

For Academic Year 2024-25 PLEASE NOTE:

[Physics majors must click here to see exceptions applicable to the major requirements during AY24-25.](#)

Core offerings repeat annually as listed in Fall, Winter, and Spring (i.e. courses in the PHYS 4, 100, 105, 110, 120, 130, and 140 series)

Summer offerings of PHYS 4A-B are not guaranteed beyond 2025.

Unless otherwise noted, all courses are offered in-person.

The schedule for the following academic year is on the next tab of this workbook. [1]

We do not offer any UD or GRAD physics courses over summer.

Instructors can be selected right up until the first day of instruction. If "STAFF" is listed that means the instructor has not yet been selected. Regularly check this spreadsheet for updates!

[Click here to see Special Topics \(39/139/239\) course descriptions](#)

SCROLL DOWN TO SEE OFFERINGS BY TERM

FALL 2024

LOWER DIVISION (LD)			
Course	Title	Instructor	
1ABCLabs	Phys 1 Labs	Tsai, Arlett	
1Aa	Mech	Tsai	
1Ab	Mech	Groisman	
1Ac	Mech	Groisman	
1B	E&M	Li	
1C	Wav/Rad/Mod	Bal	
2A	Mech	Bal	
2B	E&M	Keres	
2Ca	FI/Wv/Th/Opt.	Yang	
2Cb	FI/Wv/Th/Opt	Tan	
2CL	E&M Lab	Frano	
2D	Modern Phys	Branson	
2DL	Mod Phys Lab	Butov	
4C	E&M	Chivukula	
12	Energy Environ.	Meyertholen	
39 (SEE NOTE) [3]	Spec. Top: Error Analys.	Frano	

WINTER 2025

LOWER DIVISION (LD)			
Course	Title	Instructor	
1ABCLabs	Phys 1 Labs	Yagil, Tsai	
1A	Mech	Tsai	
1Ba	E&M	Smith	
1Bb	E&M	Smith	
1Bc	E&M	Smith	
1C	Wav/Rad/Mod	Bal	
2Aa	Mech	Bal	
2Ab	Mech	Dudko	
2B	E&M	Shotwell	
2C	FI/Wv/Th/Opt	Jun	
2CL	E&M Lab	Jun	
2D	Modern Phys	Hirsch	
4A	Mech	Averitt	
4D	EM/Wv/Opt/Rel	Frano	
12	Energy Environ.	Branson	
39 (SEE NOTE) [4]	Spec. Top: Error Analys.	Jun	
41	Sci. Comp: Python	Green	
87 (SEE NOTE) [5]	1st Yr Sem: LaTex	Grinstein	

SPRING 2025

LOWER DIVISION (LD)			
Course	Title	Instructor	
1ABCLabs	Phys 1 Labs	Yagil, Tsai	
1A	Mech	Tsai	
1B	E&M	Groisman	
1Ca	Wav/Rad/Mod	Popmintchev	
1Cb	Wav/Rad/Mod	Popmintchev	
2A	Mech	Shotwell	
2Ba	E&M	Meyertholen	
2Bb	E&M	Meyertholen	
2BL	Mech Lab	Sharma	
2C	FI/Wv/Th/Opt	Shotwell	
2CL	E & M LAB	Ni	
2D	Modern Phys	Branson	
4B	Mech/FI/Wv/Ht	Grinstein	
4E	Quantum	Intriligator	
87 (SEE NOTE) [2]	1st Yr Sem: LaTex	Grinstein	

SUMMER 2025

LOWER DIVISION (LD)				
Course	Title	Instructor	Session(s)	
1ABCLabs	Phys 1 Labs	TBD	1 & 2	
1A	Mech	TBD	1 & 2	
1B	E&M	TBD	1 & 2	
1C	Wav/Rad/Mod	TBD	1 & 2	
2A	Mech	TBD	1 only	
2B	E&M	TBD	1 & 2	
2BL	Mech Lab	TBD	1 only	
2C	FI / Wv/ Th / Opt	TBD	1 & 2	
2CL	E&M LAB	TBD	2 only	
2D	Modern Phys	TBD	2 only	
4A	Mech	TBD	1 only	
4B	Mech/FI/Wv/Ht	TBD	2 only	
12	Energy Environ.	Meyertholen	1 only	

UPPER DIVISION (UD)

