

Physics 211
Physics for Scientists and Engineers I
Fall, 2021

Meets:

Sect. 1: 8:00 am – 9:50 am
Mon., Wed., Fri.
150 Meldrum Hall

Instructor:

Dr. Christopher Cline
278 Meldrum Hall
832-2346
ccline@westminstercollege.edu

Conditions of enrollment: A passing grade of C- or better in Math 144 (or Math 143 or Math 141/Math 142) is a prerequisite for all students enrolled in this course. Also, concurrent enrollment or a passing grade of C- or better in Math 201 (Calculus I) is required.

Textbook:

Required: *Physics for Scientists and Engineers: A Strategic Approach, 4th Edition*, Randall D. Knight
Workshop Physics Activity Guide, Modules 1 & 2, Priscilla W. Laws
Free & online: *OpenStax College Physics*,
Other readings as provided

How to get help: My [office hours](#) are **MW 10:00 am - 12:00 pm**, **TWTh 1:00 pm - 3:00 pm**, and **M 3:00 pm - 5:00 pm**. If you can't come during any of these hours, I will be happy to make an appointment with you for another time. For me, *the most enjoyable aspect of teaching is working with students one-on-one. Please, please come see me often—especially if you run into difficulties with concepts.*

Course Description and Philosophy

Course Objectives and Goals:

1. Development of Transferable Scientific Skills
 - a. Ability to work well in a group
 - b. Research and development skills
 - i. Development of conceptual understanding through observation of physical phenomena
 - ii. Reasoning about physical phenomena on the basis of available evidence
 - iii. Use of experimental data in the development, testing, and refinement of theoretical models
 - iv. Evaluation of data sets containing extraneous information and/or noise in regard to identifying relevant/important information.
 - v. Experimental design
 - vi. Scientific writing ability
2. Applying course material in quantitative problem solving
3. Increased comfort in using educational technologies

Physics: From the practical to the profound: Physics is *not* a large collection of facts or formulas to be memorized. Physics is also not the dreaming up of theories in the absence of data, or the exposé of truth, whatever that means. Physics is not mathematics; in physics, math is demoted from the wonderful art that it is to a necessary tool for dealing with quantitative predictions and data treatment. And the laws of physics do not command objects to behave in certain ways.

Physics is a science that attempts to unify elements of the natural world by means of observation, mathematics, and the use of precise language. Using methods developed by physicists, we can describe many events that occur in our everyday lives. The principles of physics provided a basis for most of the technologies that are an essential part of modern life. In this sense, physics is *practical*. Many laws developed by physicists, such as the law of conservation of energy, are of tremendous practical importance. These same laws also help physicists understand the very tiny constituents of matter as well as the motions of giant clusters of galaxies. Thus the study of physics helps us understand some fundamental relationships between the matter in our surroundings and the evolution of the universe. In this sense physics is *profound*. You are about to begin your own exploration of the natural world using some of the concepts, tools, and methods commonly employed by physical scientists. Thus, you are beginning what we hope will become a grand journey from the practical to the profound that will continue long after you have completed introductory physics.

The Workshop Physics Philosophy

*I hear, I forget.
I see, I remember
I do, I understand*

Anon

In traditional science courses, attending lectures, reading a textbook, and solving problems are the primary learning activities. These activities are usually supplemented by a weekly laboratory session taught by an instructor other than the lecturer. The emphasis in traditional courses is on *what* you know.

Physics 152 will be taught using the award-winning Workshop Physics method developed by Dr. Priscilla Laws of Dickinson College and used at hundreds of colleges and universities across the country. The workshop method is based upon the simple principle that understanding comes not from listening but from doing.

At its heart, physics is a science that is based upon experimentation; physics was developed through a process of observation, prediction, and refinement through further experimentation. In this course we will take a very similar approach. Instead of reading and memorizing the laws of physics from a textbook (and taking someone else's word for it that they are correct), we will seek to discover and verify them for ourselves during in-class activities. We'll use a whole host of high-tech tools such as computer driven sensors, video software, and spreadsheets to both acquire and analyze data. Abstract physics concepts will make much more sense when you can plot data instantaneously on the computer and model them using Excel. Your learning will go beyond simply memorizing physics equations; you will develop a conceptual understanding of physics as well as concrete reasoning and computer skills that will be useful in any other science course that you take. The critical question in this course is not "What do you know" but rather "*How* do you know what you know?"

