

# PHY2053 Fall 2020 Course Overview and Policies Page <sup>↕</sup>

This page contains information about course logistics and policies, broken down by topic area.

## × Area 1: Basic Course Communication Information

This section tells you how to contact the course instructor and TAs and gives an overview of how communication will happen and in what time frame.

Instructor Name and Title: Dr. McGill	Instructor Name and Title: Prof. Ray
Office Location: Due to Covid, we will not be holding any face-to-face interactions during this semester.	Office Location: Due to Covid, we will not be holding a face-to-face interactions during this semester.
Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only (https://ufl.instructure.com/conversations#filter=type=inbox)</a>	Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only (https://ufl.instructure.com/conversations#filter=type=inbox)</a>
Office Hours: Tues/Thurs 12:50 - 1:40 pm (Per 6) Zoom link:	Office Hours: Wed 1:30 - 3:30 pm (yes, split between periods!) Zoom link:

There are 7 TAs available to help you during discussion sections and office hours. The office hour schedule and contact information for TAs can be found in **Area 2**.

**Communications:** Only messages through the [official course e-Learning mail tool \(https://ufl.instructure.com/conversations#filter=type=inbox\)](https://ufl.instructure.com/conversations#filter=type=inbox) are guaranteed a response. When contacting instructors copy messages to BOTH Dr. McGill and Prof. Ray. The only exception to this rule is if you are writing about DRC matters: all messages about DRC accommodations go only to Dr. McGill. Emails to TAs do not need to copy the instructors. On weekdays we respond to email between the hours of 8 am and 6 pm and will usually respond within 24 hours. On the

weekend we will respond within 48 hours.

**Class Compartment:** All participants of this course (students, TAs, and instructors) should adhere to the following netiquette policies:

- Treat your instructor and classmates with respect in email or any other communication.
- Always use your professors' proper title: Dr. or Prof.
- Use clear and concise language.
- All college level communication should have correct spelling and grammar (this includes discussion boards).
- Avoid slang terms such as "wassup?" and texting abbreviations such as "u" instead of "you."
- Avoid using the caps lock feature AS IT CAN BE INTERPRETED AS YELLING.
- Limit/avoid the use of emoticons like :) .
- Be cautious when using humor or sarcasm as tone is sometimes lost in an online interaction and your message might be taken seriously or sound offensive.
- When posting on the Canvas Discussion or Zoom Chat in your online class, you should:
  - Make posts that are on topic and within the scope of the course material.
  - Take your posts seriously and review and edit your posts before sending.
  - Be as brief as possible while still making a thorough comment.
  - Always give proper credit when referencing or quoting another source.
  - Be sure to read all messages in a thread before replying.
  - Don't repeat someone else's post without adding something of your own to it.
  - Always be respectful of others' opinions even when they differ from your own.
  - When you disagree with someone, you should express your differing opinion in a respectful, non-critical way.
  - Do not make personal or insulting remarks.
  - Be open-minded.

## × Area 2: TA Information

**This section tells you the role and responsibilities of the TA, how to contact the TAs, and gives an overview of how communication will happen and in what time frame.**

**Statement on TA's Role: *The TAs will be running your discussion sections, writing and grading your quizzes, and managing quiz makeup requests. We (the instructors) will guide the TAs in these endeavors. All course policies***

*have been set by the instructors, and any questions about them should be sent to both Dr. McGill and Prof. Ray. Your TAs are not the authorities on course policy. They are, however, excellent authorities on physics, and you should not be shy about asking them questions. They are actively involved in departmental TA training to continuously improve their teaching practices. If you have any concerns please contact Dr. McGill and Prof. Ray.*

### **TA Responsibilities:**

- Create weekly quizzes. These quizzes are approved by the instructors prior to being given.
- Grade weekly quizzes.
- Return graded quizzes/post grades 1 week from the date the quiz was taken.
- Approve makeup quiz requests within 3 days of the request being made.
- Provide a re-grade of quiz grades, when requested.
- Run discussion sections and all this entails (taking attendance for participation credit, facilitating student-created problems, problem solving, etc) and hold office hours.
- *TAs are not responsible for creating or interpreting course policies. Any questions/clarification required for course policy must be addressed to your instructors.*

Office Location: Due to Covid, we will not be holding any face-to-face interactions during this semester.

