

## PHYS 251: University Physics I Spring 2010 - 4 credits\* (Online Course)

\* As clearly shown in the NDUS Common Course Numbering matrix, the PHYS 251/251L combination will only transfer in as 4 total credits to UND and LRSC. To view the CCN matrix see <http://www.ndus.nodak.edu/students/ccn/matrix/discipline.asp?id=38>.

**Instructor:** Dr. Thomas Gonnella  
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**Class Meeting Time:** Lectures will be made available online after 5 pm on Mondays and Wednesdays. Each lecture will be available for at least one week.

**Recommended Text:** **Fundamentals of Physics**, Halliday and Resnick, Wiley, 8<sup>th</sup> Ed. (2008), 7<sup>th</sup> Ed (2005), or 6<sup>th</sup> Ed (2003).

**Course Objective:** The Physics 251 course is designed to present the students with the fundamentals of physics from a structured calculus-based approach.

**Course Description:** The goal of this course is to cover the first fourteen chapters and chapter eighteen of the textbook. This encompasses measurements, units, error analysis, motion in one dimension, vector algebra, motion in two dimensions, laws of motion, work, energy, momentum, circular motion, torque, static equilibrium, moment of inertia, universal gravitation, fluids, and heat.

**Method of Evaluation:**

1 <sup>st</sup> Hour Exam (02/02/10) + Combined Problem Sets	22%
2 <sup>nd</sup> Hour Exam (03/02/10) + Combined Problem Sets	22%
3 <sup>rd</sup> Hour Exam (04/06/10) + Combined Problem Sets	22%
4 <sup>th</sup> Hour Exam (05/04/10) + Combined Problem Sets	22%
<u>5<sup>th</sup> Hour Exam (TBA) + Combined Problem Sets</u>	<u>22%</u>
Best 4 Scores	88%
Final Exam (TBA – finals week)	12%

**Grading:** A > 90% B > 80% C > 70% D > 60%

**Homework:** Homework is completely optional. Throughout the semester homework problems will be assigned with clear due dates. Unless otherwise stated, the assignment needs to be electronically submitted and received before 5 pm on the due date. The answers to the homework will be provided at the beginning of the next posted lecture. The percentage from combined total of all the homework leading up to an exam can be averaged with the resulting percentage on the exam. If the percentage from the combined homework is less than the percentage on the exam then the homework percentage is dropped and the percentage on the exam becomes the score used for grade determination.

**Exams:** The timeline for four of the section examines are clearly indicated above and will be conducted with an approved exam proctor. The final exam will be comprehensive and needs to

be scheduled with the instructor for a two-hour period during finals week (05/10/10-05/14/10). If it is necessary to miss an exam, arrangements for a make-up session need to be made with the instructor and proctor prior to the scheduled exam. If the exam is missed without prior arrangements made, a score of zero will be given. If the make-up exam is missed, the resulting score will also be a zero. The instructor does reserve the right to deny any student a make-up exam time. All exams will be taken using \$13 calculator (TI-30Xa) approved by the instructor and proctor.

**Email:** It is the responsibility of each student to check and maintain their own their e-mail accounts throughout the day so the information sent by the instructor can be received in a timely manner.

**Study Groups and Academic Dishonesty:** The students are encouraged, but not required, to form study groups in order to complete the assigned homework. In this type of environment, ideas and approaches to particular problems are exchanged and similar answers to the homework problems result. This is an acceptable practice. Contrary to this approach, is the practice of copying answers off of another student's homework assignment or lab, which is considered to be academically dishonest, and will not be tolerated. Academic dishonesty on any exam will also be dealt will severely.

**English Proficiency and other Academic Concerns:** The State Board of Higher Education requires that all faculty members and teaching assistants in the NDUS have appropriate communications skills, including the ability to speak English clearly and with good pronunciation. Students who experience problems have the following obligation:

1. Discuss the situation with the first instructor to see if a resolution can be reached.
2. If the problem is still not resolved with the instructor, contact the instructor's Division Chair for assistance.
3. If the situation is still not resolved, the matter should be brought to the attention of the Vice President for Academic Affairs.
4. In the unlikely event that the situation has not been resolved through this procedure, students may contact the President of the University for final resolution.

**Students with Disabilities:** As required by Section 504 of the Rehabilitation Act and the ADA, appropriate and reasonable accommodations will be made for all students with documented disabilities (LD, Orthopedic, Hearing, Visual, Speech, Psychological, ADD/ADHD, Health-Related, & Other) that request those accommodations to ensure their full access to the academic opportunities of Mayville State University. If you need accommodations in this course because of a disability, need special arrangements in case the building must be evacuated, or if you have emergency medical information to share, please inform your instructor as soon as possible. The information will remain confidential. Accommodations and alternative format print materials (large print, audio, disk, or Braille) are available through Greta Kyllö, Disability Support Services – [greta.kyllo@mayvillestate.edu](mailto:greta.kyllo@mayvillestate.edu).