Finally, let us emphasize that you are not losing anything by not being taught in the traditional lecture format - quite the contrary. Students who have completed workshop based general physics courses have been shown to perform far better than their peers who have gone through traditional courses. Workshop physics students demonstrate a far better overall understanding of physics, and, although it may seem surprising, their ability to solve traditional textbook problems is also superior. We truly believe that you will find workshop physics to be an enriching, rewarding, and, we hope, an enjoyable experience.

Written and Oral Work

Grading:

Your grade will be based on a professional judgment of your work using the following weighting scheme:

15%	Exam 1	Friday, September 24, 150 Meldrum
15%	Exam 2	Friday, November 12, 150 Meldrum
15%	Exam 3	Friday, December 10, 150 Meldrum
15%	<i>Written Homework</i>	
15%	<i>Activity Guide Entries</i>	
15%	<i>Formal Laboratory Project</i>	
10%	<i>Course Engagement</i>	

Your final letter grade will be determined from percentages in the following manner:

93 to 100	A	(superior)
90 to 92.9	A –	(excellent)
87 to 89.9	B +	(extremely respectable)
83 to 86.9	B	(very respectable)
80 to 82.9	B –	(respectable)
77 to 79.9	C +	(very acceptable)
73 to 76.9	C	(acceptable)
70 to 72.9	C –	(tolerably acceptable)
67 to 69.9	D +	(passable)
63 to 66.9	D	(barely passable)
60 to 62.9	D –	(hardly passable)
0 to 59.9	F	(unacceptable)

Activity Guide Entries: An Activity Guide has been developed to support the Workshop Physics approach to learning. In-class written work will consist primarily of documenting your class activities by filling in the entries in the "activity" spaces provided. You are encouraged to keep your own notes in the margins of the Activity Guide. *You should not make a practice of waiting until after class to fill in your guide.* Some corrections to the Activity Guide pages are available on the class resources; your entries should be updated before each class period.

Activity Guide entries describe observations, derivations, calculations, and answers to questions. In the guide, a group of numbers signifying the unit, section, and activity number followed by the bold word **Activity:** (e.g., **5.2.2. Activity: Applying a Constant Force**) indicates that a series of entries using data, words, sketches, or graphs is requested. Although you may use the same data and graphs as your partner(s) and discuss concepts with your classmates, all entries should reflect *your own understanding* of the concepts and the meaning of the data and graphs you are presenting. *Thus each Activity Guide entry must be written in your own words. Students who copy Activity Guide entries from current or old Guides will be reported for plagiarism.* The first such occurrence will result in a score of zero on that entry; the second occurrence will result in failure of the course.

Activity Guide Units are due by 5:00 p.m. two days after the Unit work is completed, or on the following Monday if the due day falls on a weekend (or an Exam day). For example, if a particular unit is finished in class on Monday, the Activity Guide is due by 5:00 p.m. on the following Wednesday. If a unit is finished in class on Friday, the Activity Guide is due by 5:00 p.m. on the following Monday. Late Activity Guides take teaching assistants and instructors much longer to review. In order to discourage late work, the grade on the Activity Guides will be reduced by 10% for each day or part of a day after the due date unless a written notification of illness is provided by Student Services.

Grading of Activity Guide Entries

You will be asked to submit each Workshop Physics unit for review at the same time that unit's homework is due. Your instructor will examine the unit for completeness and quality, *but not necessarily the accuracy of your understanding of the physics. It is ultimately your responsibility to see that your entries reflect a sound understanding of the phenomena you are observing and analyzing.* Scores will be awarded based on using complete sentences, clear expository writing, proper labeling of graphs and tables, the use of appropriate units with numbers, inclusion of calculations, the expression of results to the correct number of significant figures, and adherence to instructions. For one out of every few units, a selection of questions will be graded for accuracy, and these units will be weighted more heavily into your Activity Guide grade. For additional information, see the document "[Activity Guide Grading Rubric](#)".

Since these Activity Guide entries will be open to you when you take examinations, *it is to your advantage to create a set of entries and marginal notes based on in-class discussions and textbook readings that are useful references as you complete examinations.*

Homework Assignments: There will be a home assignment to complete for each unit; the assignments will be available from your instructor's web page. Some of the homework assignments will consist of questions based on class activities, while others are fairly difficult mathematical problems. Some of these may be adapted from problems in your textbook. Sometimes you will need to finish activities you started during class before starting the homework. At times you will need to use software (Excel or Logger Pro) to do computer assignments; all software is provided to you for free by download or through Westminster Anywhere. At times you will need to come back to the classroom to do computer assignments. This out-of-class work will typically take 2 or more hours to complete after each class session. A typical student can expect to work about 6 to 8 hours each week out of class, and spend anywhere from 15 to 60 minutes on each homework problem.

