MME 3306 • RATE PROCESSES • SPRING 2022

Instructor: Ms. Norma Mia Padilla, Visiting Lecturer, Materials/Processes Engineer and Systems Engineer @ Raytheon Space Airborne Systems and currently working for Northrop Grumman Aerospace Corporation
E-mail: npadilla@utep.edu and students and message me via MS Teams

Class Time and Location: MW 9:00 am – 10:20 am, LART 207

Office Hours: We can meet before or after class or on-line. Sent me a message via Teams or email me and we can set a good time to meet.

Course Description: This course will cover the processes that control metals and materials production systems and modification of material properties for specific applications. The separation process involved in industrial applications are based on mass transport, momentum transport and heat transport. The basis of these fundamentals will be covered for material balance, fluid flow, and heat transfer. Since processes are dependent on time, reaction kinetics will also be included in the course.

Educational Objective: At the end of this course, you will be able to apply the principles of material balance, reaction kinetics, fluid flow, and heat transfer to the solution of material production and material processing problems.

No required textbook: There is not one book that contains all the subjects discussed in this course, therefore it was decided that there will not be a required textbook. Lecture notes and handout will be provided to support the learning from the lectures and group work.

Homework: Regular homework will be assigned to reinforce the concepts covered in class, discussions, handouts, and textbook. All homework will be graded and counts as 20% of your final grade. Your homework solutions need to be clean, neat, easy to read and grade. Circle your final answer and assure you have the correct units. Homework picture needs to be converted to PDF file and submitted in Blackboard (BB) in the assigned homework folder. Engineering graph paper is encouraged for neater solutions but not mandatory.

Exams: There will be four exams and one comprehensive final exam. One makeup exam will be given on Dead Day (time and location to be announced). You will only be allowed to take the makeup exam if you have a valid, documented excuse for missing an exam. The university does not allow make up final exams.

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<th>Grading Policy</th>
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Any instance of cheating or plagiarism will be reported to the Dean of Students for appropriate action. This can include possible failure of the course and/or dismissal of the University.

**Attendance:** Think of attendance as continuation for successful habit building for preparation for your future job and attending class on time, ready to participate/engage is key.

**Classroom Etiquette:** Part of being a professional is being on time and prepared to do your job. This applies to your career as a student as much as it does to your future career as an engineer or scientist. Coming to class late is unprofessional and very disruptive to the class. You are expected to be in class and prepared to participate when the class bell rings. If you are late to class, you are to come in quietly and take your seat. DO NOT attempt to turn in assignments or try to pick up handouts until class is over.

**Cellphones:** Be respectful of the professor and your fellow colleagues’ time by turning off your cell phones to avoid disturbing class. If your phone continues to disrupt class, you will be asked to leave and return when you are ready to follow this rule.

**Religious Holy Days:** “The students must notify the instructor of each (no later than the 15th day of the semester) that the student will be absent for a religious holy day. The student’s notification must be in writing and must be either, 1) delivered by the student personally to the instructor of each class, with receipt of the notification of acknowledgement by the instructor, or 2) by certified mail, return receipt requested, addressed to the instructor of each class. The student may not be penalized for these excused absences if a missed assignment or examination is completed within a reasonable time.” (UTEP Catalog)