TA Name: Alexander Donald	TA Name: Prof. Juan Guan
Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only (https://ufl.instructure.com/conversations#filter=type=inbox)</a>	Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only (https://ufl.instructure.com/conversations#filter=type=inbox)</a>
Office Hours: TR Per. 7 Zoom link:	Office Hours: F Per. 8-9 Zoom link:

TA Name: Joseph McNeil	TA Name: Taylor Miller
Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only</a> ( <a href="https://ufl.instructure.com/conversations#filter=type=inbox">https://ufl.instructure.com/conversations#filter=type=inbox</a> )	Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only</a> ( <a href="https://ufl.instructure.com/conversations#filter=type=inbox">https://ufl.instructure.com/conversations#filter=type=inbox</a> )
Office Hours: WF Per. 5 Zoom link:	Office Hours: M Per. 5-6 Zoom link:

TA Name: William Perry	TA Name: Nathaniel Strauss
Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only</a> ( <a href="https://ufl.instructure.com/conversations#filter=type=inbox">https://ufl.instructure.com/conversations#filter=type=inbox</a> )	Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only</a> ( <a href="https://ufl.instructure.com/conversations#filter=type=inbox">https://ufl.instructure.com/conversations#filter=type=inbox</a> )
Office Hours: R Per. 9-10 Zoom link:	Office Hours: WF Per. 4 Zoom link:

TA Name: Ruyang Sun
Phone and Email: <a href="https://ufl.instructure.com/conversations#filter=type=inbox">Canvas-email only</a> ( <a href="https://ufl.instructure.com/conversations#filter=type=inbox">https://ufl.instructure.com/conversations#filter=type=inbox</a> )
Office Hours: WF Per. 3 Zoom link:

### × Area 3: Required and Recommended Materials for this Course

This section overviews the materials you will need to complete the assigned work in the course.

**Important for those of you in different time zones from the East coast of the USA:**

Times/dates of all items listed in our syllabus in Canvas are in US East coast times. Canvas does not automatically reset these to show when they will occur in your local time.

- **Required Reading and Other Course Materials:**

- Text (e-book) : *College Physics: A Strategic Approach* by Knight, Jones, and Field (4e). You will need to set up a MasteringPhysics account in order to access the e-text. [See this link for further details.](#)

<https://ufl.instructure.com/courses/405942/files/51721190/download?wrap=1>)

- Homework: will be presented and submitted through Expert TA. To access the homework, click the "Assignments" link in the left-hand navigation menu. Clicking on an assignment will take you to the assignment in Expert TA. The first time you do this, you will be asked to pay for your access privileges. See the screenshots in [this document \(https://ufl.instructure.com/courses/405942/files/51821461/download?wrap=1\)](https://ufl.instructure.com/courses/405942/files/51821461/download?wrap=1) for help navigating this process.
- iClicker: Most lectures will feature a few in-class iClicker questions for extra credit.

- **Recommended Reading and Other Course Materials:** Our course material is separated into Modules based on topic. We have provided additional materials (videos, problem solving, etc) and these are located in the Modules.

- **Required Technology:** You will need Zoom; high speed internet connection; a working and good webcam so that Honorlock can see you work; Google Chrome; an approved calculator.

- Lectures, discussion sections, and office hours will all be held live-time through Zoom.
- Quizzes and Exams will be taken electronically using the course website and proctored by Honorlock. **Google Chrome is the only supported browser for taking exams and quizzes in Canvas.**
- Calculator: If you are on either the vet or med school track you should be aware that the GRE, required for Veterinary programs, provides their own simple calculators while the MCAT does not permit calculators at all. For this on-line only course, *cell phones as calculators are not allowed.*

- [\\_ \(http://www.honorlock.com/extension/install\)](http://www.honorlock.com/extension/install) **Materials and Supplies Fee:**  
n/a.

