## **Physics Lab Orientation**

FALL 2021

#### How can I know my Physics Lab schedule?

You will need to conduct 9 labs this term. The schedule for the experiments can be found either on your canvas or in the Physics Lab website.

The picture on the right shows an example of a schedule.

Make sure you identify the name and code for each of the experiments as well as the 'Begin day' and 'Due day'. During this period of time, you must complete all calculations, verify the results with a lab instructor and submit your lab report.

	Valencia College		
nline I	Physics Laboratory Schedule	Fall Term 2	021
ny 100	7C CRN 17744	Prof. Marcien D	entey
	Assigned Experiments	<b>D</b> • 1	<b>N</b> 1
		Degin day	Due day
	Intro Week	Aug 25	Adg 29
M4a	Measurements	Aug 30	Sep 9
M9c	Free Fall Acceleration	Sep 10	Sep 23
F5a	Pressure & Volume	Sep 24	Oct 07
F9a	Fluid Mechanics & Bernoulli's Principle	Oct 1	Oct 14
T4a	Thermal Expansion	Oct 8	Oct 21
S7a	Measuring Sound Speed by Air Column Resonance	Oet 15	Oct 28
E4a	Simple D. C. Circuits	Oct 29	Nov 11
E5a	Resistivity of Different Materials	Nov 5	Nov 18
A5a	Line Spectra and Energy	Nov 12	Dec 2

10:00am to 8:00pm with previous reservation. First day for online assistance will be Monday Aug 30 - 2021. Last day for online assistance will be Thursday Dec 2 - 2021. Online assistance will be closed the following dates: Sep 6 - 2020 (Labor day) Nov 11 (Veterans day) Nov 22 to 25 - 2020 (Thanksgiving)

#### Link to Schedules:

http://science.valenciacollege.edu/physics/physics-index.html



#### West Campus Physics Laboratory

Valencia's West Campus Physics Lab utilizes an open concept approach where students independently schedule their experiments during the lab's open hours, presently 40 hours per week. This creates a dynamic environment with students from five different physics courses conducting experiments simultaneously in the open lab space. This dynamic nature facilitates diverse interactions between students, professors and lab personnel. Read more...

Schedules Staff Lab Orientation	
Phy1007C. Online Ivan Padron	PDF
Phy2053C, Online, Wafaa Khattou	PDF
Phy2053C, Online, Homaira ParchamyAraghy	PDF
Phy2054C, Online, Wafaa Khattou	PDF
Phy2048C, Online, Irina Struganova	PDF
Phy2048C, Online, Ivan Padron	PDF
Phy2048C, Online, Richard Jerousek	PDF
Phy2049C, Online, Richard Jerousek	PDF

#### How will I do my online experiments?



All links to the necessary materials to conduct your experiments will be posted in your canvas course. You can also find access some of these documents and videos by navigating through the physics lab website.

Your professor will assign you to a lab group to work in the experiment calculations. Identify your group and stablish communication with the members.

Science West	Home	Physics -	Biology	Chemistry <del>-</del>		
Zoom Setup	Lab Info/ Schedules Experiments Reservations					
Excel templates						
Mean and Standard Deviation						
Slope and Standard Deviation						

# PHYSICS EXPERIMENTS (A) Atomic & Nuclear (B) Magnetism (E) Electricity (F) Fluid Mechanics (M) Mechanics (O) Optics & Light (S) Oscillations & Waves

#### For each experiment:



Watch the Lab videos. Look at the pictures and read Lab instructions.



Answer prelab questions and submit to your professor.



Complete calculations in the data sample document.

Consult an online physics tutor if needed.

Verify your calculations and graphs with a lab instructor online.



Type Lab report.

#### What is the data sample document?

The data sample document will be provided by your professor on canvas. It contains real data collected by following the procedures described in the instructions and videos.

Following the analysis description in the handouts, you will be able to complete the calculations and graphs. An example of a data sample document is shown below.

Data Shee	ts: T4a:	Thermal Exp	ansion				]	
NAME:			DA	LTE:				Calculations that need
Tube Material	Initial Length (m)	Initial Temperature (°)	Final Temperature (°)	Change of length (m)	Thermal expansion Coefficient	Percent Error		to be completed
Aluminum	0.751	21.875	97.383	0.00139				
Brass	0.751	21.859	98.367	0.00113				
Copper	0.751	22.016	98.180	0.00100				

# What online assistance can I have while doing calculations?

Besides your professor, you can reach physics tutors in real time in the **Science Tutoring rooms** following this link:

https://libguides.valenciacollege.edu/c.php?g=1014597&p=7351774

Check the tutors availability schedule in the following link:

https://docs.google.com/spreadsheets/d/1h 9Mk3qeeIIfWkNBFqGym5aJrXa8XwM6P-q139gyo8/edit#gid=361776516

Once you are connected to Science Tutoring, look for one of the following tutors among the tutors assigned for your specific course:



Alejandra Gomez Monique Anderson Once you finish your calculations and graphs, book an online section with a lab instructor to validate your data and get approval in real time **This step is required before submitting your calculations to your professor**.

