



A college of the Riverside Community College District

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**Norco College**

A college of the Riverside Community College District

**PHY-4A**

**Section: 34418**

**Spring 2018**

**Instructor:** Ms. Louise Daniels

**Email:** Louise.Daniels@rcc.edu

**Class Hours:** TTh 6:00PM - 7:25AM

**Class Location:** ST 211

**Lab Hours:** W 6:00PM - 9:10PM

**Lab Location:** HUM 201

**Textbook:** University Physics, 13th Edition by Young and Freedman, but you may use the 12<sup>th</sup> or 11<sup>th</sup> edition instead

**Co-requisite:** Math 1A

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**COURSE DESCRIPTION:** Physics 4A is a calculus-based introduction to Newtonian mechanics, including the concepts of motion, forces, vectors, work, energy, momentum, rotational dynamics, static equilibrium, gravitation, and periodic motion, with an emphasis on applications and problem solving. This course includes both a lecture component and a laboratory component. Homework will be done online using Mastering Physics. See below in the homework section for more details. The course will include 3 focused exams and a comprehensive final exam. Exam #1 will cover Ch. 1-3 of the text, Exam #2 Ch. 4-7, and Exam #3 Ch. 8-11. The final exam will cover Ch. 1-11, 13-14 on Wednesday, May 30, (8:05 pm - 9:10 pm) and Tuesday, June 5 (6:00 pm - 7:25 pm) as a two-part final.

**COURSE POLICIES:** Only those who are enrolled may attend the class. Roll will be taken during each class and one unexcused absence may result in the student being dropped from the course. Absences are only excused with documentation, such as a doctor's note. However, do not rely on the instructor to drop you from the course. If you choose to drop the course, it is your responsibility to fill out the necessary paperwork. Students are expected to observe *The Standards of Student Conduct* as listed in the *Student Handbook*. Students engaging in willful destruction of property may be removed from the course and subjected to further punitive action. Makeup exams are only given for excused absence and you must notify the instructor of your absence for an exam as soon as possible. Missing an exam for an unexcused absence will result in a zero for the exam. There are no makeup labs. You will receive the average grade of all the other labs for the first two labs missed if you have an excused absence and a zero for any subsequent missing labs. Please silent your cell phone during class.

**EXPECTATIONS:** Students are expected to demonstrate substantial comprehension of the subject matter as well as an ability to perform mathematical analysis of physical systems using methods conveyed during the course. To this end, students are strongly encouraged to attend every class meeting, take notes, participate in all laboratory activities, read the text in detail, and complete all homework assignments. Unless otherwise indicated, no reference materials will be allowed during the exams. All exams must be completed during the designated times. Quizzes may be given out at random with the results incorporated into the subsequent exam score. All lab activities must be completed during the designated times, and you will lose points for any part of the lab that was not done. Unless approved by the instructor, leaving the lab early will result in a substantial grade penalty.

**HOMEWORK:** The Homework will be done online using Mastering Physics (<http://www.masteringphysics.com>). When you purchase a new textbook from the campus bookstore, you will also get an account for Mastering Physics. The class ID is MPDANIELS34418, and the edition of the book you will need to select in order to enroll is 13e. For those who bought used book, you may purchase an account on the Mastering Physics website with or without the e-book.

**CHANGES TO SYLLABUS:** This syllabus is subject to change made by the instructor and posted or distributed during any class session.

**GRADING:**

Homework	15%
Lab	15%
3 Exams	15% each total 45%
Final Exam	25%

Overall percentage (%)	Final grade
> 90	A
80.0 – 89.99	B
70.0 – 79.99	C
60.0 – 69.99	D
< 60	F