× Area 4: Grading Policies and Grade Scale

## Grading in this course takes place within the following parameters.

- Your course grade **will not be assigned based on a curve** but will be based on a 100-point fixed scale.
- Your grade is determined by your performance on the following in-class and out-of-class components: 3 exams, weekly quizzes, and on-line homework. In addition you can earn extra credit through discussion section participation and in-class clicker questions.
- We use a forgiveness factor as a make-up policy to accommodate circumstances that may arise throughout the semester that may hinder your performance in the homework, the discussion quizzes and participation, and the clicker questions. The forgiveness factors are given in the table below. They are calculated at the end of the semester and mean that you can miss the stated percentage of work associated with that component but still score 100% of the credit for it.
- Grading in this class is consistent with UF policies available at: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/> (https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/)
- Assignment Values: Point values/percentages for each assignment are available in the Assignments page of Canvas.
  
- **Policy on Late and Make-up Work**: Homework solutions are released immediately after the due-date thus no late-HW can be accepted for credit. Makeups for quizzes and exams are permitted under UF attendance policy guidelines. See **Area 6**, **Area 7**, and **Area 8** for further details.
  
- **Grade Return Timing**: Homework grades and solutions are released within 1 minute of the due-date through Expert TA. Graded quizzes are returned by the following week's discussion session. Exam grades should also be posted within 1 week of the exam.
  
- **Point Scale for this Class**:

Item	Points	Forgiveness Factor
Exam 1	25	0%
Exam 2	25	0%
Exam 3	25	0%
Quizzes	20	10%
Homework	5	20%
Total Course Points	100	N/A
iClicker	3 course extra credit pts	20%
Discussion section attendance	5 quiz extra credit pts	20%

- **Point Range for this Class:** Note that we round up at 0.50 percentage points. Thus, 59.50% rounds up to 60.00%, while 59.49% does not. Also note that a grade of C- is not a qualifying grade for major, minor, Gen Ed, or College Basic distribution credit.

Letter Grade	Range	
A	100 %	to 85.00%
A-	< 85.00 %	to 80.00%
B+	< 80.00 %	to 76.00%
B	< 76.00 %	to 72.00%
B-	< 72.00 %	to 68.00%
C+	< 68.00 %	to 64.00%
C	< 64.00 %	to 60.00%
C-	< 60.00 %	to 55.00%
D+	< 55.00 %	to 50.00%
D	< 50.00 %	to 45.00%
D-	< 45.00 %	

## × Area 5: UF Policies Shaping This Course

This course is aligned with the UF policies below.

- **Contact Hours:** "Contact Hours" refers to the hours per week in which students are in contact with the instructor, excluding office hours or other voluntary contact. The number of contact hours in this course equals the number of credits the course offers.
- **Workload:** As a Carnegie I, research-intensive university, **UF is required by federal law to assign at least 2 hours of work outside of class for every contact hour.** Work done in these hours may include reading/viewing assigned material and doing explicitly assigned individual or group work, as well as reviewing notes from class, synthesizing information in advance of exams or papers, and other self-determined study tasks.
  - For tips and suggestions on how to approach this class and the appropriate amount of work required to master the topics we'll be covering see the page: [How To Study For PHY2053 \(https://ufl.instructure.com/courses/405942/pages/how-to-study-for-phy2053\)](https://ufl.instructure.com/courses/405942/pages/how-to-study-for-phy2053)
- **Accommodation for Student with Disabilities:** Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. This class supports the needs of different learners; it is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.
  - Once you have your DRC Accommodations letter, please fill out the [DRC Accommodation Request survey \(https://ufl.instructure.com/courses/405942/quizzes/875605\)](https://ufl.instructure.com/courses/405942/quizzes/875605). Survey responses submitted at least 72 hours in advance of a timed assessment will be in effect for all future assessments. If a response is submitted with less than 72 hours until the next scheduled

assessment, then the accommodations will apply after the next timed assessment. Failure to meet the announced 72 hour deadline prior to a timed assessment is not a valid rationale for requesting a makeup assessment. |

- **Statement Regarding Evaluations:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <http://gatorevals.aa.ufl.edu/students> <sup>↗</sup> (<https://gatorevals.aa.ufl.edu/students/>) . Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <http://ufl.bluera.com/ufl/> <sup>↗</sup> (<https://ufl.bluera.com/ufl/>) . Summaries of course evaluation results are available to students at <http://gatorevals.aa.ufl.edu/public-results/> <sup>↗</sup> (<https://gatorevals.aa.ufl.edu/public-results/>) .
- **Statement Regarding Course Recording:** Our class sessions may be audio visually recorded for students in the class to refer back to and for use of enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded. If you are unwilling to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited. |
- **Honor Policy:** UF students are bound by The Honor Pledge which states, “We,

the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The [Honor Code](http://sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. You are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

## × Area 6: Additional Information

The following are additional policies regarding graded material for this course.

