

THE UNIVERSITY OF TEXAS AT EL PASO  
COLLEGE OF SCIENCE  
DEPARTMENT OF MATHEMATICAL SCIENCES

**Special Topics - 25059 - MATH 5370 – Arithmetic Functions and Applications**

**Online via Blackboard**

Jan. 19 – May 06

Spring 2021

**Instructor:**

Dr. Emil Schwab

E-mail: [eschwab@utep.edu](mailto:eschwab@utep.edu)

**Office Hours:**

Online/TBA

For communication, you must use only your **UTEP email address**.

I will try to return e-mails within 24 hours (except weekends/holidays)

**Textbook :**

No textbook required. References and materials will be given.

**Course Objectives and Content**

This course is an introduction in the theory of arithmetic functions with respect to various convolution-type product operations, emphasizing algebraic and multiplicative techniques. It will be discussed many structure theorems basic to the study of arithmetic functions and applications in algebraic combinatorics and formal power series.

This class deepens students' understanding of concepts, and students' ability to think abstractly and to elaborate rigorous proofs.

**Exams and Assignments:**

There will be two projects/exams.

	<b>Due Date /Date</b>	<b>Weight</b>
<b>Project 1/Exam 1</b>	<b>March 11</b>	<b>100 points possible (50% of final grade)</b>
<b>Project 2 / Exam 2</b>	<b>May 6</b>	<b>100 points possible (50% of final grade)</b>

The final grade will be determined by the average of the project/exam's scores respecting the following grading scale:

- A 85-100;**
- B 70-84;**
- C 55-69;**
- D 40-54;**
- F below 40.**

**Late Work and Make-up Policy:**

No late work and submission of exams will be accepted if the reason is not considered excusable. Make-up exams will only be given under extraordinary circumstances, approved by instructor.

**Attendance & Withdrawal:**

This is an online course and as such you do not have any strict attendance guidelines. You are expected to work toward completion of the course weekly. It is the student's responsibility to drop the course if she/he desires a grade W. The Drop Date for this semester is **April 1<sup>st</sup>, 2021**. After the drop deadline the College of Science will not approve any drops (W).

**Technology Requirements:**

Course content is delivered via Blackboard.

You will need to have access to a computer/laptop and scanner.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#)

**Netiquette/Copyright Statement:**

Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only and you are not allowed to copy documents and paste them to a publicly accessible website, blog, or other space.

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

**Scholastic Integrity:**

Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations, which are available for inspection electronically at <http://www.utsystem.edu/bor/rules/homepage.htm>

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

**Disability Statement:**

If you need special accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to [cass@utep.edu](mailto:cass@utep.edu), or visit their website at [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass).

**Military Statement:**

If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact the instructor as soon as possible.