What is the Purpose of Regular Homework?

There are two reasons why we assign homework on a regular basis. First and for most doing regular exercises right after class activities helps you clarify, retain, and extend the concepts developed during in-class activities. Our research has shown that students who do well-designed homework exercises on a regular basis learn much more physics than those who don't. The second reason for the homework assignments is to help both you and your instructors assess your progress in the course on a regular basis. For this reason we grade the homework so we can give you continuous feedback.

We have noted in the past that there is a strong correlation between the steady effort needed to successfully complete homework and performance on examinations.

It is often difficult for beginning physics students to appreciate that the primary purpose of assigned problems in physics is *absolutely not* to see if you can get the right answer. Rather, it is for you to practice and then demonstrate that you have learned 1) how to *determine* the fundamental physical principles that are involved in a described situation and 2) how to *apply* those principles in a *disciplined* and *orderly* fashion. Of course, if you have learned how to do these things, you should expect to get the right answer too, but that is - *really* - of secondary importance. You will find - indeed, you probably *have* found - that, given time, an open book, lots of worked examples, and knowledge of the correct answer, it is very often possible to "get the answer" without the slightest understanding of what you are doing. Please guard against this; it is a *complete* waste of your time because it does not prepare you for, and it obviously will not work on, exams.

Accordingly, we are not - and *you* should not be - satisfied with problem "solutions" that simply consist of a series of mathematical manipulations leading to a result. Instead, your problem solutions should be "presented." By this we mean that they should be readable by someone who does not have access to the problem statement; should include written explanations and thoughtful comments about *what* you are doing and, especially, *why*; should use well-defined and

consistent notation (employing unique and meaningful subscripts and superscripts as necessary); should be accompanied by neatly drawn and carefully labeled diagrams; and should flow in a logical and orderly progression down the page. They should use more space for the written explanatory information than for the mathematics! They should *not* include lengthy, multiple-step, purely *mathematical* manipulations because it only serves to *obscure* the physics. Do this kind of work on scratch paper and simply say something like "solving this equation for v , substituting the result into the equation for F , and simplifying we obtain..."

Handwritten Homework

Homework is due by 5:00 p.m. two days after the Unit work is completed, or on the following Monday if the due day falls on a weekend (or an Exam day). For example, if a particular unit is finished in class on Monday, the homework is due by 5:00 p.m. on the following Wednesday. If a unit is finished in class on Friday, the homework is due by 5:00 p.m. on the following Monday. Late homework takes teaching assistants and instructors much longer to grade. In order to discourage late work, the grade on the homework will be reduced by 50% for each day or part of a day after the due date, unless previously arranged with the instructor. After one day, *no more late homework will be accepted*, as the solutions to the homework will be posted at that time so that other students may review them.

All homework will be emailed to your instructor as a PDF file. Handwriting your homework on 8 1/2" \times 11" sheets of paper will likely still be the most convenient for you. The number of each exercise in the assignment should be listed to the left of each answer. All contents of a problem must appear in order; for example, do not attach a printed graph to the end of your homework if it belongs with a question that appears in the middle. Also, all problems should appear in order. Some students choose to type the majority of their assignment and insert pictures of handwritten drawings or mathematical work directly into their document; this is acceptable as long as everything is submitted as one PDF. A sample of the format is shown below.

Name	→ Lindsay Learner
Due Date	→ 2/28/22
Course and Section	→ Physics 152-01
Unit 18, Problems 1-9	← Unit and problem number
18.1)	_____

18.2)	_____

etc.	

Grading of Homework

There will typically be between 5 and 10 problems for each homework assignment. The problems will be a mix of conceptual questions that will require a short essay, and mathematical problems (which will include problems where data is collected and/or analyzed using the computer). Some problems may only be graded for "honest effort", but not as to whether they are correct or not. Homework will be graded holistically using the provided rubric, on a 10-point scale. The rubric focuses on accuracy of the physics concepts, written explanation, presentation of mathematics, and completion. Solutions to the problems for each homework assignment will be provided on the [Homework Assignments](#) web page.

