

Web Address - <http://www.registrar.caltech.edu/>**KEY TO ABBREVIATIONS****LOCATIONS**

ANB	Annenberg Center for Information Science and Technology	KAR	Karman Laboratory
ARM	Arms Laboratory of Geological Sciences	KCK	Keck Engineering Laboratory
AVE	Avery House	KLK	Kellogg Radiation Laboratory
BAC	Braun Athletic Center	KRK	Kerckhoff Laboratory of Biological Sciences
BAX	Baxter Hall of Humanities and Social Services	KSP	Keith Spaulding Building
BBB	Beckman Laboratory of Behavioral Biology	L+R	Linde + Robinson Laboratory for Global Environmental Science
BCK	Beckman Institute	LAU	Lauritsen Physics Laboratory
BRD	Broad Center	LINDE	Ronald and Maxine Linde Hall of Mathematics and Physics
BRG	Bridge Laboratory of Physics	MEAD	Undergraduate Chemistry Laboratory
BRN	Braun Laboratory	MRE	Moore Laboratory
BRW	Brown Gym	NMD	North Mudd Building of Geological Sciences
CHL	Cahill Center for Astronomy and Astrophysics	NYS	Noyes Laboratory of Chemical Physics
CHR	Church Laboratory of Chemical Biology	NewMedia	NewMedia Classroom
CRL	Crellin Chemistry Laboratory	POLY	Polytechnic School
CSS	Center for Student Services	PWL/BTH	Powell/Booth Laboratory
DAB	Dabney Hall of Humanities	SAC	Student Activities Center
DWN	Downs Physics Laboratory	SCH	Schlinger Laboratory
DWN/LAU	Downs Lauritsen	SFL	Sherman Fairchild Library
FIR	Firestone Flight Science Laboratory	SMD	South Mudd Building of Geophysics and Planetary Sciences
GCL	Gates Chemical Laboratory	SPL	Spaulding Laboratory of Chemical Engineering
GTL	Gates-Thomas Engineering Laboratory	STL	Steele Laboratory of Electrical Engineering
GUG	Guggenheim Laboratory	TCT	Theater Arts at Caltech (TACIT)
HAM	Hameetman Center	WAT	Watson Laboratory of Applied Physics
JRG	Jorgensen Laboratory	YHC	Young Health Center

GRADING SCHEME

G = Grades Only
 P = Pass/Fail Only
 Blank = Grades/may exercise P/F

TIMES/LOCATION/UNITS

A = Hours/Location to be Arranged
 + = Units to be Arranged
 OM = Organizational Meeting

DAYS OF THE WEEK

M = Monday
 T = Tuesday
 W = Wednesday
 R = Thursday
 F = Friday
 S = Saturday
 U = Sunday

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme			
AEROSPACE										
Ae 200	+	Advanced Research in Aerospace	04	Dimotakis, P	A	A	P			
			05	Gharib, M	A	A	P			
			06	Hornung, H	A	A	P			
			07	Bhattacharya, K	A	A	P			
			08	Leonard, A	A	A	P			
			09	Murray, R	A	A	P			
			10	Ortiz, M	A	A	P			
			11	Pullin, D	A	A	P			
			12	Ravichandran, G	A	A	P			
			13	Rosakis, A	A	A	P			
			14	McKeon, B	A	A	P			
			15	Pellegrino, S	A	A	P			
			16	Shepherd, J	A	A	P			
			17	Blake, G	A	A	P			
			18	Lapusta, N	A	A	P			
			19	Troian, S	A	A	P			
			20	Daraio, C	A	A	P			
			21	Blanquart, G	A	A	P			
			22	Kochmann, D	A	A	P			
			23	Greer, J	A	A	P			
			24	Gurnis, M	A	A	P			
			25	Minnich, A	A	A	P			
			26	Johnson, J	A	A	P			
			27	Austin, J	A	A	P			
			28	Kulkarni, S	A	A	P			
			29	Chung, S	A	A	P			
			30	Asimaki, D	A	A	P			
			32	Meiron, D	A	A	P			
			33	Hunt, M	A	A	P			
			34	Dickinson, M	A	A	P			
			Ae 208B	1-0-0	GALCIT Colloquium	01	McKeon, B / Chung, S	F 15:00 - 15:55	133 GUG	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
AEROSPACE							
Ae 220	3-0-6	Theory of Structures <i>First class meeting will be held Tuesday, January 14th (no meeting during the first week of term)</i>	01	Pellegrino, S	TR 13:00 - 14:25	232 GUG	
Ae/AM/ME 223	3-0-6	Plasticity	01	Andrade, J	TR 14:30 - 15:55	135 GTL	
Ae/ACM/ME 232B	3-0-6	Computational Fluid Dynamics	01	Meiron, D	TR 14:30 - 15:55	232 GUG	P
Ae 240	+	Special Topics in Fluid Mechanics <i>Se 1: Educational Exchange // Sec 2: Wings and Wakes - 9 units (3-0-6)</i>	01 02	Meiron, D Winckelmans, G	A MW 12:30 - 13:55	A 133 GUG	P P
MedE/BE/Ae 243	3-0-6	Physiological Mechanics	01	Roh, C	TR 09:00 - 10:25	232 GUG	G
Ae/AM/CE/ME/Ge 265	3-0-6	Static and Dynamic Failure of Brittle Solids and Interfaces, from the Micro to the Mega	01	Rosakis, A	MWF 10:00 - 10:55	135 GTL	
ANTHROPOLOGY							
An 014	3-0-6	Introduction to Sociocultural Anthropology <i>maximum enrollment: 25 students // previously numbered An 22, counts as Intro SS</i>	01	Ensminger, J	TR 14:30 - 15:55	B125 BAX	G
An 097	+	Undergraduate Research	01	Ensminger, J	A	A	P
An/PS 127	3-0-6	Corruption <i>maximum enrollment: 15 students // Designated as Writing Intensive Course</i>	01	Ensminger, J	MW 14:30 - 15:55	127 BAX	G
APPLIED & COMPUTATIONAL MATH							
ACM080B	+	Undergraduate Thesis	01	Staff	A	A	P
ACM081B	+	Undergraduate Projects in Applied and Computational Mathematics	01 02	Effros, M Trojan, S	A A	A A	P P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
APPLIED & COMPUTATIONAL MATH							
ACM095A	4-0-8	Introductory Methods of Applied Mathematics for the Physical Sciences	01	Pierce, N	MWF 11:00 - 12:15	119 KRK	
ACM100A	4-0-8	Introductory Methods of Applied Mathematics for the Physical Sciences	01	Pierce, N	MWF 11:00 - 12:15	119 KRK	
ACM/IDS 101B	4-4-4	Methods of Applied Mathematics	01	Bruno, O	TR 14:30 - 16:25	213 ANB	
ACM105	3-0-6	Applied Real and Functional Analysis	01	Hoffmann, F	TR 10:30 - 11:55	243 ANB	
ACM/EE 106B	3-0-9	Introductory Methods of Computational Mathematics	01	Hou, Y	TR 13:00 - 14:25	105 ANB	
Ec/ACM/CS 112	3-0-6	Bayesian Statistics	01	Rangel, A	TR 10:30 - 11:55	155 ARM	
ACM118	3-0-9	Stochastic Processes and Regression	01	Owhadi, H	MW 13:00 - 14:25	213 ANB	
