Phys 4161 – Physics Research Project
Department of Physical and Environmental Sciences
and the Texas Physics Consortium
Fall 2020

A. COURSE INFORMATION

Course number/section: PHYS 4161.301, 1 credit
Class meeting time: MWF 12:00-12:50pm, Face-to-face Video
Course Websites: http://wtclass.tamucc.edu/ (Course Management System)
http://www.tarleton.edu/tpc/ (TPC Info)

B. INSTRUCTOR INFORMATION

Instructor: Dr. Vrinceanu
Office location: Texas Southern University
Office hours: [TBA]
Telephone: 713-313-4482
e-mail: vrinceanud@tsu.edu
Appointments: Email for appointments.

Local Facilitator: Dr. Jeff Spirko
Office location: NRC-1111 (Inside NRC-1100) and on Webex
Office hours: MTWR 1pm-3pm
Live Calendar: http://faculty.tamucc.edu/jspirko/calendar.html
Telephone: 361-825-6020
e-mail: jeffery.spirko@tamucc.edu (preferred over phone calls)
Appointments: Email for appointments. Check calendar and suggest an open time.
Webex: Email for Webex contact info.

C. COURSE DESCRIPTION

Catalog Course Description
The first half of a two semester sequence. The student will work with a faculty member to develop and conduct a senior research project including a search of the relevant literature and presentation of the proposed research idea.

Extended Course Description
This course is being offered by the Texas Physics Consortium as part of the Joint BS degree with a Physics Major. All TPC courses use the WTClass system for class management (instead of Blackboard). For more information on TPC, please visit our website (http://www.tarleton.edu/tpc/) or speak with the Local Facilitator.

The Course Syllabus from the sending institution is the primary Syllabus that the instructor will follow. This TAMUCC Syllabus exists to make sure you have all of the information summarized in one place and that you are informed about TAMUCC
D. PREREQUISITES AND COREQUISITES

Prerequisites:
- PHYS-3334 – Modern Physics I

Corequisite:
- (n/a)

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
- (No textbook required.)

Optional Textbook(s) or Other References
- (No textbook required.)
- Don’t overlook your engineering physics text as an excellent reference.

Required Equipment/Abilities
- Students are expected to have internet access throughout the course.
- Video conferencing via Webex and Zoom using computer or phone.
- Ability to generate a PDF from a digital file (Word, Excel, etc.).
- Ability to generate a decent quality, readable PDF from handwritten notes. (Google Drive (Android), Notes (iOS), NAPS2 (windows), PDFScanner (MacOS).)
- Ability to use interactive HTML5 websites, such as PhET and Physlets.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

Specific learning objectives will be shared by the instructor in the Syllabus and during Class.
G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course is a face-to-face distance education course. Students should plan to attend synchronously, but lectures will be recorded and provided upon request.

WTClass: All Class notes, homework assignments and videos will be posted using TPC’s WTClass management system. It is student’s responsibility to check the system prior to each class meeting, complete reading and homework assignment and submit the latter through WTClass prior to the deadline. All graded homework will be returned via WTClass.

Reading Assignments: Students are expected to read the textbook. It’s expensive and it provides a great explanation of all topics.

Lecture: Most topics will be discussed in lecture, where the instructor will give their own interpretation as a supplement to the textbook. Examples will be worked out in lecture.

Homework: Deliberate practice is more valuable than straight lecture. Homework is an obvious time for practice. Though study groups and helping each other is encouraged, each assignment must represent your own work. Copying (or even paraphrasing) others’ work and claiming it as your own is plagiarism, regardless of free or open source copyright licenses.

Personal Consultations: Come visit me (Dr. Spirko, your local facilitator) on Webex or Zoom (meeting ID posted on Blackboard)! Visitors to my office received candy¹. But seriously, I strongly encourages you to talk to me on a regular basis to clarify your understanding of the course material and to seek help in completing the homework.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Course requirements and grading will be discussed by the instructor during the first class.

I. COURSE CONTENT/SCHEDULE

The expected content and schedule will be distributed by the instructor during the first class.

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

¹ Disclaimer: Candy not available via Webex. There may not even be candy in my office.
J. COURSE POLICIES
The course instructor will discuss specific course policies during the first class.

Videoconference Etiquette
Generally, keep your microphone muted to keep background noise from being sent to the entire class. Even worse, it can override the instructor’s audio. Unmute your microphone to talk to the instructor or to the class.

Plagiarism
You may not copy-and-paste anything without permission from the author, except for short quotes under the principle of fair use. Even paraphrasing is plagiarism if the material isn’t clearly described as coming from another source. If you quote or use knowledge from a source in a written project, you must cite the source.

Careless copying is defined as plagiarism by TAMUCC University Procedure 13.02.99.C3.01 Academic Misconduct Cases, section 2.1.1 (http://academicaffairs.tamucc.edu/Rules_Procedures/).

K. TAMUCC COLLEGE AND UNIVERSITY POLICIES
(Students should become familiar with their university’s analogues to these policies.)

COVID-19
Face Coverings—Face coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Extra masks will be made available if needed.

Academic Integrity (University)
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

Classroom/Professional Behavior
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be
instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Statement of Civility**

Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high-quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state, and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of gender, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

**Deadline for Dropping a Course with a Grade of W (University)**

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

**Grade Appeals (College of Science and Engineering)**

As stated in University Procedure 13.02.99.C0.03, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is required to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C0.03, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

**Disability Services**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable
accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

Civil Rights Complaints
Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints, options and support resources (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz (Rosie.Ruiz@tamucc.edu) x5826, or visit website at Title IX/Sexual Assault/Pregnancy (http://edcs.tamucc.edu/titleIX/index.html).

Limits to Confidentiality. Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me.

These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors in the University Counseling Center (https://counseling.tamucc.edu/).

Statement of Academic Continuity
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a
secondary means of contacting each student.

L. **OTHER INFORMATION**

**Academic Advising**

The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**Local Facilitator**

*Keep in touch:* let us know when things are happening. The Local Facilitator is happy to help with physics questions and with administrative matters, but you, the student, are responsible for keeping track of assignments and exams. Don’t assume that the Local Facilitator knows when your exams are taking place. Proctoring takes at least a few days to arrange, so make sure things are ready and confirmed **BEFORE** your exam takes place.

**Primary Syllabus**

The Course Syllabus from the sending institution is the primary Syllabus that the instructor will follow.

M. **GENERAL DISCLAIMER**

We reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. We will announce such changes in a timely manner during regularly scheduled lecture periods and by posting on the course website.

N. **Changelog**

- Ver 1, 2020-07-24, Original Version