



Department of Physics & Astronomy

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Introductory Physics Content Assessments

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All of our introductory courses (Introductory Mechanics [PHYS 00.220], Introductory Electricity & Magnetism [PHYS 00.223], Introductory Thermodynamics, Fluids, Waves & Optics [PHYS 00.221], Physics I w/o Calculus [PHYS 00.210], Physics II w/o Calculus [PHYS 00.211], and Physics of Everyday Life [PHYS 00.150]) will be administering a pre- and post-course assessment to help us evaluate students' content gains from our courses and help our department, as a whole, understand how changes we have made work, and plan for future curricular changes that may be desired.

The tests are delivered on-line through a BlackBoard course that all students in those classes will be able to see (the BlackBoard techs will have enrolled them). **The pre-test is administered in the first couple days of class; be sure to let me know when you will want it to run so that I can have it turned on for your class.**

Since there are only 12 computers in the classrooms, you can save some time if you contact your students ahead of time and ask them to bring a laptop to class on the day you are going to give the assessment—if you feel you need to give them a reason, just say it is for an in-class activity. You can contact your entire class from the class list page in Banner.

Note: do not tell the students that this is a pre-test, nor that they will be taking a post-test as it can bias the results. Just tell them that they are going to take a conceptual content diagnostic so that you will have an idea of what their current understanding is. In fact, we do use it as such—the results of the pre-test will be compiled and given to you by the end of the second week of classes.

The post test should also be administered in class near the end of the semester and you can administer it as best fits your schedule—*just contact me to let me know when*. For example, I have my students do it as part of their final exam, half the class can start with the online assessment, the others work on the written half until a computer frees up. Of course, the Mechanics post-test (for Introductory Mechanics [PHYS 00.220], Physics I w/o Calculus [PHYS 00.210], Physics of Everyday Life [PHYS 00.150]) can be administered any time after you have finished covering Newton's Laws and the Thermodynamics post-test (for Introductory Thermodynamics, Fluids, Waves & Optics [PHYS 00.221]) can be administered anytime after that subject matter is completed in the class so you could make it part of a mid-term or even an in-class assignment. Both the pre- and post-test *must* be proctored and it is strongly recommended that you attach some kind of course grade-related value to the post-test.

Procedure

Have your students login to BlackBoard (there is a link from the Student Campus Portal at <http://cp.rowan.edu/> or they can just go directly to <http://blackboard.rowan.edu>). Once there they should see a link for the course Fall 2013 *Subject Assessment* (where *Subject* is one of Mechanics, E and M, or Thermo depending on your which class you are teaching).

Note that this course will *not* show up on your (professor) course lists.

Once in the course they will see an icon for the diagnostic assessment. They just click on that to start; they will have 30-ish minutes to complete it. The assessment is a multiple-choice conceptual test; if they are spending more than one minute per item, they are over-thinking it.

Troubleshooting

It is quite likely that you have a student or two who is not in the system (e.g. they haven't yet registered or registered after the lists were uploaded to the course). This is not a problem—simply *call me* (x4391 on campus, 610-566-1034 at home) *immediately* (i.e. as you are administering the assessment) with the **Rowan username** (i.e. what they use to login to BlackBoard or e-mail) of the student(s) and I will immediately enroll them so they can then login, see the course, and take the assessment. For the times when I am in class (see below), just send the student(s) to that room and I will take the ~ 3 minutes to get them in the system. My on-campus schedule for the first week+ of classes is:

Day	Times	Place
WED 04 SEP	12:15–1:30	SCI 138
FRI 06 SEP	10:50–1:20	SCI 148
	1:45–3:00	in meeting (send an email)
MON 09 SEP	12:15–1:30	SCI 138
TUE 10 SEP	1:00–2:00	in meeting (send an email)
WED 11 SEP	12:15–1:30	SCI 138
THU 12 SEP	10:00–12:00	in meeting (send an email)
FRI 13 SEP	10:50–1:20	SCI 148
	1:45–3:00	in meeting (send an email)

All other times I am in my office (8:30 AM–5:00 PM; x4391) at home (before 7:30 AM and after 6:00 PM; 610-566-1034), or on the road (7:30–8:30 AM and 5:00–6:00 PM; call my home, leave a message or send an email).

If you have to leave a message (either phone or e-mail) be sure to give me all the information in your message so I can set it up and then contact you when it is complete (either include a call-back number or I will reply via e-mail).