MTH 3326: Partial Differential Equations

Tentative Syllabus, Fall 2021

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Sec. 01: TTh 09:30–10:45 am (SR325); Sec. 02: TTh 12:30–01:45 pm (SR203)

Instructor: Professor Qin “Tim” Sheng
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E-Mail: Qin.Sheng@Baylor.edu
URL: http://sites.baylor.edu/qin_sheng/
Virtual Office Hours: TTh: 01:50 pm–03:00 pm or by appointment
Office Location: Sid Richardson 302.F

On August 13, 2021, the Baylor COVID Team announced that “face coverings be worn by all students, faculty and staff in all classrooms and labs when used for academic instruction, in addition to some indoor locations where appropriate social distancing may not be possible, private faculty and staff offices when requested, and other areas designated by posted signage.”

TEXT: Applied Partial Differential Equations by John Davis, 2010 (my lecture notes will also be used)

COURSE COVERAGE & SUGGESTED EXERCISES: This course will cover the following sections of the textbook (tentatively): 1.1-4, 2.1-6, 3.1-6, 5.3-6, 6.1-2, 7.1-4. We may use computer software packages, such as Matlab and Mathematica, for illustrations of solution properties and project.

ATTENDANCE: Students who are experiencing symptoms or tested COVID-19 positive, or exposed to a COVID-19 positive person, including roommates, are required to stay home for further observation. Canvas and lecture notes can be used in the study. Student grades will not be adversely affected by following the best practices in terms of public health. Beginning the sixth week of the fall and spring semesters, professors will be prompted by the Paul L. Foster Success Center to submit academic progress reports for any student with substandard academic performance. Academic progress reports are submitted by professors to alert the student about the academic concerns in order that the student might seek out the resources needed to succeed.

HOMEWORK: As we go along section by section for the covered materials in the textbook, you are required to complete all suggested exercises in time. You are required to keep a notebook solely for this homework. If you have questions please see me during my office hours or by making an appointment. You may also consult with our TA and tutors in the Math Lab.

EXAMS, QUIZZES, PROJECTS AND GRADING POLICIES: There will be three in-semester tests, ten quizzes and one final exam (or final project).

See a tentative test and quiz schedule on our course calendar:

<table>
<thead>
<tr>
<th>Quiz 1</th>
<th>08/26</th>
<th>Quiz 4</th>
<th>09/23</th>
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<th>Quiz 10</th>
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<td>Quiz 5</td>
<td>09/30</td>
<td>Quiz 8</td>
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<td>Quiz 3</td>
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<td>Quiz 6</td>
<td>10/07</td>
<td>Quiz 9</td>
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<tr>
<td>Test I</td>
<td>09/16</td>
<td>Test II</td>
<td>10/14</td>
<td>Test III</td>
<td>11/11</td>
<td>Final Ex.</td>
<td>12/14&amp;16</td>
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Final Exam Information:
Session 01: Tuesday, Dec 14, 2021, 14:00–16:00; Session 02: Thursday, Dec 16, 09:00–11:00
Website: http://www.baylor.edu/registrar/doc.php/373482.pdf

Method of Evaluation:
3 tests, each one counts 13% toward your final (no makeup tests without justified reasons)
10 quizzes, each counts 4% toward your final, and 1 final comprehensive exam
(or comprehensive project), counting 21% toward your final score.

Grading Scale: A 91-100%, A- 89-90, B+ 87-88%, B 81-86%, B- 79-80, C+ 77-78%, C 71-76%,
C- 69-70, D+ 67-68, D 61-66%, D- 59-60, F below 59%

ACCESSING CLASS INFORMATION VIA INTERNET: Our updated syllabus, and
lecture notes/slides will be posed on Canvas.

TEACHING ASSISTANT (TA): Mr. Nolan Craft
E-mail: Nolan_Craft1@baylor.edu
You are encouraged to email our TA directly for questions, advice or assistances.

OFFICE HOURS: One of the best ways to take full advantage of learning in my course is by
coming to my office hours. Due to the pandemic, our office hours are online via Zoom from 1:50
pm to 3:00 pm on Tuesdays and Thursdays. Appointments will also be available. I look forward
to guiding you in your academic pursuits. Take advantage of the hours listed above or email me
for an appointment. All individuals who need to enter my office must wear proper face covering.

MATH TUTORIAL LAB: Beyond my office hours, please visit and get the free service from the
face-to-face Math Tutorial Lab in SDRICH 326! Knowledgeable tutors are waiting for questions!
The lab starts on August 23, 2021.