Course	Title	Instructor	
100A	E&M	Green	
110A	Mech	Dudko	
122 LAB	Exp. Tech	Ni	
130B	Quant Mech	You	
133 LAB	Matl Sci Lab	Allen	
139 (A00) (SEE NOTE) [8]	Spec. Topics (Understanding Meissner Effect.)	Hirsch	
140A	Stat/Therm	Arovas	
161 (SEE NOTE) [10]	Black Holes	Fuller	
175/275	Biological Phys	Koslover	
191	UG Seminar	Parker	

UPPER DIVISION (UD) [6]

Course	Title	Instructor	
100B	E&M	Barreiro	
105A	Comp. Phys	Lin	
110B	Mech	Serra	
124 LAB	Lab Project	Arnold	
130A	Quant Mech	Parker	
130C	Quant Mech	You	
136 (SEE NOTE) [9]	Nuclear Physics	Grinstein	
139/239 (A00) (SEE NOTE) [11]	Spec. Topics (Neur. Comp)	Di Ventra, Schuller	
140B	Stat/Therm	Arovas	
142/242	Comp Phys	Duarte	
152A	Cond Matter	Butov	
160 (SEE NOTE) [13]	Stellar Astrophys.	Fuller	
176/276	Quant. Molecular	Hwa	
178/278	Biophys Neur Comp	Kleinfeld	

UPPER DIVISION (UD) [7]

Course	Title	Instructor	
100C	E&M	Barreiro	
105B	Comp. Phys	Green	
120 CORE LAB	Circ. & Elec.	Yang	
130A	Quant Mech	You	
130B	Quant Mech	You	
137	String Theory	Intriligator	
140A	Stat/Therm	Frano	
141/241	Comp Phys	Zhao	
152B	Electronic Mats	Hirsch	
154	Elem. Part Phys	Grinstein	
162 (SEE NOTE) [14]	Cosmology	Keating	
170	Medical Instruments	Oh	
177/277	Phys of the Cell	Dudko	

PHYS MAJORS: Notice there's no "PHYS UD Lab" option in spring (the PHYS 120 lab, which is part of the core UD major program, is the only lab offered in spring!)

If you're wrapping up PHYS 4, you might consider PHYS 141, 142, 170, 177, 178 based on their prereqs. *Note recommended prep for 177.

GRADUATE

Course	Title	Instructor	
200A	Mech	Di Ventra	
201	Math Phys	Fogler	
210B	Noneq Stat Mech	Di Ventra	
211A	Solid State	Butov	
212A	Quant Mech	Grover	
215A	Part & Fields	Shotwell	
220	Group Theory	McGreevy	
225A	Gen Relativ	Flaueger	
230	Advanced SS	Parker	
275/175	Biological Phys	Koslover	
282	Spatio. Temp. Dyn.	Hwa	
500	Teaching	Bal, Shotwell	

GRADUATE

Course	Title	Instructor	
203A	E&M	Fogler	
211B	Solid State	Grover	
212B	Quant Mech	Chivukula	
215B	Part & Fields	McGreevy	
225B	Gen Relativ	Flaueger	
239/139 (A00)	Spec. Topics (Comp)	Di Ventra, Schuller	
239 (B00)	Spec. Topics: Emer Phs Tran	Goldenfeld	
242/142	Comp Phys	Duarte	
259A	Methods QBio	Hwa	
261	Grad. Seminar	Schuller	
276/176	Quant. Molecular	Hwa	
278/178	Biophys Neur Comp	Kleinfeld	

GRADUATE

Course	Title	Instructor	
202	Estimates	Vergassola, Diamond	
203B	E&M	Fogler	
210A	Equilib Stat Mech	Arovas	
212C	Quant Mech	Grover	
215C	Part & Fields	McGreevy	
224A	Nonlin-Dynam	Canceled	
222A	Exp Meth. Part.	Ni	
227	Cosmology	Fuller	
228	Compact Obj	Flaueger	
232/152B	Electronic Mats	Hirsch	
239 (A00)	Spec. Topics (Emerg & Order)	Goldenfeld	
239 (B00)	Spec. Topics (Biophys)	Serra	
241/141	Comp Phys	Zhao	
277/177	Phys of the Cell	Dudko	

For Academic Year 2025-26 PLEASE NOTE THE FOLLOWING

[Physics majors must click here to see exceptions applicable to the major requirements during AY25-26.](#)

Core offerings repeat annually as *listed* (i.e. courses in the PHYS 4, 100, 105, 110, 120, 130, and 140 series).