**Physics 4A Tentative Schedule – Spring 2018**

Month	Lecture (TTh)	Laboratory (W)
Feb.	13: 1.3-1.5, 2.1	<b>14: Intro to Motion</b> 15: 2.2-2.4
	20: 2.5, 1.7 <i>Introduction to Mastering Physics HW Due</i>	<b>21: Changing Motion</b> 22: 1.8-1.10
	27: 3.1-3.3 <i>HW #1 Ch 1-2 Due</i>	<b>28: Vectors</b>
Mar.		1: 3.3-3.4
	6: 3.5, Applications: Projectile Problems <i>HW #2 Vectors Due</i>	<b>7: Projectile Motion</b> 8: Review for Exam 1
	13: 4.1-4.4 <i>HW #3 Ch 3 Due</i>	<b>14: Exam #1 Ch. 1-3</b> 15: 4.5-4.6, 5.1-5.2
	20: 5.3-5.4	<b>21: Newton's 2<sup>nd</sup> Law</b> 22: 6.1-6.3
	27: 6.4, 7.1-7.2 <i>HW #4 Ch 4-5 Due</i>	<b>28: 7.3-7.5</b> 29: Applications: Work-Energy Problems
Apr.	3: Review for Exam #2 <i>HW #5 Ch 6-7 Due</i>	<b>4: Exam #2 Ch. 4-7</b> 5: 8.1-8.3
	<b>Spring Break</b>	<b>Spring Break</b>
	17: 8.4-8.6	<b>18: Momentum Conservation</b> 19: 9.1-9.3
	24: 9.4-9.5 <i>HW #6 Ch 8 Due</i>	<b>25: Ballistic Pendulum</b> 26: 10.1-10.4
May.	1: 10.5-10.7 <i>HW #7 Ch 9 Due</i>	<b>2: Rotational Motion</b> 3: 11.1-11.4
	8: 11.4-11.5 <i>HW #8 Ch 10 Due</i>	<b>9: Equilibrium Problems</b> 10: Review for Exam 3
	15: 13.1-13.4 <i>HW #9 Ch 11 Due</i>	<b>16: Exam #3 Ch. 8-11</b> 17: 13.4-13.5, Gravitational Problems
	22: 14.1-14.3 <i>HW #10 Ch 13 Due</i>	<b>23: Simple Harmonic Motion</b> 24: 14.4-14.6
	29: 14.7-14.8 <i>HW #11 Ch 14 Due</i>	<b>30: Review for Final and First Half of Final Exam</b> 31: NO CLASS
Jun.	5: Second Half of Final Exam	

**FINAL EXAM:** Wednesday, May 30, (8:05 pm - 9:10 pm) and Tuesday, June 5 (6:00 pm - 7:25 pm)

**STUDENT LEARNING OUTCOMES:** Upon successful completion of the course, students should be able to:

1. Analyze the kinematics of objects moving at constant velocity in one- and two-dimensions.
2. Apply Newton's Laws to analyze the dynamics of objects.
3. Apply the concepts of energy- and momentum-conservation to solve mechanical situations.
4. Integrate gravitation into Newton's laws of motion to solve related problems.
5. Record and analyze measured data in a laboratory environment by applying concepts related to material presented in lecture.

**ACADEMIC INTEGRITY:** Norco College is committed to maintaining academic integrity throughout the college community. Academic dishonesty is a serious offense that can diminish the quality of scholarship, the academic environment, the academic reputation, and the quality of a Norco College degree. The Student Handbook 2014-2015 states:

In cases of academic dishonesty by a student, a faculty member may

- 1) Reduce the score on test(s) or assignment(s);
- 2) Reduce the grade in the course;
- 3) Fail the student in the course if the weight of the test(s) or assignment(s) warrants course failure;
- 4) Recommend suspension from the course (see further details in Student Handbook, 37).

Academic dishonesty includes but is not limited to:

- a) Plagiarism – the intentional presentation of words, ideas or work of others as one’s own. This includes but is not limited to: copying homework, using a work or portion of a work written or created by another but not crediting the source and using one’s own work completed in a previous class for credit in another class without permission. The usual consequence of academic dishonesty is failure of the course and referral of the case to the Dean of Student Services for additional disciplinary action. Students may discuss assignments but are expected to complete all work independently.
- b) Cheating During Examinations – includes unauthorized use of electron devices, copying from another, looking at another student’s exam and opening books when not authorized.

Any of these practices could result in charges of academic dishonesty.

**ACCOMMODATIONS FOR DISABILITIES:** Norco College provides services to students with disabilities through the Disability Resource Center (DRC) located in the Center for Student Success Building. To request academic accommodations due to a disability, please visit the DRC or contact the DRC staff at 372-7070. A DRC staff member will confidentially review your concerns with you to determine any required accommodations. Once your accommodations are approved through DRC, please bring your DRC documentation(s) to me so that we may discuss them.

**ADDING THIS CLASS:** Students wanting to add this section will need to be provided with a four-digit add/authorization code. If you receive an add/authorization code, you are responsible for completing the add process **before** the deadline to add. This deadline can be found in the Schedule of Classes available online. Add codes can be processed through your WebAdvisor account. **If you fail to add the class by the deadline, you are not officially enrolled and college policy prohibits you from continuing to attend class.**

Be aware that your failure to pay fees/fines, to document prerequisites, to clear academic holds, or to navigate personal problems may hinder you from adding this section. Please allow sufficient time to take care of these issues **before the deadline to add**. Adding this course after the published deadline will require documented extenuating circumstances involving severe illness, accident, or death.

The use of an add/authorization code issued to another student violates the Student Code of Conduct and the student will be referred to the Dean of Student Life for disciplinary action. The unauthorized use of an add code is grounds for removal from the course.