#### **Important Information and Rules for bookings!**



Before attempting to book a reservation, make sure the device that you are using for the booking has **Orlando time and date**. Otherwise, you will received a wrong time confirmation appointment.



Reservations to validate the data must be done in groups and it is required that all members are present during the validation section to get credit for the calculations. The sections will have a duration of 30 minutes. The students will be accepted on the meeting during the first 10 minutes only.



Only one reservation should be done at a time. **DO NOT BOOK MORE THAN ONE SECTION** unless it is suggested and approved by the lab instructor.

Online Assistance availability:

Monday through Thursday from 10:00am until 8:00pm

#### How can I book a section?

For booking reservations, access the following link:

https://physics-lab-data-validation.appointlet.com



Select your class based in the CRN number and professor's name. **Be really careful on this selection** because each course has a designed lab instructor.



VALENCIACOLLEGE

Select a member  Andrea Carvajal  Select a member  Select your  Lab instructor	Meeting Types	2 Members	3 Times	4 Information	5 Review		
Andrea Carvajal		Selec	t a membe	ər			Select your
	Andrea Carvajal					>	lab instructor

	0	Meeting Types (	2 Members 3	Times 4 Info	rmation <b>5</b> Rev	iew	
		Timezone: U	Pick a Da	te & Time Eastern ∽	(6:30:15 PM)		Select the
	Tue 8/18	E Wed 8/19	Aug 18, 2020 Thu 8/20	- Aug 26, 2020 · Mon 8/24	✓ Tue 8/25	> Wed 8/26	date and time
ŀ	7:30 PM	10:00 AM 10:30 AM	10:00 AM 11:30 AM	10:00 AM 10:30 AM	10:30 AM 11:00 AM	10:00 AM 10:30 AM	
L		11:00 AM	12:00 PM	11:00 AM	11:30 AM	11:00 AM	

🚺 Me	eting Types 2 Members 3 Times 4 Information 5 Review	
	Provide your information	
Email *	lcarvajal3@valenciacollege.edu	
Student Name	Andrea	
Partner name 1		
Partner name 2		Provide your
Partner name 3		information
Course *	● 1007C	
	○ 2053C	
	○ 2054C	
	○ 2048C	NOTE:
	○ 2049C	Make sure to add your
Professor *	Marcien Dentey 🗸	partners names!
	Save my information for future bookings	
	Continue →	

Meeting Types	Members S Times	Information	5 Review
Review yo	ir information and compl	ete your boo	king
	Confirm Booking →		
TIME			US/Eastern
Tuesday, August 25, 2020	11:00 AM - 11:30 AM		Edit
MEETING TYPE			
1007C (CRN#13724) Ma - 30 minute	rcien Dentey - Physics La	b Online Dat	a Validation Edit
MEMBER			
Andrea Carvajal			Edit
YOUR INFORMATION			
Email	Icarvajal3@valenciacolleg	e.edu	Edit
Student Name	Andrea		Edit
Partner Name 1			Edit
Partner Name 2			Edit
Partner Name 3			Edit
Course	1007C		Edit
Professor	Marcien Dentey		Edit
	Confirm Booking $\rightarrow$		

### Receive your confirmation

#### Review your information and complete booking

Thanks for booking! Add it to your calendar:	
31 0 17	
TIME	US/Eastern
Tuesday, August 25, 2020 11:00 AM - 11:30 AM	
LOCATION	
https://valenciacollege.zoom.us/my/physicslabdatavalidation1	
MEETING TYPE	
1007C (CRN#13724) Marcien Dentey - Physics Lab Online Data V 30 minute	/alidation -
MEMBER	
Andrea Carvajal	
Get your own Appointlet page for free	
← Book Another	Done →

**NOTE**: You will receive an email with your scheduled appointment information. From the confirmation email, you can add the appointment to your calendar and cancel or reschedule the appointment.



#### Final Step:

After your data has been validated, it is time to write your lab report and submit to your professor.