FACE COVERING REQUIRED in this classroom.
Academic Integrity: Plagiarism or any form of cheating involves a breach of student-teacher trust. This means that any work submitted under your name is expected to be your own, neither composed by anyone else as a whole or in part, nor handed over to another person for complete or partial revision. Be sure to document all ideas that are not your own. Instances of plagiarism or any other act of academic dishonesty will be reported to the Honor Council and may result in failure of the course. Not understanding plagiarism is not an excuse. As a Baylor student, I expect you to be intimately familiar with the Honor Code at: http://www.baylor.edu/honorcode/

Academic Success: I believe every student who has been admitted to Baylor can be successful and I want to partner with you to help you thrive academically. Be sure to take advantage of the many resources available for academic success, including coming to see me during my office hours. Students who regularly utilize the great resources in the Paul L. Foster Success Center (http://www.baylor.edu/successcenter/) are among my most successful students. If your academic performance in this class is substandard, I will submit an Academic Progress Report to the Success Center so that the team of coordinated care professionals can ensure that you get the help you need.

Class Format Conversion: I will keep you informed should this course need to be converted to fully/partially hybrid or online format at some point in the semester due to the COVID-19 pandemic situation.

Face Coverings: On Friday, August 13, 2021, the following information was provided by President Livingstone and the Baylor COVID Team: In certain indoor settings, face coverings will now be required on a temporary basis. This includes the requirement that face coverings be worn by all students, faculty and staff in all classrooms and labs when used for academic instruction, in addition to some indoor locations where appropriate social distancing may not be possible, private faculty and staff offices when requested, and other areas designated by posted signage. Outside of these required areas for wearing a face covering, students, faculty and staff can choose to wear a face covering in other indoor or outdoor settings based on their individual health and safety needs. We ask that you please keep a facemask with you at all times and respect others who might have personal or family health considerations. Also, masks should cover your nose and mouth, as they are not effective on chins only. Failure to comply with wearing face coverings within these specific settings will result in referral to the Student Conduct office or the respective faculty or staff disciplinary process.

Proper face covering is required for visiting me in my office in person.

First Generation College Students: Baylor University defines a first-generation college student as a student whose parents did not complete a four-year college degree. The First in Line program is a support office for first-generation college students to utilize if they have any questions or concerns. Please check out First in Line, visit us in the Basement of Sid Richardson West Wing or email frontline@baylor.edu. If you are a first gen college student, you may wish to add: I was also the first in my family to graduate with a four-year bachelors degree and can answer questions about experiences as a first-generation college student.

Military Connected Students: Veterans, active duty military personnel, and dependents are encouraged to connect with the VETS program, a space dedicated to supporting our military-connected students. Please communicate, in advance if possible, any special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations).

Health Resources for Students: Baylor University is strongly committed to addressing the
mental health and wellness needs of students by providing access to on-campus healthcare resources.

**Crisis and Emergencies:**
BUCC Crisis Line: (254) 710-2467 (Business Hours/Non-Business Hours/Weekends)
Baylor Police Department: (254)710-222
MHMR Crisis Center: (254)867-6550
MHMR 24-Hour Emergency/Crisis Number: (254)752-3451
When home during academic breaks, when the counseling center is closed, please call your local resources. Some national numbers for support during a crisis:
National Hope Network Hotline: 1-800-SUICIDE (1-800-784-2433)
National Suicide Prevention Lifeline: 1-800-273-TALK (1-800-273-8255)

**General Guidance for Struggling Students:** Baylor University CARE Team Services:
Located on the second floor of the Student Life Center, suite 207.
The Department of CARE Team Services is a team of case managers who work with students who are struggling with mental health issues, financial struggles, and anything else affecting a students ability to be successful in the classroom. Contact Information: (254) 710-2100; CareTeam@baylor.edu.

**Students Basic Needs (Food & Housing):** Food insecurity is defined as a lack of consistent access to enough food for you to live an active, healthy life. At Baylor, we want all students to have access to food resources that will support their holistic well-being and success. If you or someone you know experiences food insecurity at any time, you can find information on campus and community food resources by visiting The Store. You can also contact Store staff at 254-710-4931. For additional basic needs assistance, please reach out to CASE or the Care Team.

**Physical Health and Wellness, Psychiatric Evaluations, Pharmacy:** Baylor Health Services Department:
Baylor Health Services includes Primary Care, Psychiatry, Physical Therapy and Pharmacy and is staffed with fully certified and licensed physicians and nurse practitioners, as well as nurses and administrative staff. Appointments may be made by calling our main number or by logging into the health portal located on our website. Contact Information: (254) 710-1010; Health_Services@baylor.edu.