Summer offerings of PHYS 4A-B are not guaranteed beyond 2025.

Unless otherwise noted, all courses are offered in-person.

The schedule for the following academic year will typically be published ~April. (SEE NOTE) [14]

Not every course is offered annually or even bi-annually.

We *do not* offer any UD or GRAD physics courses over summer.

Instructors can be selected right up until the first day of instruction. If "STAFF" is listed that means the instructor has not yet been selected. Regularly check this spreadsheet for updates!

[Click here to see Special Topics \(39/139/239\) course descriptions](#)

SCROLL DOWN TO SEE OFFERINGS BY TERM

FALL 2025

LOWER DIVISION (LD)		
Course	Title	Instructor
1ABCLabs	Phys 1 Labs	Bal, Frano
1Aa	Mech	Groisman
1Ab	Mech	Groisman
1Ac	Mech	STAFF
1B	E&M	Tsai
1C	Wav/Rad/Mod	STAFF
2A	Mech	Shotwell
2B	E&M	Barreiro
2Ca	Fi/Wv/Th/Opt	Tan
2Cb	Fi/Wv/Th/Opt	Tan
2CL	E&M Lab	Ni
2D	Modern Phys	Sharma
2DL	Mod Phys Lab	Butov
4C	E&M	Chivukula
12	Energy Environ.	Branson
87 (SEE NOTE) [15]	First Year Seminar	Grinstein

WINTER 2026

LOWER DIVISION (LD)		
Course	Title	Instructor
1ABCLabs	Phys 1 Labs	Shotwell, Yang
1A	Mech	STAFF
1Ba	E&M	Smith
1Bb	E&M	Smith
1Bc	E&M	Smith
1C	Wav/Rad/Mod	Tsai
2Aa	Mech	Dudko
2Ab	Mech	Shotwell
2B	E&M	Ni
2C	Fi/Wv/Th/Opt	Keres
2CL	E&M Lab	Ariett
2D	Modern Phys	Hirsch
4A	Mech	Averitt
4D	EMWv/Opt/Rel	Intriligator
12	Energy Environ.	Sharma
39 (SEE NOTE) [16]	Spec. Top: Error Analys.	Ariett
39L (SEE NOTE) [18]	Spec. Top: E&M Lab for PHYS Majors	Kleinfeld
41	Sci. Comp: Python	Li

SPRING 2026

LOWER DIVISION (LD)		
Course	Title	Instructor
1ABCLabs	Phys 1 Labs	Meyertholen, Ni
1A	Mech	Ariett
1B	E&M	STAFF
1Ca	Wav/Rad/Mod	Popmintchev
1Cb	Wav/Rad/Mod	Popmintchev
1Cc	Wav/Rad/Mod	Popmintchev
2A	Mech	Bal
2Ba	E&M	Tan
2Bb	E&M	Bal
2BL	Mech Lab	Sharma
2C	Fi/Wv/Th/Opt	Duarte
2CL	E & M LAB	Frano
2D	Modern Phys	Branson
4B	Mech/Fi/Wv/Ht	Hirsch
4E	Quantum	Intriligator
39 (SEE NOTE) [17]	Spec. Top: Error Analys.	Frano

SUMMER 2026

LOWER DIVISION (LD)			
Course	Title	Instructor	Session(s)
1ABCLabs	Phys 1 Labs	TBD	1 & 2
1A	Mech	TBD	1 & 2
1B	E&M	TBD	1 & 2
1C	Wav/Rad/Mod	TBD	1 & 2
2A	Mech	TBD	1 only
2B	E&M	TBD	1 & 2
2BL	Mech Lab	TBD	1 only
2C	Fi / Wv/ Th /Opt	TBD	1 & 2
2CL	E&M LAB	TBD	2 only
2D	Modern Phys	TBD	2 only

UPPER DIVISION (UD) (SEE NOTE) [19]