Ma/ACM/IDS 140A	3-0-6	Probability	01	Tamuz, O	MWF 13:00 - 13:55	187 LINDE	
Ma/ACM 142	3-0-6	Ordinary and Partial Differential Equations	01	Frank, R	TR 09:00 - 10:25	187 LINDE	P
IDS/ACM/CS 157	3-2-4	Statistical Inference	01	Zuev, K	MW 09:00 - 10:25	105 ANB	
CS/ACM 177A	3-3-3	Discrete Differential Geometry: Theory and Applications	01	Schroeder, P	TR 10:30 - 11:55	314 ANB	
ACM190	+	Reading and Independent Study	01	Bruno, O	A	A	P
ACM/IDS 204	3-0-9	Topics in Linear Algebra and Convexity: Randomized Algorithms for Linear Algebra	01	Tropp, J	TR 10:30 - 11:55	213 ANB	
ACM/IDS 216	3-0-6	Markov Chains, Discrete Stochastic Processes and Applications	01	Owhadi, H	TR 09:00 - 10:25	105 ANB	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
APPLIED & COMPUTATIONAL MATH							
Ae/ACM/ME 232B	3-0-6	Computational Fluid Dynamics	01	Meiron, D	TR 14:30 - 15:55	232 GUG	P
ACM300	+	Research in Applied and Computational Mathematics	01	Bruno, O	A	A	P
			02	Chandrasekaran, V	A	A	P
			03	Desbrun, M	A	A	P
			04	Hou, Y	A	A	P
			05	Tropp, J	A	A	P
			06	Meiron, D	A	A	P
			07	Pierce, N	A	A	P
			08	Owhadi, H	A	A	P
			09	Schroeder, P	A	A	P
			10	Hassibi, B	A	A	P
			11	Beck, J	A	A	P
			12	Stuart, A	A	A	P
			13	Graber, T	A	A	P
APPLIED MECHANICS							
Ae/AM/CE/ME 102B	3-0-6	Mechanics of Structures and Solids	01	Bhattacharya, K	TR 09:00 - 10:25	135 GTL	
AM/CE/ME 150B	1-0-0	Graduate Engineering Seminar	01	Lapusta, N	R 11:00 - 11:55	135 GTL	P
Ae/AM/ME 223	3-0-6	Plasticity	01	Andrade, J	TR 14:30 - 15:55	135 GTL	
AM/CE/ME 252	2-1-6	Linear and Nonlinear Waves in Structured Media <i>maximum enrollment: 20 students</i>	01	Daraio, C	F 14:00 - 15:55	115 GTL	
Ae/AM/CE/ME/Ge 264	3-0-6	Static and Dynamic Failure of Brittle Solids and Interfaces, from the Micro to the Mega	01	Rosakis, A	MWF 10:00 - 10:55	135 GTL	
AM 300	+	Research in Applied Mechanics	02	Bhattacharya, K	A	A	P
			03	Andrade, J	A	A	P
			04	Avouac, J	A	A	P
			05	Murray, R	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
APPLIED MECHANICS							
AM 300	+	Research in Applied Mechanics	06	Ortiz, M	A	A	P
			07	Phillips, R	A	A	P
			08	Ravichandran, G	A	A	P
APPLIED PHYSICS							
APh078B	+	Senior Thesis, Experimental	01	Faraon, A	A	A	P
			02	Scherer, A	A	A	P
			03	Phillips, R	A	A	P
			04	Painter, O	A	A	P
			05	Vahala, K	A	A	P
			06	Atwater, H	A	A	P
			07	Bellan, P	A	A	P
			08	Troian, S	A	A	P
			09	Yung, Y	A	A	P
			10	Schwab, K	A	A	P
			11	Knutson, H	A	A	P
			12	Endres, M	A	A	P
			13	Hajimiri, S	A	A	P
APh079B	+	Senior Thesis, Theoretical	01	Goddard, W	A	A	P
			02	Troian, S	A	A	P
			03	Kimble, H	A	A	P
APh100	+	Advanced Work in Applied Physics	01	Atwater, H	A	A	P
			02	Faraon, A	A	A	P
			03	Painter, O	A	A	P
			04	Scherer, A	A	A	P
			05	Troian, S	A	A	P
			07	Roukes, M	A	A	P
			08	Yang, C	A	A	P
			09	Bellan, P	A	A	P
			10	Phillips, R	A	A	P
			11	Choo, H	A	A	P
			12	Minnich, A	A	A	P
			13	Kimble, H	A	A	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
APPLIED PHYSICS							
Ae/Aph/CE/ME 101B	3-0-6	Fluid Mechanics	01	Austin, J	MWF 10:00 - 10:55	133 GUG	G
Ae/Aph 104B	0-6-3	Experimental Methods	01	McKeon, B	A	A	G
Aph109	0-6-3	Introduction to the Micro/Nanofabrication Lab	01	Troian, S / Ghaffari, A	OM,R 16:00 - 16:55	104 WAT	
Aph110	2-0-0	Topics in Applied Physics	01	Bellan, P	M 12:00 - 12:55	104 WAT	P
Aph114B	3-0-6	Solid-State Physics	01	Atwater, H	MWF 09:00 - 09:55	104 WAT	
Aph/Ph 115	3-0-9	Physics of Momentum Transport in Hydrodynamic Systems <i>class cancelled</i>	01	Staff	A	A	
Ph/Aph 137B	3-0-6	Atoms and Photons	01	Endres, M	TR 10:30 - 11:55	469 LAU	
EE/Aph 149	3-0-6	Frontiers of Nonlinear Photonics	01	Marandi, A	TR 13:00 - 14:25	B280 MRE	
Aph156B	3-0-6	Plasma Physics	01	Bellan, P	MW 14:30 - 15:55	104 WAT	
BE/Aph 161	3-0-9	Physical Biology of the Cell <i>Counts towards 'total biology units' requirement in the Biology undergraduate option.</i>	01	Phillips, R	MW 14:30 - 15:55	100 - Rock Auditorium BRD	
Aph200	+	Applied Physics Research	01	Atwater, H	A	A	P
			02	Fultz, B	A	A	P
			03	Bellan, P	A	A	P
			04	Chen, Y	A	A	P
			05	Johnson, W	A	A	P
			06	Schwab, K	A	A	P
			07	Goddard, W	A	A	P
			08	Lewis, N	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme			
APPLIED PHYSICS										
APh200	+	Applied Physics Research	09	Troian, S	A	A	P			
			10	Preskill, J	A	A	P			
			11	Refael, G	A	A	P			
			12	Faraon, A	A	A	P			
			13	Lewis, N	A	A	P			
			14	Alicea, J	A	A	P			
			15	Hsieh, D	A	A	P			
			16	Minnich, A	A	A	P			
			17	Yang, C	A	A	P			
			18	Gharib, M	A	A	P			
			19	Painter, O	A	A	P			
			20	Phillips, R	A	A	P			
			21	Bernardi, M	A	A	P			
			22	Kimble, H	A	A	P			
			23	Roukes, M	A	A	P			
			24	Nad Perge, S	A	A	P			
			25	Scherer, A	A	A	P			
			26	Hutzler, N	A	A	P			
			27	Van Zyl, J	A	A	P			
			28	Yeh, N	A	A	P			
			29	Endres, M	A	A	P			
			30	Vahala, K	A	A	P			
			31	Yariv, A	A	A	P			
			32	Rosenbaum, T	A	A	P			
			33	Adhikari, R	A	A	P			
			34	Meiron, D	A	A	P			
			35	Elowitz, M	A	A	P			
			39	Motrunich, O	A	A	P			
			40	Spiropulu, M	A	A	P			
			Ph/APh 223A	3-0-6	Advanced Condensed-Matter Physics	01	Alicea, J	MW 09:00 - 10:25	103 DWN	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
APPLIED PHYSICS							
APh250	3-0-6	Advanced Topics in Applied Physics: Recent Advances in Transport Phenomena in Micro/Nanoscale Systems	011	Troian, S	WF 11:00 - 12:25	170 WAT	
APh300	+	Thesis Research in Applied Physics	01	Faraon, A	A	A	P