In the case of mathematical problems, a properly worked problem should contain:

- A brief description of the physical situation in clear, grammatically correct English.
- A list of the known and unknown quantities (with proper symbols, significant figures, and units).
- A running narrative, with complete English sentences, describing the step you take in solving the problem. The narrative should also include a description of the physics concepts being used (i.e. Newton's 1st Law, Conservation of Energy, etc.).
- Diagrams or drawings of the physical situation (graphs, free-body diagram, etc.).
- A list of the equations used, in symbol form.
- The equations solved in symbol form before substituting in any numbers. (You'll get better and better at this, we promise, but you must practice.)
- Calculations shown with the numbers substituted into the equations having the correct units and number of significant figures.
- The final answer clearly shown (usually with a box around it), with the correct units and number of significant figures.
- A check of the final result to make sure that it makes sense (e.g., having a snail crawling at 25 m/s would indicate a mistake was made somewhere).

For additional information, see the document “Problem Solving Steps and Rubric” on the [Class Resources](#) web page, as well as the “[Homework Grading Rubric](#)”. Homework will usually be graded by your instructor, but also on occasion by an upperclassman who has taken introductory physics. Your grader may occasionally make an error in judgment or a mistake. *If you think this is the case, feel free to ask the instructor to review your homework assignment.*

Late Homework

Homework solutions will be posted on the [Homework Assignments](#) web page one day after the homework due date. **No late homework will be accepted after the solutions are posted.** In cases where you have an extended illness lasting more than three class periods *with a note from student services*, you may negotiate a due-date for your make-up homework with your instructor.

Extra Credit for Solution Review and Reflection

A "good" score on an assignment does not necessarily mean that the problems were done correctly. It is the student's responsibility to make sure that they understand all the problems. Solutions to the problems for each homework assignment will be posted on the [Homework Assignments](#) web page; it is the student's responsibility to compare their assignment to the solutions and correct their own work. Though solution sets are not allowed to be used during the exam, your own handwritten corrections and notes are allowed. You may compare your graded homework to the solutions and submit a written, audio, or video reflection explaining what you missed and how you could improve the assignment. Don't just copy the solutions; explain in complete sentences what you missed, e.g. “I forgot to write the units in each step” or “I solved the the problem assuming [this] but I should have considered [that]...” A complete reflection will earn you up to 1 additional point on the homework assignment (not to exceed 10 points). Homework reflections are due at the same time as the next unit's homework, OR the day before an exam that uses that unit's homework, whichever comes first.

Academic Honesty

You are encouraged to discuss and work on homework with classmates. **However, you are not allowed to post your problem to the internet to be solved and are not permitted to solicit answers to assignment problems from any source outside of our class.** It is against class policy *and* copyright policy to use any “answer sharing website” such as Chegg to search for the resolutions to your homework problems.

Even after discussing with classmates, you should write out answers to questions and problem solutions using your own format, equations, and words to reflect your understanding of the assignment. As is the case for Activity Guide Entries, *any student who copies homework from another student or other source will be reported for plagiarism.* The first such occurrence will result in a score of zero on that homework and notification of the Dean of Students; the second occurrence will result in failure of the course.

Course Project: During the last two months of the course, you will be required to work with two or three other classmates to complete a course project on a topic covered in the course. An important requirement is that these projects have both an experimental and theoretical aspect to it. The goal of the project is to help you consolidate or extend your understanding of an introductory physics topic of interest to you to learn more about the process of doing collaborative research in physics.

Each formal report must be word-processed with data and graphs included in appropriate places in the main body of the text rather than tacked on at the end. Each project report will be graded and returned for revision. After you revise it, you will resubmit it and the instructor will assign a second grade to it. The project procedures and due dates for the reports given on the project information page and in the course outline. *Late projects will not be accepted.*

Examinations: There will be **three in-class examinations** during the semester. Questions on these examinations will be based primarily on course activities and homework assignments. Emphasis will be placed on demonstration of the ability to apply the concepts and techniques learned to **new** situations. Material for the examinations will be drawn from the Activity Guide, assigned problems, and suggested readings as well as from class discussions and oral presentations by instructors. Unless we specify otherwise, *examinations will be open to the Activity Guide, your graded homework, and other written material and notes that you generated during the course.* You may also use an electronic calculator and at times you may be required to use one of the computers to perform analyses and make calculations during examinations. *Examinations will not be open to your textbook or other books, published exam or homework solutions, and other people's ideas.* You may not work with or gain assistance from anyone except your instructor.

Cheating on exams will not be tolerated. Again, the first such occurrence will result in a score of zero on that exam; the second occurrence will result in failure of the course.