Course	Title	Instructor
100A	E&M	Green
110A	Mech	Dudko
116/216	Fluid Dynamics	Diamond, Vergassola
130B	Quant Mech	Keating
133/219 LAB	Mati Sci Lab	Allen
136	Nuclear Physics	Grinstein
139 (A00) (SEE NOTE) [22]	Spec. Topics (Meissner Effect.)	Hirsch
139 (B00) (SEE NOTE) [24]	Spec. Topics (Machine Learning)	Duarte
140A	Stat/Therm	Parker
161	Black Holes	Fuller
175/275	Biological Phys	Koslover
191	UG Seminar	Yang

UPPER DIVISION (UD) (SEE NOTE) [20]

Course	Title	Instructor
100B	E&M	Barreiro
105A	Comp. Phys	Duarte
110B	Mech	Serra
124 LAB	Lab Project	Arnold
130A	Quant Mech	Parker
130C	Quant Mech	Branson
139/239 (A00) (SEE NOTE) [23]	Spec. Topics (Neur. Comp)	Di Ventra, Schuller
140B	Stat/Therm	Arovas
152A	Cond Matter	Butov
160	Stellar Astrophys.	Fuller
178/278	Biophys Neur Comp	Sharpee

UPPER DIVISION (UD) [21]

Course	Title	Instructor
100C	E&M	Barreiro
105B	Comp. Phys	Green
120 LAB	Circ. & Elec.	Yang
130A	Quant Mech	Lin
130B	Quant Mech	You
140A	Stat/Therm	Serra
141/241	Comp Phys	Zhao
152B	Electronic Mats	Di Ventra
162	Cosmology	Keating
178/276	Quant. Molecular	Hwa
177/277	Phys of the Cell	Dudko

PHYS MAJORS: Notice there's no "PHYS UD Lab" option in SPRING (the PHYS 120 lab is part of the CORE UD major requirements). Also notice PHYS 122 and PHYS 173 are not being offered in AY25-26.

GRADUATE

Course	Title	Instructor
200A	Mech	Di Ventra
201	Math Phys	Vergassola
210B	Noneq Stat Mech	McGreevy
211A	Solid State	Butov
212A	Quant Mech	Fogler
215A	Part & Fields	Shotwell
216/116	Fluid Dynam	Diamond, Vergassola
219/133 LAB	Mati Sci Lab	Allen
220	Group Theory	Arovas
225A	Gen Relativ	Flauger
239 (A00)	Spec. Topics (Meissner Effect.)	Hirsch

GRADUATE

Course	Title	Instructor
203A	E&M	Fogler
211B	Solid State	Grover
212B	Quant Mech	Chivukula
215B	Part & Fields	McGreevy
239/139 (A00)	Spec. Topics (Neur. Comp)	Di Ventra, Schuller
239 (B00)	Spec. Topics (Emer Phs Tran)	Goldenfeld
278/178	Biophys Neur Comp	Sharpee

GRADUATE

Course	Title	Instructor
203B	E&M	Fogler
210A	Equilib Stat Mech	Arovas
212C	Quant Mech	Grover
215C	Part & Fields	McGreevy
227	Cosmology	Fuller
232 (152B)	Electronic Mats	Di Ventra
239	Spec. Topics (Emerg)	Goldenfeld
241/141	Comp Phys	Zhao
259A	Methods QBio Reading	Hwa
278/176	Quant. Molecular	Hwa
277/177	Phys of the Cell	Dudko

239 (B00)	Spec. Topics (String Theory)	Intriligator
275/175	Biological Phys	Koslover
279	Neurodynamics	Silva
282	Spatio- Temp. Dyn.	Hwa
500	Teaching	Bal, Shotwell

[1] The UG schedule of service and core courses typically repeats annually; terms of LD astro, UD specialization, and grad courses may vary and non-core courses may not be offered in a particular year. If a course is in the catalog, that means we hope to offer it within the next 5 years. There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C.

There are two offerings of PHYS 140A but only ONE offering PHYS 140B.

PHYS 151 is crosslisted as MAE 117A and is only offered when MAE offers the courses (they give PHYS a few seats). Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring.

PHYS 137 is typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.

PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

[2] For details, see: <https://ugseminars.ucsd.edu/Listing.aspx>

[3] This will be a 1-unit course open only to students directed to enroll by the PHYS Dept. in relation to a processed course equivalency request.

[4] This will be a 1-unit course open only to students directed to enroll by the PHYS Dept. in relation to a processed course equivalency request.

