

Report on Physics course requirements for UC Life and Agricultural Science majors.

The left column in the table shows the CNAS Life and Ag Science majors and the other UC offerings of similar degrees are shown in columns to the right.

The Physics requirements are shown with a color code.

Green: 3 qtr of 3 qtr calculus-based Physics with discussion and lab, like Physics 2A, 2B, and 2C with labs 2LA, 2LB, and 2LC.

Orange: 2 qtr of 3 qtr calculus-based Physics with discussion and lab, like Physics 2A and 2B with 2LA and 2LB

Yellow: 2 qtr trigonometry-based Physics, 3 units/qtr, no lab and no discussion

Red: 3 qtr of advanced calculus-based Physics with discussion and lab for physical scientists and engineers, like Physics 40A, 40B and 40C.

Notes:

A) All biological science majors in the UC system require 3 qtr calculus-based Physics with discussion and lab, the equivalent of 2ABC with lab.

B) UC Davis is the only UC that offers a trig-based Physics course. At UC Davis, even though the option of 2 qtr Physics is available, the only major to choose it is Entomology. Plant Biology and Plant Science both choose the 3 qtr calculus-based course with integrated discussion and lab.

C) A few majors at UCB and UCSC require a semester or 2 qtrs of the full year calculus-based course. (See orange). The content covered is: mechanics, thermal physics, and waves. This is covered in UCR's Physics 2A and 2B with discussion and lab. These are UCB Integrated Biology (LS), Microbial Biology (CNR), Genetics and Plant Biology (CNR) and UCSC Ecology and Evolution, Microbiology, and Plant Sciences.

Lower Division Physics requirements for Life Science BS degrees at UC's

UCR CNAS Major	UCD	UCB	UCSC	UCSB	UCLA	UCI*	UCSD
Color Code for minimum	2 qtr series of trig-based Physics 1AB for majority of CAES majors at UC Davis	1 semester of 2 semester series or 2 qtr of 3 qtr series calculus-based Physics for Life Science majors equivalent to UCR Phys 2AB with labs 2LA, 2LB	2 semester or 3 qtr calculus-based Physics for life science majors equivalent to Physics 2ABC with labs 2LA, 2LB, 2LC	3 qtr calculus-based Physics for Physical Science and Engineering majors equivalent to UCR Phys 40ABC with discussion and lab		All UC Physics Depts offer an equivalent of the 3 qtr calculus-based Phys 2 and Phys 40 series with discussion and labs.	Note: UCD Physics is the only UC Physics department that offers a trig-based Physics series for science majors.
Biochemistry	Biochemistry and Molecular Biology (CBS)	Molecular and Cell Biology (LS)	Biochemistry and Molecular Biology	Biochemistry-Molecular Biology Pharmacology	Biochemistry	Biochemistry and Molecular Biology	Biochemistry
Biology	Biological Sciences (CBS)	Molecular and Cell Biology (LS)	Biology	Biological Sciences	Biology (Ecology and Evolutionary)	Biological Sciences	Biology with specialization in Bioinformatics
	Evolution, Ecology and Biodiversity (CBS)	Integrated Biology (LS)	Ecology and Evolution	Ecology and Evolution	Integrative Biology and Physiology	Biology Education	Ecology, Behavior, and Evolution
	Genetics and Genomics (CBS)			Physiology	Ecology, Behavior and Evolution	Ecology and Evolutionary Biology	General Biology
	Human Biology (CBS) Systems and Synthetic Biology (CBS)			Zoology		Genetics Human Biology	Human Biology
Cell, Molecular, and Developmental Biology	Cell Biology (CBS)	Molecular and Cell Biology (LS)	Molecular, Cell, and Developmental Biology	Cell and Developmental	Immunology and Molecular Genetics	Developmental and Cell Biology	Molecular and Cell Biology
					Molecular, Cell and Developmental		
Entomology	Entomology (CAES)						
Microbiology	Molecular and Medical Microbiology (CBS)	Molecular and Cell Biology (LS)	Microbiology	Microbiology	Microbiology	Microbiology and Immunology	Microbiology
		Microbial Biology (CNR)					
Neuroscience	Neurobiology, Physiology and Behavioral (CBS)	Molecular and Cell Biology (LS)	Neuroscience		Neuroscience	Neurobiology	Neurobiology
Plant Biology	Plant Biology (CBS)	Genetics and Plant Biology (CNR)	Plant Sciences				
	Plant Sciences (CAES)						