and/or Resource Materials

John B. Conway, Functions of One Complex Variable, 2nd edition, Springer GTM.
You can download a free copy here:

<https://link.springer.com/book/10.1007%2F978-1-4612-6313-5>

(<https://link.springer.com/book/10.1007%2F978-1-4612-6313-5>) . This site also has a link to purchase a softcover copy for USD 24.99 (a considerable reduction from the list price).

Grading Policy

There will be two exams during the semester, each worth 100 points, and a comprehensive third exam, also worth 100 points. All exams will be take-home. In addition, there will be weekly graded homework assignments for a total of 100 points.

Letter grades will be assigned as follows:

85% - 100% = A; 70% - 84% = B; 55% - 69% = C; below 55% = D.

Late Work Policy

Homework assignments are expected to be turned in on time. I am however willing to be flexible, on a case by case basis, if circumstances are reasonable.

Course Schedule

The course material will be spread evenly over the semester. Exams are planned as follows.

Exam 1: week of Feb. 17

Exam 2: week of March 31

Exam 3: week of April 28

The day of the week when exams are given out, and the due date, will depend on where we are in the course, but will be announced at least one week in advance.

University Policies

This section outlines the university level policies. The TAMU Faculty Senate established the wording of these policies.

NOTE: Faculty members should not change the written statements. A faculty member may add separate paragraphs if additional information is needed.

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to **Student Rule 7 (<https://student-rules.tamu.edu/rule07/>)** in its entirety for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to **Student Rule 7 (<https://student-rules.tamu.edu/rule07/>)** in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor” (**Student Rule 7, Section 7.4.1** (<https://student-rules.tamu.edu/rule07/>)).

“The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence” (**Student Rule 7, Section 7.4.2** (<https://student-rules.tamu.edu/rule07/>)).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (**See Student Rule 24** (<https://student-rules.tamu.edu/rule24/>)).

Academic Integrity Statement and Policy

“An Aggie does not lie, cheat or steal, or tolerate those who do.”

“Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one’s work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case” (**Section 20.1.2.3, Student Rule 20** (<https://aggiehonor.tamu.edu/Rules-and-Procedures/Rules/Honor-System-Rules/>)).

Texas A&M at College Station

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at aggiehonor.tamu.edu (<https://aggiehonor.tamu.edu/>).

Texas A&M at Galveston

You can learn more about the Honor Council Rules and Procedures as well as your rights and responsibilities at [tamug.edu/HonorSystem](https://www.tamug.edu/HonorSystem).  (<https://www.tamug.edu/HonorSystem/>)

Texas A&M at Qatar

You can learn more about academic integrity and your rights and responsibilities at Texas A&M University at Qatar by visiting the [Aggie Honor System](https://www.qatar.tamu.edu/students/academic-services/aggie-honor-system) (<https://www.qatar.tamu.edu/students/academic-services/aggie-honor-system>)_website.

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources office on your campus (resources listed below). Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Texas A&M at College Station

Disability Resources is located in the Student Services Building or at (979) 845-1637 or visit <https://disability.tamu.edu/> (<https://disability.tamu.edu/>).

Texas A&M at Galveston

Disability Resources is located in the Student Services Building or at (409) 740-4587 or visit <https://www.tamug.edu/disabilityresources/index.html>  (<https://www.tamug.edu/disabilityresources/index.html>).

Texas A&M at Qatar

Disability Services is located in the Engineering Building, room 318C or at +974.4423.0316 or visit <https://www.qatar.tamu.edu/students/student-affairs/disability-services> (<https://www.qatar.tamu.edu/students/student-affairs/disability-services>).

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based

discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see **University Rule 08.01.01.M1** (<https://rules-saps.tamu.edu/PDFs/08.01.01.M1.pdf>)):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Texas A&M at College Station

Students wishing to discuss concerns related to mental and/or physical health in a confidential setting are encouraged to make an appointment with **University Health Services** (<https://uhs.tamu.edu/appointments/index.html>) or download the **TELUS Health Student Support app** (<https://uhs.tamu.edu/mental-health/student-support.html>) for 24/7 access to professional counseling in multiple languages. Walk-in services for urgent, non-emergency needs are available during normal business hours at University Health Services locations; call 979.458.4584 for details.

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's **Title IX webpage** (<https://titleix.tamu.edu/>).

Texas A&M at Galveston

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with the Counseling Office in the Seibel Student Center, or call (409)740-4587. For additional information, visit

<https://www.tamug.edu/counsel/index.html> 

[_ \(https://www.tamug.edu/counsel/index.html\)_](https://www.tamug.edu/counsel/index.html).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the Galveston Campus'

[_ Title IX webpage \(https://titleix.tamu.edu/\)_](https://titleix.tamu.edu/).

Texas A&M at Qatar

Texas A&M University at Qatar students wishing to discuss concerns in a confidential setting are encouraged to visit the **Health and Wellness**

[_ \(https://www.qatar.tamu.edu/students/student-affairs/health-and-wellness\)_](https://www.qatar.tamu.edu/students/student-affairs/health-and-wellness) website for more information.

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's **Title IX webpage (https://titleix.tamu.edu/)_**.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors influencing a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care practices by utilizing the resources and services available through **University Health Services (https://uhs.tamu.edu/)_**. The **TELUS Health Student Support (https://uhs.tamu.edu/mental-health/student-support.html)_** app provides access to professional counseling in multiple languages anytime, anywhere by phone or chat, and the 988 Suicide & Crisis Lifeline offers 24-hour emergency support at 988 or **988lifeline.org**  [_ \(http://988lifeline.org/\)_](http://988lifeline.org/).

Texas A&M College Station

Students needing a listening ear can contact University Health Services (979.458.4584). 24-hour emergency help is also available through the 988 Suicide & Crisis Lifeline (988) or at 988lifeline.org  [.\(http://988lifeline.org/\)](http://988lifeline.org).

Texas A&M at Galveston

Students who need someone to talk to can call (409) 740-4736 from 8:00 a.m. to 5:00 p.m. weekdays or visit <https://www.tamug.edu/counsel/index.html>  [.\(https://www.tamug.edu/counsel/index.html\)](https://www.tamug.edu/counsel/index.html) for more information. For 24-hour emergency assistance during nights and weekends, contact the TAMUG Police Dept at (409) 740-4545. 24-hour emergency help is also available through the 988 Suicide & Crisis Hotline (800-273-8255) or at 988lifeline.org  [.\(https://988lifeline.org/\)](https://988lifeline.org).

Texas A&M at Qatar

Texas A&M University at Qatar students wishing to discuss concerns in a confidential setting are encouraged to visit the [Health and Wellness](https://www.qatar.tamu.edu/students/student-affairs/health-and-wellness) [.\(https://www.qatar.tamu.edu/students/student-affairs/health-and-wellness\)](https://www.qatar.tamu.edu/students/student-affairs/health-and-wellness) website for more information.

