PHYS-160-A01 (Summer 2021), University Physics I TENTATIVE SYLLABUS ONLINE ASYNCHRONOUS COURSE, May 17 – June 19

Instructor:

Dr. Branislav Djordjevic Room: Virtual, Blackboard Collaborate, or Zoom Email: <u>bdjordje@gmu.edu</u> Office hours: TBD

Recitation instructors:

PHYS 160 3A1 – Dr. Branislav Djordjevic PHYS 160 3A2 – Dr. Elena Murgu Ziu PHYS 160 3A3 – Dr. Elena Murgu Ziu PHYS 160 3A4 – Dr. Elena Murgu Ziu

Tutor: Dr. S. Fisher

Tutor Hours: Check: https://learningservices.gmu.edu/physics-tutoring/ for tutoring hours & location

| Text: | <i>University Physics I</i> , Young and Freedman (15 th , 14 th and 13 th editions are all fine) |
|-------------|---|
| Blackboard: | <u>202140.41744 PHYS-160-A01 (Summer 2021)</u> |

Homework and Quizzes:

You have two options to purchase access to Mastering, directly from Pearson: a) Mastering with e-Book: \$119.99, or b) Mastering without e-Book: \$69.99. However, you will register for Mastering and later access your homework FROM WITHIN BLACKBOARD! Your Mastering homework is integrated with your Blackboard course. Never log directly into Mastering website! First log in your Blackboard course, and then click on "Access Your Mastering Homework" link in the content. I will post detailed instruction about how to register. All Mastering assignments should be completed by the end of the last week of the course. I will open all assignments at once, and they will all be due by the last day of the course. NO EXTENSIONS WILL BE GIVEN BEYOND THE LAST DAY OF THE COURSE!

Graded Assignments:

| Midterm Exam | 30 % |
|--|------|
| Final Exam | 40 % |
| Mastering - Homework | 30 % |
| Recitation is not graded. (UP to the instructor how to run) | |
| Total | 100 |

| Grading Scale: | Percentage | Grade |
|-----------------------|------------|------------|
| | 97 | A+ |
| | 90 | Α |
| | 87 | B + |
| | 80 | В |
| | 77 | C+ |
| | 70 | С |
| | 60 | D |
| | <60 | F |

SUGGESTED Schedule FOR YOU TO STUDY (this course is asynchronous):

| WEEK | MONDAY | WEDNESDAY | THURSDAY |
|------|---|---------------------------------------|-------------------------------------|
| 1 | 5/17 | 5/19 | 5/21 |
| | Chapters 1 & 2: Introduction, Motion | Chapter 3: Motion in higher | Chapter 3: Motion in higher |
| | along the straight line; Free Fall | dimensions; Projectile Motion; | dimensions; Projectile Motion; |
| | | Circular Motion | Circular Motion |
| | | | Chapter 4: Newton's Laws |
| 2 | 5/24 | 5/26 | 5/28 |
| | Chapter 4: Newton's Laws | Chapter 5: Applying Newton's Laws | Chapter 6: Work and Kinetic Energy |
| | Chapter 5 : Applying Newton's Laws | | Chapter 7: Potential Energy and |
| | | | Energy Conservation |
| 3 | 5/31 | 6/2 FIXED DATE | 6/4 |
| | Chapter 7: Potential Energy and | Midterm Exam (Ch:1,2,3,4,5,6,7) | Chapter 9: Rotation of Rigid Bodies |
| | Energy Conservation | Chapter 8: Momentum, Impulse, | Chapter 10: Dynamics of Rotational |
| | Review | Collisions | Motion |
| | | Chapter 9: Rotation of Rigid Bodies | |
| 4 | 6/7 | 6/9 | 6/11 |
| | Chapter 10: Dynamics of Rotational | Chapter 13: Gravitation | Chapter 13: Gravitation (Cont.) |
| | Motion | | Chapter 14: Periodic Motion |
| | Chapter 11: Equilibrium | | _ |
| 5 | 6/14 | 6/16 | 6/18 FIXED DATE |
| | Chapter 14: Periodic Motion | Review - prepare for the Final | FINAL EXAM (comprehensive) |
| | | Exam | |

Goals and Requirements of the Course:

First semester of three-semester, calculus-based introductory physics sequence, designed primarily for science and engineering majors. The topics covered in this course are in Mechanics. This course also fulfills general education requirement in natural science.

This course is designed to assist students to comprehend the fundamental ideas of mechanics and to help them to apply the basic physical principles appropriately. Furthermore, the students will develop the ability to solve realistic physical problems. The secondary objective of the course is to improve students' symbolic reasoning skills to assist them in further enhancing their analytical skills.

Math 113 is a prerequisite of this course. Students are expected (with no exception) to have the knowledge of first semester calculus. It is assumed that all students have the knowledge of high school algebra. Math 114 is a co-requisite of this course.

Lecture Format: Recorded Lectures will be posted **ONLINE** for you to watch, according to the schedule above. I will have my live office hours during which we can discuss anything related to the topics covered.

Exams:

- There is one midterm exam and the final. There are NO make-up exams! There is NO extra-credit in this course.
- Students must install **Respondus Lockdown Browser**, to use for taking exams. Respondus Monitor (i.e. webcam, will NOT be required. The instructions about how to do this are given here: https://its.gmu.edu/knowledge-base/how-to-install-and-use-the-respondus-lockdown-browser/
- You **MUST have a working computer** to work in this course. Phone cannot be used phone will not let you do the exams.
- The exams will be **timed**, you will have **one attempt**, but you will have larger time frame to start your exam at the convenient time for you, on the exam date you see in the schedule.
- Exams will be multiple-choice questions (with Respondus Lockdown Browser) + you will have to upload your detailed written solutions after you to justify your choices in the multiple-choice exam (does not require Respondus Lockdown Browser).

Honor Code:

Copying homework, use of online homework solutions or the instructor solution manual, giving or receiving assistance on exams, posting exam questions online and asking for solutions, viewing answers on exam questions during the exam, participating in any kind of discussion groups during the exam, and any other improper conduct will be considered a violation of the Honor Code. Students who cheat in any way will be reported to the GMU Honor Committee, without exception!

Class Etiquette:

Our communication must be courteous, polite, respectful, and precise. Always sign your emails with your full Name. When asking about specific topic, or problem – be it from the homework, or from the book, be specific, instead of letting your instructor search to find the problem you are referring to.

University Resources

Learning Services <u>https://learningservices.gmu.edu/</u> Student Support and Advocacy Center <u>https://ssac.gmu.edu/</u> Counseling and Psychological Services <u>https://caps.gmu.edu/</u>

Important Dates

Look for **Session A: 5 week** here: <u>https://registrar.gmu.edu/calendars/summer-2021/#dates</u>