### • **Honorlock General Information:**

- You DO NOT need to create an account, download software or schedule an appointment in advance. You will need a computer, working webcam, speakers, microphone and reliable Internet connection to be able to take your exam. Wireless internet is not recommended. You may also need a mirror or other reflective surface.
- You can download the Google Chrome extension at [www.honorlock.com/extension/install](http://www.honorlock.com/extension/install) (links to an external site).
- **Important:** Prior to each use, visit the [Honorlock system check](https://honorlock.com/support) (Links to an external site.) and scroll down the page to evaluate your equipment and software.
- **Take the practice quiz** (<https://ufl.instructure.com/courses/405942/quizzes/875898>), worth 0 points, to get familiar with the Honorlock procedure for beginning and taking proctored exams.
- See [this link](https://ufl.instructure.com/courses/405942/files/51100789/download?wrap=1) for an overview of test-taking tips and requirements.
- When you are ready to test, log in to Canvas, go to your course, and click on your quiz or exam. Clicking "Launch Proctoring" will begin the Honorlock

authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

- Honorlock support is available 24/7/365. If you encounter any issues, you may contact them by LiveChat, phone (855-828-4004), and/or email ([support@honorlock.com](mailto:support@honorlock.com) (<mailto:support@honorlock.com>)). LiveChat is available by clicking on the chat window at the bottom right of the exam.

- **Homework:**

- Before you begin you will need to register your account. [Read this document \(https://ufl.instructure.com/courses/405942/files/51815216/download?wrap=1\)](https://ufl.instructure.com/courses/405942/files/51815216/download?wrap=1) for instructions on registering and using Expert TA.
- Homework sets will be due on Sundays at 11:59 pm and will be open for a period of 14 days prior to the deadline.
- You get 5 attempts to get a question right. You will lose a portion of that part value as a deduction for each incorrect submission attempt. For multiple choice or true/false type questions credit will be deducted for incorrect attempts. Deduction per incorrect answer =  $100\% / (\# \text{ of options} - 1)$ . Full solutions to homework will be available immediately after the due date in the homework system.
- Expert TA requires your responses be within 2% of the correct answer to account for rounding errors. Going by significant figures can result in the system marking your answer wrong despite you technically being correct. Do not worry about significant figures unless specifically asked for them in the HW problem.
- Follow appropriate practices of academic honesty when working on the homework problems: discussions with colleagues and/or tutors about methods of posing and solving a homework problem are acceptable and encouraged. *Using a formula that is specific to the problem, derived by someone else to input answers is considered cheating.*
- Some of the exam and quiz questions will be based on the homework

problems. Treat the homework as practice for the exams and quizzes: derive, on your own, any result that you submit and attempt to do so using the provided formula sheet and minimal reliance on your calculator.

- **Make-up Homework:** solutions are released immediately after the due-date; no make-ups are possible for homework. We do, however, apply a 20% forgiveness factor to your homework grade at the end of the semester.

- **In-Class iClicker:**

- In-lecture iClicker questions begin to count on **Tuesday, September 15th, 2020**. You must use either a computer or mobile device to participate in the clicker questions.
- We will get set up with iClicker on the first day of class.
- Correct responses to clicker questions are worth 2 points and incorrect responses will be worth 1 point. **Responding for other students is considered cheating by both parties.**
- iClicker has a ~30 second delay when used over live-stream. When the associated iClicker clock says it has ~30 seconds remaining, the poll has actually just closed. You need to get your responses in sooner than the iClicker clock says (with say 40 seconds left to be safe).

