

2015

# Physics 122 General Physics II Fall 2015

Jeremy Jang

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## Recommended Citation

Jang, Jeremy, "Physics 122 General Physics II Fall 2015" (2015). *Physics Courses*. Paper 5.  
[http://spark.parkland.edu/physics\\_course/5](http://spark.parkland.edu/physics_course/5)

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## PARKLAND: Physics 122 (2pm) - FA2015

**Instructor:** Jeremy Jang [jjang@parkland.edu](mailto:jjang@parkland.edu)

**Office Hours:** M-126: 4pm - 5pm, Mondays

**Phone:** (847) 708-0897 (emergency only)

**Course Website:** <http://cobra.parkland.edu>

**Text:** *Physics Fundamentals*, Colletta

Note: a calculator (scientific or graphing) will also be required

**Course Aims:** Introduce several core concepts of physics.  
Provide a methodology which applies these concepts towards solving problems.

**Grading:**

Participation:	200 pts (10 pts each)
Labs:	150 pts (15 pts each)
Exams:	390 pts (130 pts each)
Final Exam:	260 pts (worth 2x a regular exam)
<u>TOTAL:</u>	<u>1000 pts</u>

Grade	need at least:
"A"	895 pts
"B"	795 pts
"C"	695 pts
"D"	595 pts

**Homework:** Homework problem sets will be posted on the course website. There is one set per lecture topic. Although it doesn't count for your grade, it will be useful to do...

**Participation:** One in-class problem will be presented after each lecture topic. They will be collected on the same day. They are available on the course website, so if you miss one, you can turn it in late (-2pts late penalty).

**Labs:** On-campus: Purchase a lab manual from the bookstore, and bring it on lab days. The manual has worksheets for each lab, which need to be turned in before you go. Be sure to complete the worksheet thoroughly for full credit! If you miss a lab, come see me about making it up (-2pts late penalty).  
Online: See the course website for details. Late labs are penalized (-2pts).

**Exams:** Closed book, closed notes. Calculators allowed. Equation sheet will be provided. Time limit: 1 hr 50 min. Format: 13 random homework questions, with randomized numbers. Each question has 5 parts (again, chosen randomly). You MUST give an explanation or show work for your answers to receive any credit!  
I will require at least one week prior notice if you wish to reschedule an exam. Otherwise, there is no guarantee (unless you have a legitimate emergency).

**Final Exam:** Cumulative, 2 hr time limit. Otherwise, same format as a regular exam.

**Calendar:** A calendar with topics, labs (marked with \*), and exams is provided below.  
 (Note: this assumes no unforeseen events like inclement weather, etc).

Week	Monday	Tuesday	Wednesday	Thursday	Online Lab Due
Aug 24	Intro -		ElectricForce -		
Aug 31	ElectricField -		ElectricPotential -	- *ElectricFields	
Sep 07		- *ElectricFields	Capacitors -	- *Voltage	*Electrostatics -
Sep 14	Resistors -	- *Voltage	Circuits-RC -	- *Ohm'sLaw	*Voltage -
Sep 21	Power -	- *Ohm'sLaw	AC-Intro -	- *Series&Parallel	*RC-Circuits -
Sep 28	Review -	- *Series&Parallel	<b>Exam!!!</b> -		
Oct 05	MagneticFields -		Electromagnets -	- *SpecificCharge	
Oct 12	InducedEMF -	- *SpecificCharge	Inductance -	- *InducedEMF	*InducedEMF -
Oct 19	AC-Circuits -	- *InducedEMF	EM-Waves -	- *ResonanceRCL	
Oct 26	Review -	- *ResonanceRCL	<b>Exam!!!</b> -		*AC-Circuits -
Nov 02	Polarization -		Reflection -	- *Polarization	*LRC -
Nov 09	Refraction -	- *Polarization	Interference -	- *Reflection	*Polarizers -
Nov 16	Diffraction -	- *Reflection	ParticlesWaves -	- *Diffraction	*Reflection -
Nov 23	Review -	- *Diffraction	<b>Exam!!!</b> -		*MoreOptics -
Nov 30	NuclearPhysics -		SpecialRelativity -	- *Lightbulbs	*WaveParticle -
Dec 07	Review -	- *Lightbulbs	Review -		
Dec 14		<b>Final Exam!!!</b> Dec 15 @2pm			

**Makeups:**

In-class problems: These must be turned in before the day of the Final Exam.

Late assignments will be penalized (-2pts) unless you have a valid excuse.

Assignments must be turned in to me personally; any assignments dropped off in my mailbox is NOT guaranteed to be graded.

Labs: Makeups for missed labs are only possible if you schedule one with me.

A makeup lab is automatically penalized (-2pts) unless you have a valid excuse.

Exams: Makeups are only possible if you schedule one with me, in person, at least one week before the actual exam date. Even then, there are no guarantees.

Bonus: I will replace your lowest regular exam score with your equivalent

Final Exam score if (and only if) it helps your grade. This is done automatically, and does not require any action on your part.

**Attendance:**

Although attendance itself is not part of your final grade, late penalties and missed assignments will have an effect. It is your responsibility to keep up, and keep track of your grade (on the course website).

**Disabilities:**

If you believe you have a disability for which you may need an academic accommodation (e.g. an alternate testing environment, use of assistive technology or other classroom assistance), please contact:

Cathy Robinson, Room X148, 217-353-2082, [crobinson@parkland.edu](mailto:crobinson@parkland.edu)