			02	Bellan, P	A	A	P
			03	Flagan, R	A	A	P
			04	Refael, G	A	A	P
			05	Snyder, G	A	A	P
			06	Troian, S	A	A	P
			07	Fultz, B	A	A	P
			08	Schwab, K	A	A	P
			09	Desbrun, M	A	A	P
			10	Hsieh, D	A	A	P
			11	Faber, K	A	A	P
			12	Hutzler, N	A	A	P
			15	Phillips, R	A	A	P
			16	Daraio, C	A	A	P
			17	Rosenbaum, T	A	A	P
			18	Roukes, M	A	A	P
			20	Scherer, A	A	A	P
			21	Chen, Y	A	A	P
			24	Vahala, K	A	A	P
			25	Yariv, A	A	A	P
			28	Painter, O	A	A	P
			29	Zmuidzinas, J	A	A	P
			30	Atwater, H	A	A	P
			31	Bernardi, M	A	A	P
			32	Nad Perge, S	A	A	P
ASTROPHYSICS							
Ay 021	3-0-6	Galaxies and Cosmology	01	Steidel, C	TR 13:00 - 14:25	219 CHL	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ASTROPHYSICS							
Ay 043	+	Reading in Astronomy and Astrophysics	01	Staff	A	A	P
Ay 078B	+	Senior Thesis	01	Bock, J	A	A	P
			02	Fuller, J	A	A	P
			03	Hillenbrand, L	A	A	P
			04	Steidel, C	A	A	P
			05	Cohen, J	A	A	P
			06	Phinney, E	A	A	P
			07	Howard, A	A	A	P
			08	Martin, C	A	A	P
			09	Prince, T	A	A	P
			10	Harrison, F	A	A	P
			11	Hallinan, G	A	A	P
			12	Scoville, N	A	A	P
			13	Hopkins, P	A	A	P
			14	Djorgovski, S	A	A	P
			15	Knutson, H	A	A	P
			16	Kasliwal, M	A	A	P
			17	Mawet, D	A	A	P
			18	Blake, G	A	A	P
Ay 102	3-0-6	Physics of the Interstellar Medium	01	Hillenbrand, L	MWF 11:00 - 11:55	211 CHL	
Ay 111A	3-0-0	Introduction to Current Astrophysics Research	01	Kirby, E	F 11:00 - 11:55	219 CHL	P
Ge/Ay 117	3-0-6	Bayesian Statistics and Data Analysis	01	Knutson, H	MWF 14:00 - 14:55	269 LAU	
Ay 122B	3-0-6	Astronomical Measurements and Instrumentation	01	Hallinan, G / Ravi, V	TR 13:00 - 14:25	211 CHL	
Ay 124	3-0-6	Structure and Dynamics of Galaxies	01	Hopkins, P	MW 10:30 - 11:55	219 CHL	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ASTROPHYSICS							
Ay 127	3-0-6	Cosmology and Galaxy Formation	01	Martin, C / Hopkins, P	TR 14:30 - 15:55	219 CHL	
Ge/Ay 137	3-0-6	Planetary Physics	01	Batygin, K	MWF 13:00 - 13:55	162 SMD	
Ay 141B	1-0-2	Research Conference in Astronomy	01	Kasliwal, M	F 16:00 - 16:55	370 CHL	P
Ay 142	+	Research in Astronomy and Astrophysics	01	Fuller, J	A	A	P
			02	Blake, G	A	A	P
			03	Harrison, F	A	A	P
			04	Brown, M	A	A	P
			05	Phinney, E	A	A	P
			06	Djorgovski, S	A	A	P
			07	Howard, A	A	A	P
			08	Kasliwal, M	A	A	P
			09	Hillenbrand, L	A	A	P
			10	Fuller, J	A	A	P
			11	Kulkarni, S	A	A	P
			12	Hallinan, G	A	A	P
			13	Martin, C	A	A	P
			14	Bock, J	A	A	P
			16	Prince, T	A	A	P
			17	Hopkins, P	A	A	P
			18	Kirby, E	A	A	P
			19	Sargent, A	A	A	P
			20	Ravi, V	A	A	P
			23	Steidel, C	A	A	P
			27	Stevenson, D	A	A	P
			28	Cohen, J	A	A	P
			29	Knutson, H	A	A	P
			30	Mawet, D	A	A	P
			31	Batygin, K	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ASTROPHYSICS							
Ay 143	+	Reading and Independent Study	01	Sargent, A	A	A	P
			02	Kulkarni, S	A	A	P
			04	Hopkins, P	A	A	P
			06	Brown, M	A	A	P
			07	Blake, G	A	A	P
			08	Knutson, H	A	A	P
			09	Batygin, K	A	A	P
Ay 215	3-0-6	Seminar in Theoretical Astrophysics	01	Fuller, J / Phinney, E	T 17:00 - 18:55	319 CHL	P
BIOCHEMISTRY & MOLECULAR BIOPHYSICS							
BMB/Bi/Ch 173	3-0-6	Biophysical/Structural Methods	01	Jensen, G	TR 10:30 - 11:55	115 BCK	G
BMB/Ch 178	3-0-6	Macromolecular Function: Kinetics, Energetics, and Mechanisms <i>class cancelled</i>	01	Staff	A	A	
BMB/Ch 202B	1-0-0	Biochemistry Seminar Course <i>To be held on Biochemistry Seminar days from 12-1pm (approx. 1-2 per month).</i>	01	Clemons, W	R 12:00 - 12:55	320 BRN	P
Bi/BMB 251B	+	Current Research in Cellular and Molecular Biology <i>meets Wednesdays noon-1pm in BBB B180</i>	01	Hay, B	A	A	P
BMB299	+	Graduate Research	01	Mayo, S	A	A	P
			02	Pachter, L	A	A	P
			03	Rothmund, P	A	A	P
			04	Bjorkman, P	A	A	P
			05	Arnold, F	A	A	P
			06	Rees, D	A	A	P
			07	Greer, J	A	A	P
			08	Campbell, J	A	A	P
			09	Phillips, R	A	A	P
			10	Hay, B	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOCHEMISTRY & MOLECULAR BIOPHYSICS							
BMB299	+	Graduate Research	11	Hsieh-Wilson, L	A	A	P
			12	Phillips, R	A	A	P
			13	Parker, C	A	A	P
			14	Barton, J	A	A	P
			15	Heath, J	A	A	P
			16	Davidson, E	A	A	P
			17	Anderson, D	A	A	P
			18	Dougherty, D	A	A	P
			19	Mazmanian, S	A	A	P
			20	Shan, S	A	A	P
			21	Jensen, G	A	A	P
			22	Elowitz, M	A	A	P
			23	Dervan, P	A	A	P
			24	Dunphy, W	A	A	P
			25	Tirrell, D	A	A	P
			26	Patterson, P	A	A	P
			27	Meyerowitz, E	A	A	P
			28	Rothenberg, E	A	A	P
			29	Clemons, W	A	A	P
			30	Leadbetter, J	A	A	P
			31	Kennedy, M	A	A	P
			32	Lester, H	A	A	P
			33	Murray, R	A	A	P
			34	Mazmanian, S	A	A	P
			35	Baltimore, D	A	A	P
			36	Wang, Z	A	A	P
			37	Gharib, M	A	A	P
			38	Miller, T	A	A	P
			39	Sternberg, P	A	A	P
			40	Davis, M	A	A	P
			41	Pierce, N	A	A	P
			42	Gray, H	A	A	P
			43	Roukes, M	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOCHEMISTRY & MOLECULAR BIOPHYSICS							
BMB299	+	Graduate Research	44	Newman, D	A	A	P
			45	Cai, L	A	A	P
			46	Varshavsky, A	A	A	P
			47	Hoelz, A	A	A	P
			48	Goentoro, L	A	A	P
			49	Guttman, M	A	A	P
			50	Shapiro, M	A	A	P
			51	Ismagilov, R	A	A	P
			52	Meister, M	A	A	P
			53	Chan, D	A	A	P
			54	Zinn, K	A	A	P
			55	Ondrus, A	A	A	P
			56	Voorhees, R	A	A	P
			57	Winfrey, E	A	A	P
			58	Wagenaar, D	A	A	P
			60	Parker, J	A	A	P
BIOENGINEERING							
BE 001	1-0-0	Frontiers in Bioengineering	01	Bois, J	M 12:00 - 12:55	B270 MRE	P