- **Discussion Section Participation:** You will be able to earn up to 3 points per week in Discussion Section starting **Monday, September 14th, 2020**. At the end of the semester the total points you earned out of the total possible will be used to scale the 5 extra credit quiz points mentioned above. (ex: The total number of participation points for the semester is 36 and you earn 25. At the end of the semester you will have  $(25/36)*5$  points added to your final total quiz score.)

- You **MUST** use your name as it appears in Canvas to join the Zoom meeting in order to receive credit.
- The 3 possible points will be earned in the following way:
  - During your first discussion section you will be writing your own problems and solutions based on the homework (Student Generated Problems). You will work in groups of ~4. You will receive 2 points if you turn in both a

question and a reasonable attempt at a solution (the solution does not have to be correct to earn full points, but it can't be random equations either); 1 point for turning in a question without a solution (or with a solution that is not a reasonable attempt at the the answer); 0 points for not attending and/or not submitting any question at the end of section. These problems will be sent through Zoom or Canvas to your TA before the end of the discussion period. **We will select the best problems every week and compile them into a study guide before each exam. We will include one of those selected problems (with modified numbers) on each exam.**

- On the second discussion section day you will receive 1 point for participating in the discussion section. You must be present for at least 40 of the 50 minutes to receive this credit.

- **Mechanics Surveys:**

- There are two surveys that we ask you to complete during the semester. No preparation is required for either survey; they are designed as course benchmarks. You will receive full points for fully participating in these surveys (i.e. *you can answer every survey item incorrectly and still get full points for completing the survey*).
- The first survey will be administered during the second week of classes during discussion section; the second will be administered towards the end of the course.
- Each survey is worth 3 out of 3 quiz points.

## × Area 7: Exam Specific Information

**This section provides information on exam content, dates, makeup policy, and how to use Honorlock to take your exam.**

- **Exams:**

- Exams each have 15 questions and are worth 25 points.
- Many, but not all, exam questions are based on homework problems.

- At least one exam problem each exam will come from Student Generated Problems.
- Exam 1 is on Monday, October 12th, 2020 from 8:20 pm to 10:20 pm.
- Exam 2 is on Friday, November 13th, 2020 from 8:20 pm to 10:20 pm.
- The Final Exam is on Tuesday, December 15th, 2020 from 3:00 pm to 5:00 pm and will be cumulative.
- Content covered by the Exams is found on the **Course Schedule**.
- The answer you mark on your Exam is your final answer to a question. We do not look back over your work, even if you think you solved your answer correctly on the scratch paper.
- Private formula sheets are not allowed. An official formula sheet for the exam will be provided.
- In addition to these regular exam dates there are also two conflict exam dates, to be announced as soon as we have the information. A student who will miss an assembly exam due to an exam conflict or any other foreseeable reason that is approved under UF attendance policies should request **in advance** to take the conflict exam instead of the regular exam. A student who has an unforeseeable absence from an exam should contact the instructor as soon as possible, normally within 24 hours after the missed exam. If the unforeseeable absence is excused by the instructor, the student will be expected to take the conflict exam unless they have another exam conflict or reason that is approved under UF attendance policies. The conflict exam will cover the same subject matter as the regular exam and in a similar format, although the exams will not be identical.

- **Honorlock Exam Specific Information:**

- Go to Assignments -> Exams on Canvas and click on the exam.
- The formula sheet will be provided: once you have started the exam there is a button that says "Show Instructions" at the top. Clicking on this will bring up the zoom-able, scroll-able formula sheet. You minimize it using the "Minimize File Preview" button that appears just above it.
- Honorlock will only permit 4 sheets of blank scratch paper.
- Exams 1 and 2 open at 8:15 pm so that you may initiate the Honorlock

process and start the exam at 8:20 pm. The exam window closes at 11 pm to allow for delays caused by technology. Your exam must be submitted by this time in order to be scored.

- Once you begin your exam you have 2 hours in which to complete it.
- You are given 1 bathroom break during the exam. To take a break you must clearly tell the camera that you are doing so. Just as with in-person exams, you do not get to stop the testing clock to take your break.
- Any time lost due to troubleshooting technical problems should be added back by Honorlock.
- Canvas shows you have 2 attempts for each exam; this is only in case you experience significant system failure during the exam. You only get 1 attempt at the exam unless such a situation arises AND you communicate this to us immediately.