[5] For details, see: <https://ugseminars.ucsd.edu/Listing.aspx>

[6] There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C
There are two offerings of PHYS 140A but only ONE offering PHYS 140B
PHYS 151 is crosslisted as MAE 117A and is only offered when MAE offers the courses (they give PHYS a few seats. Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring).
PHYS 137 is typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.
PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

[7] There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C
There are two offerings of PHYS 140A but only ONE offering PHYS 140B
PHYS 151 is crosslisted as MAE 117A and is only offered when MAE offers the courses (they give PHYS a few seats. Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring).
PHYS 137 is typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.
PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

[8] This PHYS 139 can count toward the PHYS UD REs for PY26, PY29, PY30, PY31, PY32, and PY33, only. PHYS 139s are not guaranteed to be offered annually.

[9] This is a new permanent course that will first appear in the catalog in January 2025. It was previously offered as a PHYS 139 Special Topic in W23 and W24. The prereqs for PHYS 136 are PHYS 4D, PHYS 100A, and PHYS 130A.

[10] The PHYS 2 series is no longer accepted as a prereq.

[11] This is the same PHYS 139 as was offered in W23. This particular PHYS 139 can count toward the PHYS UD REs for PY26, PY29, PY30, PY31, PY32, and PY33, only. PHYS 139s are not guaranteed to be offered annually.

[12] The PHYS 2 series is no longer accepted as a prereq.

[13] The PHYS 2 series is no longer accepted as a prereq.

[14] The UG schedule of service and core courses typically repeats annually; terms of LD astro, UD specialization, and grad courses may vary and non-core courses may not be offered in a particular year. If a course is in the catalog, that means we hope to offer it within the next 5 years. There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C.

There are two offerings of PHYS 140A but only ONE offering PHYS 140B.

PHYS 151 is crosslisted as MAE 117A and is only offered when MAE offers the courses (they give PHYS a few seats). Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring.

PHYS 137 is typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.

PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

PHYS 122 is typically offered in fall but is canceled for AY25-26.

If a course is not listed, it is not being offered.

[15] For details, see: <https://ugseminars.ucsd.edu/Listing.aspx>

[16] This will be a 1-unit course open only to students directed to enroll by the PHYS Dept. in relation to a processed course equivalency request.

[17] This will be a 1-unit course open only to students directed to enroll by the PHYS Dept. in relation to a processed course equivalency request.

[18] This will be a 2-unit course for PHYS majors that, by exception, can be used in place of PHYS 2CL for the major requirements and as a prereq for UD PHYS courses.

[19] PHYS 122 is canceled for AY25-26. There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C.

There are two offerings of PHYS 140A but only ONE offering PHYS 140B.

PHYS 151 is crosslisted as MAE 117A and is only offered when MAE decides to offer the course (they give PHYS a few seats). Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring).

PHYS 137 and 154 are typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.

PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

If a course is not listed, it is not being offered.

[20] There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C.

There are two offerings of PHYS 140A but only ONE offering PHYS 140B.

PHYS 151 is crosslisted as MAE 117A and is only offered when MAE decides to offer the course (they give PHYS a few seats). Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring).

PHYS 137 and 154 are typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.

PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

If a course is not listed, it is not being offered.

[21] There are two offerings of PHYS 130A-B but only ONE offering of PHYS 130C.

There are two offerings of PHYS 140A but only ONE offering PHYS 140B.

PHYS 151 is crosslisted as MAE 117A and is only offered when MAE decides to offer the course (they give PHYS a few seats). Please check with MAE to see if/when they plan to offer the course - we've typically only seen it in spring).

PHYS 137 and 154 are typically offered every other year in the spring (odd years) but no guarantees. If not listed, the course is not being offered.

PHYS 116 is typically offered every 3 years in the winter but no guarantees. If not listed, the course is not being offered.

If a course is not listed, it is not being offered.

[22] This PHYS 139 can count toward the PHYS UD REs for PY26, PY29, PY30, PY31, PY32, and PY33, only. PHYS 139s are not guaranteed to be offered annually.

[23] This PHYS 139 can count toward the PHYS UD REs for PY26, PY29, PY30, PY31, PY32, and PY33, only. PHYS 139s are not guaranteed to be offered annually.

[24] This PHYS 139 can count in place of PHYS 142 for PY33 or toward the PHYS UD REs for PY26, PY29, PY30, PY31, PY32, and PY33, only. PHYS 139s are not guaranteed to be offered annually.