**Baylor University Counseling Center:** The Counseling Center seeks to foster wholeness for every student through caring relationships, cultural humility and integrated mental health services. Located on the second floor of the Student Life Center. For an appointment, go to our website to schedule an Initial Assessment or call (254) 710-2467.

**Substance and Behavioral Addiction:** Beauchamp Addiction & Recovery Center (BARC):
The Beauchamp Addiction Recovery Center aims to support students in recovery from substance and behavioral addictions through an all-encompassing level of support approach that includes one-on-one mentorship, support groups, and social events open to all Baylor students. Located in the East Village Residential Community (bottom floor of Teal Residential College). Contact Information: (254)-710-7092; BARC@baylor.edu

**Spiritual Life:** Baylor University Office of Spiritual Life:
The Office of Spiritual Life offers programs, persons, and resources to nurture theological depth, spiritual wholeness, and missional living. Located on the corner of 5th and Speight Street in the BoBo Spiritual Life Center. Contact Information: (254) 710-3517; Spiritual_Life@baylor.edu

**University’s Civil Rights Policy:** All students, faculty and staff must be treated with respect and dignity. We must promote equal opportunities and prohibit discriminatory practices,
including unlawful discrimination, all outlined as part of Baylors firm commitment to maintaining an environment where all can thrive. Our Civil Rights policies can be found online at http://www.baylor.edu/diversity/index.php?id=950974. Any issue or incident that violates the Universities Civil Rights Policy or other policies must be reported through the Report It website at http://www.baylor.edu/reportit or in conjunction with Baylors Equity Office.

**Title IX Office – Title IX Coordinator:**

- **Civil Rights Policy and Sexual and Interpersonal Misconduct Policy**

  Baylor University does not tolerate unlawful harassment or discrimination on the basis of sex, gender, race, color, disability, national origin, ancestry, age (over 40), citizenship, genetic information or the refusal to submit to a genetic test, past, current, or prospective service in the uniformed services, or any other characteristic protected under applicable federal, Texas, or local law (collectively referred to as Protected Characteristics).

  If you or someone you know would like help related to an experience involving:

  1. Sexual or gender-based harassment, sexual assault, sexual exploitation, stalking, intimate partner violence, or retaliation for reporting one of these types of prohibited conduct, please visit www.baylor.edu/titleix, or contact us at (254) 710-8454, or TitleIX_Coordinator@baylor.edu immediately.

  2. Harassment (excluding those issues listed in #1) or adverse action based on Protected Characteristics, please visit www.baylor.edu/civilrights, or contact us at (254) 710-7100 or Civil_Rights@baylor.edu.

  The Office of Equity and Title IX understands the sensitive nature of these situations and can provide information about available on- and off-campus resources, such as counseling and psychological services, medical treatment, academic support, university housing, advocacy services, and other forms of assistance that may be available. Staff members at the office can also explain your rights and procedural options. You will not be required to share your experience. **If you or someone you know feels unsafe or may be in imminent danger, please call the Baylor Police Department (254-710-2222) or Waco Police Department (9-1-1) immediately.**

  Except for Confidential Resources, all University Employees are designated Responsible Employees and thereby mandatory reporters of potential sexual and interpersonal misconduct violations. Confidential Resources who do not have to report include those working in the Counseling Center, Health Center and the University Chaplain, Dr. Burt Burleson.

**Students Needing Accommodations:** Any student who needs academic accommodations related to a documented disability should inform me immediately at the beginning of the semester. You are required to obtain appropriate documentation and information regarding your accommodations from the Office of Access and Learning Accommodation (OALA). Stop by the first floor of Sid Richardson, East Wing in the Paul L. Foster Success Center, 1st floor on the East Wing of Sid Richardson, or call (254) 710-3605 or email OALA@baylor.edu.

**University Writing Center:** I encourage you to visit the University Writing Center (UWC) this semester and get feedback on your writing for this course. Located in Moody Library 2nd floor West, the UWC offers free assistance to you at any stage of the writing process (brainstorming, researching, outlining, drafting, revising, editing). In their feedback, the consultants focus on higher order concerns, such as content, thesis, evidence, and organization, before grammar or style. The UWC tutors will not proofread, edit, or write your paper for you, but they will equip
you with a toolbox of strategies to improve your writing, research, and editing skills. Please take the assignment prompt, your paper/text, and other materials you might need with you to your appointment. Please include my name as the professor, and a report will automatically be sent to me after your session. You can set up an appointment online at www.baylor.edu/uwc, call the UWC at (254)710-4849, or stop by in person.

**Canvas:** Visit and review the *Online Student Quickstart* that is on your Canvas Dashboard page in order to familiarize yourself with the technology needed.