## × Area 8: Quiz Specific Information

**This section provides information on quiz content, makeup policy, and how to use Honorlock to take your quizzes.**

### • Quizzes:

- Quizzes will be administered every Wednesday in an asynchronous fashion; this means you can start it at any time on the scheduled date. You have 30 minutes total to take the quiz once started.
- Quizzes test how well you have learned the concepts and methods of the assigned homework problems. **The quiz questions will be related to, but not identical to, the online homework problems.** The problems may be restructured to provide guidance, allow awarding of partial credit, and discourage memorization of a solution formula.
- There will be two questions on each weekly quiz. Each question will be graded on a 3 point scale. You are expected to do the problems on your own, without any notes or other help (i.e. *there are no outside formula sheets allowed for the quizzes; instructors will provide formula sheets*).
- To allow for partial credit we will include a text entry field where you can describe in proper English your approach to the problem. This should just be

a rough outline of the main ideas you used in getting to your solution. You should only write these after you have solved the problem to your satisfaction, or if you get stuck in getting a numerical answer, then include what you think the general approach should be (the text description allows for giving partial credit).

- Example: The director wants the boom to begin to tip just as the Rock reaches the end of the boom. How far from the point where the boom attaches to the crane should the counterweight be placed if the counterweight weighs 230 kg and the Rock weighs 15 kg? (Answer in terms of D.)

On describing your approach in the text entry box:

**Incorrect:**

I would use 1D kinematics to find how long it takes for the Rock to move from the center of the boom to the edge, using D as the distance traveled, and  $2\pi D/v$  as the acceleration.

**Too short:**

Use equilibrium to find the distance.

**Too long** (We will not take off for an answer being "too long" - but keep in mind that you still only have 30 minutes to take the entire quiz, including calculations.):

This problem has a tipping bar and things providing torque, so it is an equilibrium problem. As such, we need to use the sum of the torques = 0 to solve for the unknown variable. When you move the Rock's torque to the other side of the equation you can replace the  $\tau$ s with  $FR\sin(\theta)$  and then do some algebra to rearrange the known variables to be on the other side of the equation from R for the counterweight. Use 90 degrees for  $\theta$  because the boom is horizontal and gravity points straight down.

**Just right:**

This is an equilibrium problem. Set the sum of torques equal to zero and solve for the unknown lever arm.

- **Make-up quizzes** are permitted provided you have a valid documented excuse (e.g. doctors excuse for illness, official UF sanctioned event). Submit requests through the [Makeup Quiz Request \(https://ufl.instructure.com/courses/405942/pages/makeup-quiz-request\)](https://ufl.instructure.com/courses/405942/pages/makeup-quiz-request) module in Canvas.
  - There are 3 Makeup Requests Modules available through Canvas; if you use up the 3 requests and require more please contact the instructors directly.
  - The make-up quiz must be taken within 3 weeks of the missed quiz (not within 3 weeks of the request for approval of the makeup). *There will be no make-up quizzes given after 5 pm on Monday, December 7th, 2020. You have until Monday, December 7th, 2020 to request any re-grade or to question any grade discrepancy pertaining to the quizzes.*

- **Honorlock Quiz Specific Information:**

- Go to the “Quizzes” section of Canvas and click the appropriate quiz link (see syllabus/calendar to know which quiz to take).
- The formula sheet will be provided - once you have started there is a button that says "Show Instructions" at the top. Clicking on this will bring up the zoom-able, scroll-able formula sheet. You minimize it using the "Minimize File Preview" button that appears just above it.
- Honorlock will only permit 1 sheet of blank scratch paper.
- You will have 30 minutes to take the quiz once you begin.

## Additional UF Policies and Resources

+ [Tutoring Services](#)

+ [University Police](#)

+ Career Connections Center

+ Counseling and Wellness Center

+ Dean of Students Office

+ Disability Resource Center

+ Multicultural and Diversity Affairs

+ Office of Student Veteran Services

+ ONE.UF

+ Official Sources of Rules and Regulations