

**The University of Texas at Tyler**  
**Syllabus**  
**Summer 2024**  
**Physics 1102-401**

**Instructor:** Dr. Randy Back

**Class Room:** RBN 4032

**Class Time:** MTR 1-4

**Email:** rback@uttyler.edu

**Office:** RBN 4047

**Phone:** (903) 565-5797

**Office Hours:** MTWRF 12:40-1. You should feel free to stop by my office any time. If I am available, I will be happy to help you.

**Course Topics:** This course is designed to give students hands on experience that will compliment the principles and concepts covered in lecture. Major topics covered will include Oscillations, Waves, Electricity and Magnetism, Circuits, Light and Optics.

**Text:** *College Physics*, by Knight 4<sup>th</sup> edition.

**Labs:** Each class period you will complete an experiment and write up a report that will be due before the next lab. The labs will be posted on Canvas and you will turn in the labs on Canvas.

**Make-up:** No late work will be accepted. If you have an excused absence you must make up the work before the due date.

**Grading:** Each lab report will be worth a maximum of 30 points. At the end of the semester all your points will be totaled and divided by the maximum possible. A(90%-100%), B(80%-89%), C(70%-79%), D(60%-69%), F(<60%).

#### **Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/rightsresponsibilities.php>

#### **Grade Replacement/Forgiveness and Census Date Policies**

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions that students need to be aware of. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

#### **State-Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

#### **Disability Services**

In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Services counselor. If you have a disability, including a learning disability, for which you request an accommodation, please contact the Disability Services office in UC 3150, or call (903) 566-7079.

#### **Student Absence due to Religious Observance**

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

#### **Student Absence for University-Sponsored Events and Activities**

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

#### **Social Security and FERPA Statement:**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

#### **Campus Carry**

"We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index.php>."

#### **UT Tyler is a Tobacco-Free University**

A more complete description of University policies is listed at the following website:

<http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf>

**Census Date is July 11.**

**Last Day to withdraw from a course is July 30.**

#### **Course Objectives/Student Learning Outcomes**

1. Critical Thinking Skills (includes creative thinking, innovation, inquiry and analysis, evaluation and synthesis of information)

The student will demonstrate their critical thinking skills by analyzing collected data and comparing their calculations to theoretical predictions. This Student Learning Outcome (SLO) will be assessed on the analysis part of their lab reports.

2. Communication Skills (includes effective development, interpretation and expression of ideas through written, oral and visual communication)

THIS STATEMENT MEANS TO PROVE YOUR WORK FROM START TO FINISH MAKING SENSE MATHEMATICALLY. (NO SKIPPING STEPS). YOUR WORK MUST BE THOROUGH AND IT MUST BE NEATLY WRITTEN.

The student will communicate an understanding of the physics principles discussed in class on free response essay questions. The questions will require the student to express a qualitative understanding through written communication of the physics concepts covered in class. This SLO will be assessed on the question section of their lab report.

3. Empirical and Quantitative Skills (includes the manipulation and analysis of numerical data or observable facts and results in informed conclusions)

The student will demonstrate the ability to collect empirical data on a physical system. This SLO will be assessed on the data section of their lab report.

4. Teamwork (includes the ability to consider different points of view and to work effectively with others to support a shared purpose or goal). This will be assessed by the instructor, based on the students' participation in the group. **If the student is late and/or not actively engaged in the experiment points will be deducted from the lab grade.**

## LAB SCHEDULE

July 8 Diameter versus Circumference

July 9 Buoyant Force

July 11 Speed of Sound

July 15 Reflection and Refraction

July 16 Image formation

July 18 Adding Resistors

July 22 Test 2 Review

July 23 Ohm's Law

July 25 Kirchhoff's Rules

July 29 Capacitor Lab

July 30 Test 3 Review

August 1 RC Lab

August 5 Right hand rules worksheet

August 6 Faraday's Law

August 8 Test 4 Review