Working old examinations, additional problems, and previously assigned problems, as well as reviewing assigned readings and your written Activity Guide work, is probably the best way to prepare for an examination. Each exam will have questions on (1) concepts, (2) observations or data analysis, and (3) problems. Although successful completion of

examinations will require a working knowledge of key definitions, concepts, and problem-solving techniques, *rote memorization of material will not help you to pass examinations.*

Policies and Expectations

Before coming to each class session, you should have completed the Activity Guide entries from the previous class session (hopefully in the previous class) and done the assigned reading from the text or other documents, as listed in the [course outline](#). You are also strongly encouraged to have attempted to do relevant portions of the assigned [homework](#).

You are expected to show respect for others and their ideas.

During class sessions, your willingness to discuss ideas with classmates, devise clever ways to measure or observe things, and make brief presentations using the board at the front of the classroom are important aspects of your participation in the course.

You are expected to be always participating actively in the class sessions.

The use of the computer during scheduled class periods is restricted to course related activities. In particular, reading and sending personal e-mail, working on materials for other courses, creating personal documents, and playing computer games will be detrimental to your course engagement grade and could affect your understand of the course material.

Arriving Late to Class: You are expected to show up for class on time. Coming to class late is both inconsiderate and distracting to your instructor and fellow classmates. Repeatedly coming to class late will be detrimental to your course engagement grade.

Attendance: If you are in the habit of skipping class occasionally, you should think carefully about taking this type of course. Absences create real difficulties, since practically all of the work done in the class requires the participation of two or more partners, and occasionally, special equipment.

You can make up the work if you have a legitimate excuse for your absence. If you are permitted to make up an absence, try to get one of your lab partners to help you do the work. If that is not possible, I will do my best to help you get it done. However, under no circumstances should you copy data, graphs, or anything else if you were not in class to do the work. If there are reasons you cannot attend class, and you know about it ahead of time, please let me know before that class meeting. The nature of this class is such that you will do poorly if you skip class, because your grade depends to a great extent on what you do in class. It is not possible to skip class and "do the reading" or "get the notes" to make up for your absence.

Cell Phones: You will be expected to turn off all cell phones and pagers while in class, and store them out of sight in your bag or backpack. The noise produced by cell phones and pagers, as well as the activity of emailing and text messaging, is very distracting to your fellow classmates and is a detriment to the learning environment.

Athletics: Athletes who anticipate potential conflicts should see the instructor during the first week of the semester to make arrangements for making up missed classes.

Making Up Excused Absences: Any class period missed for which there is a legitimate excuse must be made up at a time arranged for in advance.

Respect for Equipment: We expect you to be careful with the lab equipment and to keep your lab table clean and neat. At the end of every class period your table should be left with equipment arranged neatly, computer equipment off, and scrap materials thrown away.

Late Work: Because it is helpful to your learning to have rapid feedback on your written work, the instructors will try to see that all work is graded as soon as possible. It is very inconsiderate to expect an instructor or student assistant to grade late work once the same work from the rest of the students has been graded. It takes 2-3 times longer to grade late work separately. For these reasons, your instructor will not accept homework assignments handed in after they are due. As far as Activity Guides are concerned: In order to discourage late work, the grade on an Activity Guide Unit will be reduced by 10% for each day or part of a day after the due date unless a written notification of illness is provided by Student Services. However, if that particular Activity Guide Unit happens to be chosen to be quality graded, the quality grade is zero if it is handed in late.

Academic Integrity: You are encouraged to discuss and debate the ideas in any of your assignments with your instructors, TA's, lab partners, and other classmates. If you work on assignments cooperatively, rather than independently, you may

share ownership of spreadsheet, graph, and diagram files based on data you have taken with partners. However, *any other spreadsheet or written assignments must be expressed in your own words* and reflect your own format details. Thus, you may not copy (even with some modification) problem solutions or spreadsheet assignments, Activity Guide entries, or written material on examinations. *If there is reasonable evidence of copying, it will be construed as an act of plagiarism. The first such occurrence will result in a score of zero on that assignment; the second occurrence will result in failure of the course.*

Please make sure that you have read and fully understood Westminster's Policy on Academic Honesty (and Dishonesty) (as listed in the 2021-2022 [Westminster Academic Catalog](#)). My sincere desire is to act as facilitator - not an enforcer! - for your studies in physics. Accordingly, I operate on the assumption that all of our interactions are based on openness, honesty, and good faith. I expect all of us to be honest and to treat each other fairly and with respect. Because our trust in each other is absolutely *crucial* to the effectiveness of our relationship, I take an uncompromising stance, as should you, on the necessity for sanctions when it is violated.