BE 098	+	Undergraduate Research in Bioengineering <i>If your research advisor does not appear below, please contact the Office of the Registrar.</i>	01	Arnold, F	A	A	P
			02	Mayo, S	A	A	P
			03	Burdick, J	A	A	P
			04	Kennedy, M	A	A	P
			05	Beauchamp, J	A	A	P
			06	Shimojo, S	A	A	P
			07	Gharib, M	A	A	P
			08	Hajimiri, S	A	A	P
			09	Lester, H	A	A	P
			10	Phillips, R	A	A	P
			11	Dervan, P	A	A	P
			12	Pierce, N	A	A	P
			13	Gradinaru, V	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOENGINEERING							
BE 098	+	Undergraduate Research in Bioengineering <i>If your research advisor does not appear below, please contact the Office of the Registrar.</i>	14	Ondrus, A	A	A	P
			15	Guttman, M	A	A	P
			16	Roukes, M	A	A	P
			17	Scherer, A	A	A	P
			18	Tai, Y	A	A	P
			19	Tirrell, D	A	A	P
			20	Yang, C	A	A	P
			21	Shan, S	A	A	P
			22	Adolphs, R	A	A	P
			23	Elowitz, M	A	A	P
			24	Murray, R	A	A	P
			25	Bjorkman, P	A	A	P
			26	Leadbetter, J	A	A	P
			27	Winfree, E	A	A	P
			28	Ismagilov, R	A	A	P
			29	Oka, Y	A	A	P
			30	Kornfield, J	A	A	P
			31	Baltimore, D	A	A	P
			32	Davis, M	A	A	P
			33	Sternberg, P	A	A	P
			34	Meister, M	A	A	P
			35	Aravin, A	A	A	P
36	Qian, L	A	A	P			
37	Shapiro, M	A	A	P			
38	Mazmanian, S	A	A	P			
39	Van Valen, D	A	A	P			
40	Thomson, M	A	A	P			
41	Dickinson, M	A	A	P			
42	Wang, K	A	A	P			
BE/Bi 103B	1-3-5	Statistical Inference in the Biological Sciences	01	Bois, J	T 13:00 - 15:55 W 09:00 - 09:55	200 BRD 100 - Rock Auditorium BRD	
			02	Bois, J	T 19:00 - 21:55	200 BRD	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOENGINEERING							
BE/Bi 103B	1-3-5	Statistical Inference in the Biological Sciences	02	Bois, J	W 09:00 - 09:55	100 - Rock Auditorium BRD	
ChE/BE/MedE 112	3-0-6	Design, Invention, and Fundamentals of Microfluidic Systems <i>Maximum enrollment: 20 students</i>	01	Ismagilov, R	TR 13:00 - 14:25	102 SPL	
BE 159	3-0-6	Signal Transduction and Mechanics in Morphogenesis	01	Bois, J	F 10:00 - 10:55	102 SPL	
					MW 10:00 - 10:55	102 SPL	
			02	Bois, J	MW 10:00 - 10:55	102 SPL	
					F 11:00 - 11:55	102 SPL	
BE/APh 161	3-0-9	Physical Biology of the Cell <i>Counts towards 'total biology units' requirement in the Biology undergraduate option.</i>	01	Phillips, R	MW 14:30 - 15:55	100 - Rock Auditorium BRD	
MedE/EE/BE 168A	4-0-5	Biomedical Optics: Principles and Imaging	01	Wang, L	WF 15:30 - 17:25	142 KCK	G
Bi/BE 182	3-0-6	Animal Development and Genomic Regulatory Network Design	01	Stathopoulos, A / Peter Lashgari Faghani, I	TR 13:00 - 14:25	152 BRN	
Bi/BE/CS 183	3-0-6	Introduction to Computational Biology and Bioinformatics	01	Thomson, M / Pachter, L	TR 10:30 - 11:55	119 KRK	
BE 200	+	Research in Bioengineering	01	Arnold, F	A	A	P
			02	Troian, S	A	A	P
			03	Burdick, J	A	A	P
			04	Rothmund, P	A	A	P
			05	Dervan, P	A	A	P
			06	Goentoro, L	A	A	P
			07	Gharib, M	A	A	P
			08	Hajimiri, S	A	A	P
			10	Lester, H	A	A	P
			11	Guttman, M	A	A	P
			12	Pierce, N	A	A	P
			13	Meister, M	A	A	P
			14	Goddard, W	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOENGINEERING							
BE 200	+	Research in Bioengineering	15	Ismagilov, R	A	A	P
			16	Roukes, M	A	A	P
			17	Scherer, A	A	A	P
			18	Tai, Y	A	A	P
			19	Tirrell, D	A	A	P
			20	Yang, C	A	A	P
			21	Thomson, M	A	A	P
			22	Dickinson, M	A	A	P
			23	Elowitz, M	A	A	P
			24	Murray, R	A	A	P
			25	Lois, C	A	A	P
			26	Leadbetter, J	A	A	P
			27	Winfrey, E	A	A	P
			28	Shapiro, M	A	A	P
			29	Phillips, R	A	A	P
			30	Mayo, S	A	A	P
			31	Sternberg, P	A	A	P
			32	Gradinaru, V	A	A	P
			33	Andersen, R	A	A	P
			34	Qian, L	A	A	P
			35	Kornfield, J	A	A	P
			36	Bjorkman, P	A	A	P
			37	Cai, L	A	A	P
			38	Hong, E	A	A	P
39	Greer, J	A	A	P			
40	Pachter, L	A	A	P			
41	Mazmanian, S	A	A	P			
42	Wang, K	A	A	P			
43	Shapiro, B	A	A	P			
44	Van Valen, D	A	A	P			
BE 201	+	Reading the Bioengineering Literature <i>Required for first and second year BE grad students // class meets on Mondays, noon - 1pm</i>	01	Wang, K	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOENGINEERING							
Bi/BE 227	2-6-4	Methods in Modern Microscopy	01	Collazo, A	M 10:00 - 10:55 W 10:00 - 10:55	152 BRN 101 KRK	
MedE/BE/Ae 243	3-0-6	Physiological Mechanics	01	Roh, C	TR 09:00 - 10:25	232 GUG	G
BIOLOGY							
Bi 008	3-0-6	Introduction to Molecular Biology: Regulation of Gene Expression <i>Maximum enrollment: 30 students per section</i>	01	Guttman, M / Hong, E	TR 13:00 - 14:25 W 15:00 - 15:55	119 KRK 101 KRK	
			02	Guttman, M / Hong, E	TR 13:00 - 14:25 R 19:00 - 19:55	119 KRK 101 KRK	
			03	Guttman, M / Hong, E	TR 13:00 - 14:25 F 14:00 - 14:55	119 KRK 152 BRN	
Bi 021	+	Undergraduate Research with Presentation <i>minimum 12 units per term</i>	01	Staff	A	A	P
Bi 022	+	Undergraduate Research	01	Chan, D	A	A	P
			02	Quartz, S	A	A	P
			03	Allman, J	A	A	P
			04	Anderson, D	A	A	P
			05	Parker, C	A	A	P
			06	Arnold, F	A	A	P
			07	Baltimore, D	A	A	P
			08	Sternberg, P	A	A	P
			09	Lester, H	A	A	P
			10	Bjorkman, P	A	A	P
			11	Bronner Hansen, M	A	A	P
			12	Leadbetter, J	A	A	P
			13	Adolphs, R	A	A	P
			14	Shapiro, M	A	A	P
			15	Rothenberg, E	A	A	P
			16	Hay, B	A	A	P
			17	Cai, L	A	A	P
			18	Shan, S	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi 022	+	Undergraduate Research	19	Campbell, J	A	A	P
			20	Clemons, W	A	A	P
			21	Stevenson, D	A	A	P
			22	Orphan, V	A	A	P
			23	Varshavsky, A	A	A	P
			24	Meyerowitz, E	A	A	P
			25	Meister, M	A	A	P
			26	Winfrey, E	A	A	P