**DROPPING THIS CLASS:** You may withdraw from this course by using WebAdvisor prior to the drop deadline. The deadline is available on WebAdvisor by selecting “My Class Schedule/Deadlines” after logging in. If there is a hold restricting use of WebAdvisor for this purpose, you may bring a completed ADD/DROP card to the Admissions counter of the college and complete the process there. It is the student’s responsibility to drop this class should he/she decide no longer to attend.

**FOR TECHNICAL ASSISTANCE:** The 24/7 help desk number for all student and instructor Blackboard-related issues, including streaming media, is **(866) 259-7271**. There is also a new online support portal URL students and instructors can use: <http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8077>. The District Help Desk for computers, software, etc., is (951) 222-8388. For WebAdvisor assistance, please contact Admissions & Records at 951-372-7003.

**COLLEGE SAFETY AND POLICE:** You may request a police escort to walk you to your car. To contact campus police for non-emergencies call (951) 222-8171. For emergencies dial 911.

**VIOLENCE ON CAMPUS:** Norco College does not tolerate any violence or implied violence. A threat of violence includes any behavior that by its very nature could be interpreted by a reasonable person as intent to cause physical harm to self, another individual, or property. Violence or the threat of violence against or by any **student** or employee of the District or any other person is unacceptable **and will not be tolerated**. Should an individual on District property, who is not an employee or student, or a student or employee of the District, demonstrate or threaten violent behavior, s/he may be subject to criminal prosecution (AP 3510 Workplace Violence and Safety).

If you are the victim of any violent, threatening, or harassing conduct, any witness to such conduct, or if you receive a report of such conduct, immediately report the incident to the supervisor of College Safety and Police (951) 222-8171. (AP 3510 Workplace Violence and Safety)

## STUDENT SERVICES

Norco College offers excellent services for all students. These services include help with disability accommodations, financial aid, finding jobs, academic counseling, health services, veterans’ services, tutoring and [more](#). Here is a partial list of resources available to you:

- **Disability Resource Center (DRC)**  
Center for Student Success (951) 372-7070  
[drc@norcocollege.edu](mailto:drc@norcocollege.edu)
- **Veterans Services**  
Student Services Building, First Floor (951) 372-7142  
[veterans.services@norcocollege.edu](mailto:veterans.services@norcocollege.edu)
- **Student Support Services**  
Student Services Building (951) 372-7149  
[hortencia.cuevas@norcocollege.edu](mailto:hortencia.cuevas@norcocollege.edu)
- **EOPS/CARE (Extended Opportunity Programs and Services/Cooperative Agencies Resources for Education)**  
Center for Student Success (951) 372-7128  
[eops@norcocollege.edu](mailto:eops@norcocollege.edu)
- **CalWORKs (California Work Opportunity and Responsibility for Kids)**  
Center for Student Success (951) 372-7052  
[norcocalworks@norcocollege.edu](mailto:norcocalworks@norcocollege.edu)

- **Learning Resource Center (LRC)**  
Wilfred J. Airey Library, First Floor (951) 739-7896  
[lrc@norccollege.edu](mailto:lrc@norccollege.edu)
- **Student Health and Psychological Services**  
Wilfred J. Airey Library Building, Lower Level (951) 372-7046  
[lisa.mcallister@norccollege.edu](mailto:lisa.mcallister@norccollege.edu)
- **Student Financial Services**  
Student Services Building, First Floor (951) 372-7009  
[maria.gonzalez@norccollege.edu](mailto:maria.gonzalez@norccollege.edu)

#### Special Programs:

- **Honors Program**  
Ana-Marie Olaerts (951) 739-7815  
[ana-marie.olaerts@norccollege.edu](mailto:ana-marie.olaerts@norccollege.edu)
- **John F. Kennedy Middle College High School**  
Erin Cole, Student Advisor (951) 738-2200 ext. 6008  
[ecole@cnusd.k12.ca.us](mailto:ecole@cnusd.k12.ca.us)
- **Puente**  
Contact Counseling office for information (951) 372-7101
- **Study Abroad**  
Jan Schall, Director (951) 222-8340  
[jan.schall@rcc.edu](mailto:jan.schall@rcc.edu)
- **Talented Tenth (T3P)**  
Contact Counseling office for information (951) 372-7101
- **STEM (Science, Technology, Engineering and Math) Scholars**  
(951) 739-7803  
[STEM@norccollege.edu](mailto:STEM@norccollege.edu)
- **Tutorial Services**  
Wilfred J. Airey Library Building, Lower Level (951) 372-7143  
[norcotutorial@norccollege.edu](mailto:norcotutorial@norccollege.edu)