Pronouns, Correct Names, and Inclusion: It is your right to be identified by your correct name and pronouns. I support people of all gender expressions and gender identities and welcome students to use whichever pronouns or names that best reflect who they are. In this spirit, I expect all students to also use the correct pronouns and names of classmates. Please inform me if my documentation reflects a name different than what you use and if you have any questions or concerns please contact me after class, by email, or during office hours.

The scientific enterprise does not have a “clean record” with regards to respecting, including, and encouraging people from all backgrounds. There are many stereotypes floating around our cultural narrative about who can or should be a scientist/engineer. It is very important in this class to value the contributions from every student and encourage one another to rise to the challenge of the tasks ahead of us this semester.



Mask Requirement: With the recent increases in transmission rates, and consistent with CDC recommendations, we are reinstating our requirement for masks indoors, in shared spaces. The CDC recommends masks for everyone indoors in areas of substantial or high transmission. Salt Lake County has high transmission in the CDC index. Westminster College will continue to monitor data and recommendations and make changes accordingly.

Vaccine Requirement: President Dobkin, with support of the cabinet and Westminster Board of Trustees, will be requiring the vaccine for all employees and registered students. Faculty, adjunct faculty, full-and part-time staff, and all students will need to be fully vaccinated by October 15, 2021. The FDA will give full approval to the Pfizer-BioNTech COVID-19 vaccine by early September, giving our community up to six weeks to be fully vaccinated by October 15. Legally required exemptions (health/medical and religious) will be honored in this process.

Section 504 of Rehabilitation Act of 1973/ADA: Westminster college is committed to provide equal access in higher education. If you need disability-related accommodations in this class, have emergency medical information you wish to share with me, or need special arrangements in case the building must be evacuated, please inform me immediately. Please see me privately after class or in my office. Disability Services authorizes disability-related academic accommodations in cooperation with the students themselves and their instructors. Students who need academic accommodations or have questions about their eligibility should contact Jody Katz, Director of Disability Services & Testing Center, in the basement of Giovale Library (801-832-2272) or email disabilityservices@westminstercollege.edu.

Title IX: Westminster College is committed to providing a safe learning environment for all students that is free of all forms of discrimination and sexual harassment. This includes discrimination based on sexual orientation, gender identity and gender expression. If you (or someone you know) has experienced or experiences any of these incidents, know you are not alone. Westminster College has staff members trained to support you in navigating campus life, accessing health and counseling service, providing academic and housing accommodations, and more.

Please be aware all Westminster College faculty members are “mandatory reporters” which means if you tell me about a situation involving sexual harassment or gender discrimination, **I must report that information with the Title IX Coordinator**. Although I must make the notification, you will control how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

If you wish to speak to someone, you can contact any of the following on-campus resources:

- Counseling Center (egibson@westminstercollege.edu or 801-832-2237)
- Student Health Services (801-832-2239)
- Victim’s Advocate – Andreja Nadjalin or Stephanie Nolasco (advocate@westminstercollege.edu)

If you wish to make a report directly to the Title IX Office, please complete the online reporting form located on www.westminstercollege.edu/titleix or contact Mary Royal at 801-832-2496 or mroyal@westminstercollege.edu. The Title IX website contains more information about resources, rights, policy and procedures, and updated information regarding our Title IX program at Westminster College.

Equal Opportunity: Westminster’s Equal Opportunity policy prohibits discrimination or harassment based on age, color, disability, ethnicity, genetic information, military status, national origin, race, religion, pregnancy and related conditions, childbirth, gender identity, sex, or sexual orientation in any of its programs or activities. Westminster is committed to providing a safe and non-discriminatory environment for all members of the College community, including those whose gender identity and/or expression differs from the sex assigned to them at birth. Harassment and discrimination based on gender identity or expression is prohibited by the college and will not be tolerated. This includes refusal to address an individual by the gender they identify with. If you experience or witness prohibited conduct, or any form of discrimination or harassment, you should contact an Equal Opportunity Representative listed below.

- Mary Royal (801-832-2262 or mroyal@westminstercollege.edu)
- Alexandra Shorkey (801-832-2594 or ashorkey@westminstercollege.edu)
- Julie Freestone (801-832-2573 or jfreestone@westminstercollege.edu)

The equal opportunity policy and procedures can be accessed from the Student Life webpage.

As a professor, just as with Title IX, I am required to report any information I obtain regarding discrimination or harassment to the Equal Opportunity Officer for further review.