			27	Mazmanian, S	A	A	P
			28	Tirrell, D	A	A	P
			29	Shimojo, S	A	A	P
			30	Wold, B	A	A	P
			31	Sternberg, P	A	A	P
			32	Kennedy, M	A	A	P
			33	Newman, D	A	A	P
			34	Hsiao, E	A	A	P
			35	Gradinaru, V	A	A	P
			36	Peter Lashgari Faghani, I	A	A	P
			37	Thomson, M	A	A	P
			40	Goddard, W	A	A	P
			41	Stathopoulos, A	A	A	P
			42	Zinn, K	A	A	P
			43	Rangel, A	A	A	P
			45	Davis, M	A	A	P
			46	Murray, R	A	A	P
			47	Jensen, G	A	A	P
			48	Elowitz, M	A	A	P
			49	Prober, D	A	A	P
			50	Bronner Hansen, M	A	A	P
			51	Aravin, A	A	A	P
			52	Aravin, A	A	A	P
			53	Clemons, W	A	A	P
			54	Mazmanian, S	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi 022	+	Undergraduate Research	55	Newman, D	A	A	P
			56	Shan, S	A	A	P
			57	Guttman, M	A	A	P
			58	Ondrus, A	A	A	P
			59	Hong, E	A	A	P
			60	Pachter, L	A	A	P
			61	Zernicka-Goetz, M	A	A	P
			62	Wang, K	A	A	P
			63	Andersen, R	A	A	P
Bi 023	1-0-2	Biology Tutorials <i>1: section cancelled/2: Metals in Biology/3: The Junkyard of Biology: What Genomes Hide in between Genes/4: Studying Wiring of the Nervous System with Model Organisms</i>	01	Staff	A	A	P
			02	Purohit, R / Huang, A	F 13:00 - 14:15	356 CRL	P
			03	Jachowicz, J / Huang, A / Borsos, M	R 16:00 - 16:55	B136 KRK	P
			04	Xu, S / Huang, A	T 18:00 - 18:55	300 BRD	P
Bi 090B	+	Undergraduate Thesis	01	Doyle, J / Bjorkman, P	A	A	P
			02	Wold, B / Bjorkman, P	A	A	P
			03	Sternberg, P / Bjorkman, P	A	A	P
			04	Lester, H / Bjorkman, P	A	A	P
			05	Newman, D / Bjorkman, P	A	A	P
			06	Anderson, D / Bjorkman, P	A	A	P
			07	Wold, B / Bjorkman, P	A	A	P
			09	Allman, J / Bjorkman, P	A	A	P
			10	Rothenberg, E / Bjorkman, P	A	A	P
			11	Rangel, A / Bjorkman, P	A	A	P
			12	Gradinaru, V / Bjorkman, P	A	A	P
			13	Davis, M / Bjorkman, P	A	A	P
			14	Baltimore, D / Bjorkman, P	A	A	P
			15	Rothenberg, E / Bjorkman, P	A	A	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi 090B	+	Undergraduate Thesis	16	Hassibi, B / Bjorkman, P	A	A	P
			17	Bjorkman, P	A	A	P
			18	Siapas, A / Bjorkman, P	A	A	P
			19	Mazmanian, S / Bjorkman, P	A	A	P
			20	Bronner Hansen, M / Bjorkman, P	A	A	P
Bi 090C	+	Undergraduate Thesis	01	Bronner Hansen, M / Bjorkman, P	A	A	P
CNS/Psy/Bi 102A	3-0-6	Brains, Minds, and Society	01	Adolphs, R / O'Doherty, J	MW 14:30 - 15:55	B167 BRD	
BE/Bi 103B	1-3-5	Statistical Inference in the Biological Sciences	01	Bois, J	T 13:00 - 15:55 W 09:00 - 09:55	200 BRD 100 - Rock Auditorium BRD	
			02	Bois, J	T 19:00 - 21:55 W 09:00 - 09:55	200 BRD 100 - Rock Auditorium BRD	
Bi/Ge/ESE 105	3-4-5	Evolution <i>maximum enrollment: 15 students</i>	01	Phillips, R / Orphan, V	MW 13:00 - 14:25	100 - Rock Auditorium BRD	
Bi/Ch 111	4-0-8	Biochemistry of Gene Expression	01	Parker, C / Campbell, J	W 15:00 - 16:25 WF 14:00 - 14:55	152 BRN 320 BRN	
Bi 114	3-0-6	Immunology	01	Yui, M / Bjorkman, P	MW 13:30 - 14:55	200 BRD	
Bi 116	3-0-6	Microbial Genetics <i>maximum enrollment: 15 students</i>	01	Mazmanian, S / Newman, D	TR 13:00 - 14:25	101 KRK	G
Bi 117	3-0-6	Developmental Biology	01	Bronner Hansen, M	M 19:00 - 19:55 TR 13:00 - 14:25	100 - Rock Auditorium BRD 100 - Rock Auditorium BRD	
Bi 145B	3-0-6	Tissue and Organ Physiology	01	Tydell, C	MW 19:00 - 20:25	152 BRN	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi/CNS/NB 162	2-4-6	Cellular and Systems Neuroscience Laboratory <i>maximum enrollment: 18 students</i>	01	Bremner, L	M 13:00 - 16:25	B160 CHR	
NB/Bi/CNS 163	3-0-3	The Biological Basis of Neural Disorders	01	Lester, H / Lois, C	MW 09:00 - 10:25	B136 KRK	G
BMB/Bi/Ch 173	3-0-6	Biophysical/Structural Methods	01	Jensen, G	TR 10:30 - 11:55	115 BCK	G
Bi/BE 182	3-0-6	Animal Development and Genomic Regulatory Network Design	01	Stathopoulos, A / Peter Lashgari Faghani, I	TR 13:00 - 14:25	152 BRN	
Bi/BE/CS 183	3-0-6	Introduction to Computational Biology and Bioinformatics	01	Thomson, M / Pachter, L	TR 10:30 - 11:55	119 KRK	
CNS/Bi/EE/CS/NB 186	4-4-4	Vision: From Computational Theory to Neuronal Mechanisms	01	Shimojo, S / Perona, P / Meister, M / Tsao, D	TR 10:30 - 11:55	B101 BBB	
Bi/BE 227	2-6-4	Methods in Modern Microscopy	01	Collazo, A	M 10:00 - 10:55 W 10:00 - 10:55	152 BRN 101 KRK	
Ge/Bi/ESE 246	2-0-4	Molecular Geobiology Seminar	01	Orphan, V	R 14:00 - 15:55	251 ARM	P
Bi/BMB 251B	+	Current Research in Cellular and Molecular Biology <i>meets Wednesdays noon-1pm in BBB B180</i>	01	Hay, B	A	A	P
Bi 253	+	Reading, Writing, Reviewing, Experimental Design and Reproducibility <i>meets Mondays 3-5pm in 152 Braun // 6 units (2-0-4)</i>	01	Hay, B / Meister, M / Sternberg, P	A	A	P
Bi 299	+	Graduate Research	01 02 03 04 05 06 07	Stathopoulos, A Lester, H Allman, J Andersen, R Anderson, D Varshavsky, A Mazmanian, S	A A A A A A A	A A A A A A A	P P P P P P P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi 299	+	Graduate Research	08	Ondrus, A	A	A	P
			09	Pachter, L	A	A	P
			10	Bjorkman, P	A	A	P
			11	Bronner Hansen, M	A	A	P
			12	Campbell, J	A	A	P
			13	Chan, D	A	A	P
			14	Thomson, M	A	A	P
			15	Baltimore, D	A	A	P
			16	Dickinson, M	A	A	P
			17	Clemons, W	A	A	P
			18	Dunphy, W	A	A	P
			19	Voorhees, R	A	A	P
			20	Goddard, W	A	A	P
			21	Hay, B	A	A	P
			22	Kennedy, M	A	A	P
			23	Scherer, A	A	A	P
			24	Orphan, V	A	A	P
			25	Arnold, F	A	A	P
			26	Pierce, N	A	A	P
			27	Tsao, D	A	A	P
			28	Mayo, S	A	A	P
			29	Meyerowitz, E	A	A	P
			30	Newman, D	A	A	P
			31	Guo, C	A	A	P
			32	Lois, C	A	A	P
			33	Gharib, M	A	A	P
			34	Kirschvink, J	A	A	P
			35	Hsieh-Wilson, L	A	A	P
			36	Shan, S	A	A	P
			37	Rothenberg, E	A	A	P
			38	Elowitz, M	A	A	P
			39	Guttman, M	A	A	P
			40	Shimojo, S	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi 299	+	Graduate Research	41	Phillips, R	A	A	P
			42	Sternberg, P	A	A	P
			43	Cai, L	A	A	P
			44	Goentoro, L	A	A	P
			45	Winfrey, E	A	A	P
			46	Wold, B	A	A	P
			47	Jensen, G	A	A	P
			48	Heath, J	A	A	P
			49	Zinn, K	A	A	P
			50	Zernicka-Goetz, M	A	A	P
			51	Elowitz, M	A	A	P
			52	Prober, D	A	A	P
			53	Adolphs, R	A	A	P
			54	Aravin, A	A	A	P
			55	Dougherty, D	A	A	P
			56	Tai, Y	A	A	P
			57	Fejes Toth, K	A	A	P
			58	Burdick, J	A	A	P
			59	Meister, M	A	A	P
			60	Siapas, A	A	A	P
			61	Murray, R	A	A	P
			62	Gradinaru, V	A	A	P
			63	Qian, L	A	A	P
			64	Oka, Y	A	A	P
			65	Hsiao, E	A	A	P
			66	Shapiro, M	A	A	P
			67	Hong, E	A	A	P
			68	Ismagilov, R	A	A	P
			69	Phillips, R	A	A	P
			70	Parker, J	A	A	P
			71	Roukes, M	A	A	P
			72	Van Valen, D	A	A	P
			73	Wang, K	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
BIOLOGY							
Bi 299	+	Graduate Research	74	Zernicka-Goetz, M	A	A	P
BUSINESS, ECONOMICS, AND MANAGEMENT							
BEM097	+	Undergraduate Research <i>Instructor permission required prior to registering</i>	01	Camerer, C	A	A	P
BEM103	3-0-6	Introduction to Finance	01	Jin, J	TR 13:00 - 14:25	125 BAX	G
BEM110	3-0-6	Venture Capital	01	Ewens, M	MW 10:30 - 11:55	125 BAX	G
BEM111	3-0-6	Quantitative Risk and Portfolio Management	01	Winston, K	TR 19:00 - 20:25	B125 BAX	
CHEMICAL ENGINEERING							
ChE010	1-0-0	Introduction to Chemical Engineering	01	Shapiro, M	T 12:00 - 12:55	113 SPL	P
ChE062	3-0-6	Separation Processes	01	Seinfeld, J	MWF 13:00 - 13:55	106 SPL	G
ChE063A	3-0-6	Chemical Engineering Thermodynamics	01	Flagan, R	MWF 14:00 - 14:55	106 SPL	G
ChE070	0-0-0	Special Topics in Chemical Engineering: ChemE Car	01	Brady, J / Vicic, M	M 14:00 - 16:55 T 16:00 - 18:55	MEAD MEAD	P
ChE080	+	Undergraduate Research	01	Arnold, F	A	A	P
			02	Giapis, K	A	A	P
			03	Kornfield, J	A	A	P
			04	Haile, S	A	A	P
			05	Ismagilov, R	A	A	P
			06	Lewis, N	A	A	P
			07	Davis, M	A	A	P
			08	Grubbs, R	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMICAL ENGINEERING							
ChE080	+	Undergraduate Research	09	Shapiro, M	A	A	P
			10	Goddard, W	A	A	P
			11	Hoelz, A	A	A	P
			13	Flagan, R	A	A	P
			14	Gavalas, G	A	A	P
			15	Shapiro, M	A	A	P
			34	Seinfeld, J	A	A	P
			36	Tirrell, D	A	A	P
			37	Heath, J	A	A	P
			38	Agapie, T	A	A	P
ChE090A	+	Senior Thesis	01	Heath, J	A	A	P
			02	Giapis, K	A	A	P
			03	Seinfeld, J	A	A	P
			04	Tirrell, D	A	A	P
			06	Flagan, R	A	A	P
			07	Gavalas, G	A	A	P
			08	Kornfield, J	A	A	P
			09	Davis, M	A	A	P
			10	Haile, S	A	A	P
			11	Wang, Z	A	A	P
			13	Brady, J	A	A	P
			14	Greer, J	A	A	P
			15	Cai, L / Arnold, F	A	A	P
			16	Grubbs, R	A	A	P
17	Fu, G	A	A	P			
			18	Atwater, H	A	A	P
ChE090B	0-4-5	Senior Thesis	01	Giapis, K	A	A	
			02	Tirrell, D	A	A	
			03	Kornfield, J	A	A	
			04	Arnold, F	A	A	
			05	Lewis, N	A	A	
			06	Flagan, R	A	A	
			08	Mayo, S	A	A	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMICAL ENGINEERING							
ChE090B	0-4-5	Senior Thesis	09	Ismagilov, R	A	A	
			10	Seinfeld, J	A	A	
			11	Wang, Z	A	A	
Ch/ChE 091	2-0-1	Scientific Writing <i>class will meet in 151 Crellin on 2/10/20</i>	01	Parker, C	M 14:00 - 15:55	101 SCH	G
ChE101	3-0-6	Chemical Reaction Engineering	01	Davis, M	TR 14:30 - 15:55	106 SPL	
ChE103B	3-0-6	Transport Phenomena	01	Shapiro, M	MWF 10:00 - 10:55	106 SPL	
ChE/BE/MedE 112	3-0-6	Design, Invention, and Fundamentals of Microfluidic Systems <i>Maximum enrollment: 20 students</i>	01	Ismagilov, R	TR 13:00 - 14:25	102 SPL	
ChE114	3-3-3	Solid State NMR Spectroscopy for Materials Chemistry	01	Hwang, S	TR 14:30 - 15:55	102 SPL	
ChE118	3-0-6	Introduction to the Design of Chemical Systems	01	Vicic, M	MWF 15:00 - 15:55	102 SPL	G
ChE128	1-6-2	Chemical Engineering Design Laboratory <i>If unable to register, please contact instructor.</i>	01	Vicic, M / Giapis, K	M 12:00 - 12:55	113 SPL	G
					WF 09:00 - 11:55	122 SPL	
Ch/ChE 140B	3-0-6	Principles and Applications of Semiconductor Photoelectrochemistry	01	Lewis, N	TR 13:00 - 14:25	216 NYS	
ChE141	1-2-6	Data Science for Chemical Systems <i>Max enrollment is 15 students; Priority given to ChE undergrads // class will meet in SPL 113 on 1/14/20</i>	01	Vicic, M	TR 10:30 - 11:55	102 SPL	G
ChE151A	3-0-9	Physical and Chemical Rate Processes	01	Brady, J	MWF 09:00 - 09:55	102 SPL	G
ChE/Ch 164	3-0-6	Introduction to Statistical Thermodynamics	01	Wang, Z	TR 10:30 - 11:55	106 SPL	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMICAL ENGINEERING							
ChE190	3-0-6	Special Problems in Chemical Engineering: Fundamentals of Sustainability <i>taught concurrently with ESE100 and MS 150</i>	01	Kornfield, J / Diallo, M	TR 11:30 - 12:55	102 SPL	
ChE280	+	Chemical Engineering Research	01	Arnold, F	A	A	P
			02	Murray, R	A	A	P
			03	Haile, S	A	A	P
			04	Stoltz, B	A	A	P
			05	Pierce, N	A	A	P
			06	Dougherty, D	A	A	P
			07	Brady, J	A	A	P
			08	Atwater, H	A	A	P
			09	Elowitz, M	A	A	P
			10	Davis, M	A	A	P
			11	Greer, J	A	A	P
			12	Fultz, B	A	A	P
			13	Flagan, R	A	A	P
			14	See, K	A	A	P
			15	Fultz, B	A	A	P
			16	Giapis, K	A	A	P
			17	Goddard, W	A	A	P
			18	Miller, T	A	A	P
			19	Shapiro, M	A	A	P
			20	Hoffmann, M	A	A	P
			21	Kornfield, J	A	A	P
			22	Robb, M	A	A	P
			23	Lewis, N	A	A	P
			24	Wei, L	A	A	P
			25	Chan, G	A	A	P
			26	Pachter, L	A	A	P
			36	Tirrell, D	A	A	P
			37	Wang, Z	A	A	P
			40	Seinfeld, J	A	A	P
			41	Heath, J	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMICAL ENGINEERING							
ChE280	+	Chemical Engineering Research	46	Ismagilov, R	A	A	P
			47	Guttman, M	A	A	P
CHEMISTRY							
Ch 001B	4-0-5	General Chemistry <i>Maximum Enrollment: 25 students per section</i>	01	Miller, T / Robb, M	MTR 11:00 - 11:55 W 14:00 - 14:55	Lecture Hall BAX 151 CRL	P
			02	Miller, T / Robb, M	MTR 11:00 - 11:55 W 14:00 - 14:55	Lecture Hall BAX 119 KRK	P
			03	Miller, T / Robb, M	MTR 11:00 - 11:55 W 15:00 - 15:55	Lecture Hall BAX 119 KRK	P
			04	Miller, T / Robb, M	MTR 11:00 - 11:55 W 14:00 - 14:55	Lecture Hall BAX 147 NYS	P
			05	Miller, T / Robb, M	MTR 11:00 - 11:55 W 16:00 - 16:55	Lecture Hall BAX 151 CRL	P
			06	Miller, T / Robb, M	MTR 11:00 - 11:55 W 15:00 - 15:55	Lecture Hall BAX B111 DWN	P
			07	Miller, T / Robb, M	MTR 11:00 - 11:55 R 14:00 - 14:55	Lecture Hall BAX 151 CRL	P
			08	Miller, T / Robb, M	MTR 11:00 - 11:55 R 16:00 - 16:55	Lecture Hall BAX 151 CRL	P
			09	Miller, T / Robb, M	MTR 11:00 - 11:55 F 14:00 - 14:55	Lecture Hall BAX 151 CRL	P
			10	Miller, T / Robb, M	MTR 11:00 - 11:55 F 15:00 - 15:55	Lecture Hall BAX 151 CRL	P
Ch 003A	1-3-2	Fundamental Techniques of Experimental Chemistry <i>Maximum enrollment: 20 students per section//Section 3 reserved for freshmen</i>	01	Mendez, J	F 13:00 - 13:55	153 NYS	P
					T 08:00 - 10:55	107 MEAD	
			02	Mendez, J	OM,M 13:00 - 13:55	153 NYS	P
					F 13:00 - 13:55	153 NYS	
			03	Mendez, J	T 13:00 - 15:55	107 MEAD	P
					OM,M 13:00 - 13:55	153 NYS	
		F 13:00 - 13:55	153 NYS				
		T 19:00 - 21:55	107 MEAD				
		OM,M 13:00 - 13:55	153 NYS				

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 003X	1-3-2	Experimental Methods in Solar Energy Conversion <i>Maximum Enrollment: 20 students per section</i>	01	Mendez, J	F 09:00 - 09:55	147 NYS	P
					W 13:00 - 15:55	107 MEAD	
					OM,M 09:00 - 09:55	147 NYS	
			02	Mendez, J	F 09:00 - 09:55	147 NYS	P
				R 08:00 - 10:55	107 MEAD		
				OM,M 09:00 - 09:55	147 NYS		
Ch 004A	1-6-2	Synthesis and Analysis of Organic and Inorganic Compounds <i>maximum enrollment: 18 students per section</i>	01	Mendez, J	F 11:00 - 11:55	147 NYS	
					TR 08:00 - 10:55	105 MEAD	
			02	Mendez, J	F 11:00 - 11:55	147 NYS	
					TR 13:00 - 15:55	105 MEAD	
Ch 005A	1-9-2	Advanced Techniques of Synthesis and Analysis <i>Lab times available MF 8am-5pm and W 1-5pm</i>	01	Grubbs, R	A	MEAD	
Ch 010B	1-0-0	Frontiers in Chemistry <i>Lab Hours TBA</i>	01	Dervan, P / Hoelz, A	R 12:00 - 12:55	147 NYS	P
Ch 014	2-3-4	Chemical Equilibrium and Analysis	01	Rees, D	MW 11:00 - 11:55	151 CRL	G
Ch 021B	3-0-6	Physical Chemistry	01	Wei, L	MWF 13:00 - 13:55	147 NYS	G
Ch 041B	4-0-5	Organic Chemistry	01	Hsieh-Wilson, L	MWF 09:00 - 09:55	153 NYS	
					W 15:00 - 15:55	151 CRL	
			02	Hsieh-Wilson, L	MWF 09:00 - 09:55	153 NYS	
					W 20:00 - 20:55	151 CRL	
			03	Hsieh-Wilson, L	MWF 09:00 - 09:55	153 NYS	
					R 15:00 - 15:55	151 CRL	
			04	Hsieh-Wilson, L	MWF 09:00 - 09:55	153 NYS	
					R 20:00 - 20:55	151 CRL	
Ch 080	+	Chemical Research	01	Dervan, P	A	A	P
			02	Hsieh-Wilson, L	A	A	P
			03	Barton, J	A	A	P
			04	Beauchamp, J	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 080	+	Chemical Research	05	Grubbs, R	A	A	P
			06	Goddard, W	A	A	P
			07	Marcus, R	A	A	P
			08	Shan, S	A	A	P
			09	Bercaw, J	A	A	P
			10	Heath, J	A	A	P
			11	Agapie, T	A	A	P
			12	Davis, M	A	A	P
			13	Chan, G	A	A	P
			14	Shapiro, M	A	A	P
			15	Arnold, F	A	A	P
			16	Haile, S	A	A	P
			17	Gray, H	A	A	P
			18	Virgil, S	A	A	P
			20	Kornfield, J	A	A	P
			21	Rossman, G	A	A	P
			27	Okumura, M	A	A	P
			29	Peters, J	A	A	P
			30	Gao, W	A	A	P
			35	Stoltz, B	A	A	P
			36	Tirrell, D	A	A	P
			37	Reisman, S	A	A	P
			38	Weitekamp, D	A	A	P
			39	Lewis, N	A	A	P
			40	Rees, D	A	A	P
			41	Hoelz, A	A	A	P
			42	Fu, G	A	A	P
			43	Dougherty, D	A	A	P
			44	Hoffmann, M	A	A	P
			45	Holst, M	A	A	P
			46	Clemons, W	A	A	P
			47	Blake, G	A	A	P
			48	Ondrus, A	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 080	+	Chemical Research	49	Peters, J	A	A	P
Ch 081	+	Independent Reading in Chemistry	02	Reisman, S	A	A	P
			03	Hoelz, A	A	A	P
			04	Gray, H	A	A	P
			06	Goddard, W	A	A	P
			22	Lewis, N	A	A	P
Ch 082	+	Senior Thesis Research <i>9 units per term</i>	01	Rees, D / Agapie, T	A	A	P
			02	Shapiro, M / Agapie, T	A	A	P
			03	Agapie, T / Hoelz, A	A	A	P
			04	Grubbs, R / Agapie, T	A	A	P
			05	Agapie, T	A	A	P
			06	Peters, J / Agapie, T	A	A	P
			07	Tirrell, D / Agapie, T	A	A	P
			08	Stoltz, B / Agapie, T	A	A	P
			09	Gray, H / Agapie, T	A	A	P
			10	Asimow, P / Agapie, T	A	A	P
			11	Dougherty, D / Agapie, T	A	A	P
			12	Wei, L / Agapie, T	A	A	P
			13	Rossmann, G / Agapie, T	A	A	P
			14	Reisman, S / Agapie, T	A	A	P
			15	Hsieh-Wilson, L / Agapie, T	A	A	P
			16	Hoelz, A / Agapie, T	A	A	P
Ch 090	2-0-1	Oral Presentation <i>maximum enrollment: 12 students</i>	01	Bikle, K	W 10:00 - 11:55	152 BRN	P
Ch/ChE 091	2-0-1	Scientific Writing <i>class will meet in 151 Crellin on 2/10/20</i>	01	Parker, C	M 14:00 - 15:55	101 SCH	G
Ch 104	4-0-5	Intermediate Organic Chemistry	01	Fu, G	TR 09:00 - 10:55	147 NYS	G

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Bi/Ch 111	4-0-8	Biochemistry of Gene Expression	01	Parker, C / Campbell, J	W 15:00 - 16:25 WF 14:00 - 14:55	152 BRN 320 BRN	
Ch 121A	3-0-6	Atomic-Level Simulations of Materials and Molecules	01	Goddard, W	MWF 14:00 - 14:55	115 BCK	
Ch 125B	3-0-6	The Elements of Quantum Chemistry	01	Weitekamp, D	MWF 13:00 - 13:55	151 CRL	
Ch/ChE 140B	3-0-6	Principles and Applications of Semiconductor Photoelectrochemistry	01	Lewis, N	TR 13:00 - 14:25	216 NYS	
Ch 153A	3-0-6	Advanced Inorganic Chemistry	01	Gray, H / Winkler, J	F 10:00 - 11:55	115 BCK	
Ch 154A	3-0-6	Organometallic Chemistry	01	Peters, J / Agapie, T	MF 14:00 - 15:25	147 NYS	
ChE/Ch 164	3-0-6	Introduction to Statistical Thermodynamics	01	Wang, Z	TR 10:30 - 11:55	106 SPL	
BMB/Bi/Ch 173	3-0-6	Biophysical/Structural Methods	01	Jensen, G	TR 10:30 - 11:55	115 BCK	G
ESE/Ch 175	3-0-6	Physical Chemistry of Engineered Waters	01	Hoffmann, M	MWF 10:00 - 10:55	135 L+R	
BMB/Ch 178	3-0-6	Macromolecular Function: Kinetics, Energetics, and Mechanisms <i>class cancelled</i>	01	Staff	A	A	
Ch 180	+	Chemical Research	01 02 03 04	Agapie, T Gray, H Giapis, K Goddard, W	A A A A	A A A A	P P P P
BMB/Ch 202B	1-0-0	Biochemistry Seminar Course <i>To be held on Biochemistry Seminar days from 12-1pm (approx. 1-2 per month).</i>	01	Clemons, W	R 12:00 - 12:55	320 BRN	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 213B	1-0-11	Advanced Ligand Field Theory	01	Gray, H	F 13:00 - 13:55	408 BCK	G
Ch 225	3-0-6	Advanced Quantum Chemistry <i>class will meet in 147 Noyes on 3/9/20</i>	01	Miller, T / Chan, G	MWF 11:00 - 11:55	153 NYS	
Ch 242B	3-0-6	Chemical Synthesis	01	Reisman, S / Virgil, S	MWF 10:00 - 10:55	147 NYS	
Ch 279	+	Rotations in Chemistry	01	Agapie, T	A	A	P
			02	Arnold, F	A	A	P
			03	Atwater, H	A	A	P
			04	Barton, J	A	A	P
			05	Beauchamp, J	A	A	P
			06	Bjorkman, P	A	A	P
			07	Blake, G	A	A	P
			08	Blanquart, G	A	A	P
			09	Campbell, J	A	A	P
			10	Chan, G	A	A	P
			11	Clemons, W	A	A	P
			12	Cushing, S	A	A	P
			13	Davis, M	A	A	P
			14	Dervan, P	A	A	P
			15	Dougherty, D	A	A	P
			16	Elowitz, M	A	A	P
			17	Fu, G	A	A	P
			18	Goddard, W	A	A	P
			19	Gray, H	A	A	P
			20	Greer, J	A	A	P
			21	Grubbs, R	A	A	P
			22	Hadt, R	A	A	P
			23	Haile, S	A	A	P
			24	Hoelz, A	A	A	P
			25	Hoffmann, M	A	A	P
			26	Hsieh-Wilson, L	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 279	+	Rotations in Chemistry	27	Ismagilov, R	A	A	P
			28	Jensen, G	A	A	P
			29	Kornfield, J	A	A	P
			30	Lester, H	A	A	P
			31	Lewis, N	A	A	P
			32	Mayo, S	A	A	P
			33	Miller, T	A	A	P
			34	Newman, D	A	A	P
			35	Okumura, M	A	A	P
			36	Ondrus, A	A	A	P
			37	Peters, J	A	A	P
			38	Pierce, N	A	A	P
			39	Rees, D	A	A	P
			40	Reisman, S	A	A	P
			41	Robb, M	A	A	P
			42	Roberts, J	A	A	P
			43	See, K	A	A	P
			44	Seinfeld, J	A	A	P
			45	Shan, S	A	A	P
			46	Shapiro, M	A	A	P
			47	Sternberg, P	A	A	P
			48	Stoltz, B	A	A	P
			49	Tirrell, D	A	A	P
			50	Wang, Z	A	A	P
			51	Wei, L	A	A	P
			52	Weitekamp, D	A	A	P
			53	Wennberg, P	A	A	P
Ch 280	+	Chemical Research	01	Arnold, F	A	A	P
			02	Bjorkman, P	A	A	P
			03	Barton, J	A	A	P
			04	Beauchamp, J	A	A	P
			05	Bercaw, J	A	A	P
			06	Blake, G	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 280	+	Chemical Research	07	Chan, G	A	A	P
			08	Cai, L	A	A	P
			09	Fu, G	A	A	P
			10	Davis, M	A	A	P
			11	Dervan, P	A	A	P
			12	Dougherty, D	A	A	P
			13	Goentoro, L	A	A	P
			14	Miller, T	A	A	P
			15	Reisman, S	A	A	P
			16	Goddard, W	A	A	P
			17	Gray, H	A	A	P
			18	Grubbs, R	A	A	P
			19	Hsieh-Wilson, L	A	A	P
			20	Kornfield, J	A	A	P
			21	Wang, Z	A	A	P
			22	Lewis, N	A	A	P
			23	Atwater, H	A	A	P
			24	Hoffmann, M	A	A	P
			25	Mayo, S	A	A	P
			26	Clemons, W	A	A	P
			27	Okumura, M	A	A	P
			28	Ismagilov, R	A	A	P
			29	Peters, J	A	A	P
			30	Rees, D	A	A	P
			31	Cushing, S	A	A	P
			32	Sternberg, P	A	A	P
			33	Newman, D	A	A	P
			34	Seinfeld, J	A	A	P
			35	Stoltz, B	A	A	P
			36	Tirrell, D	A	A	P
			37	Ondrus, A	A	A	P
			38	Weitekamp, D	A	A	P
			39	Blanquart, G	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CHEMISTRY							
Ch 280	+	Chemical Research	40	Greer, J	A	A	P
			41	Atwater, H	A	A	P
			42	Lester, H	A	A	P
			43	Campbell, J	A	A	P
			44	Pierce, N	A	A	P
			45	Asimow, P	A	A	P
			46	Wennberg, P	A	A	P
			47	Heath, J	A	A	P
			48	Elowitz, M	A	A	P
			49	Shan, S	A	A	P
			50	Agapie, T	A	A	P
			51	Hoelz, A	A	A	P
			52	Hadt, R	A	A	P
			53	Shapiro, M	A	A	P
			54	Jensen, G	A	A	P
			55	Adkins, J	A	A	P
			56	See, K	A	A	P
			57	Tai, Y	A	A	P
			58	Parker, J	A	A	P
			59	Robb, M	A	A	P
			60	Wei, L	A	A	P
			61	Voorhees, R	A	A	P
			62	Eiler, J	A	A	P
			63	Van Valen, D	A	A	P
			64	Minnich, A	A	A	P
			65	Faber, K	A	A	P
CIVIL ENGINEERING							
Ae/APh/CE/ME 101B	3-0-6	Fluid Mechanics	01	Austin, J	MWF 10:00 - 10:55	133 GUG	G
Ae/AM/CE/ME 102B	3-0-6	Mechanics of Structures and Solids	01	Bhattacharya, K	TR 09:00 - 10:25	135 GTL	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CIVIL ENGINEERING							
AM/CE/ME 150B	1-0-0	Graduate Engineering Seminar	01	Lapusta, N	R 11:00 - 11:55	135 GTL	P
CE 200	+	Advanced Work in Civil Engineering	01	Asimaki, D	A	A	P
AM/CE/ME 252	2-1-6	Linear and Nonlinear Waves in Structured Media <i>maximum enrollment: 20 students</i>	01	Daraio, C	F 14:00 - 15:55	115 GTL	
Ae/AM/CE/ME/Ge 264	3-0-6	Static and Dynamic Failure of Brittle Solids and Interfaces, from the Micro to the Mega	01	Rosakis, A	MWF 10:00 - 10:55	135 GTL	
CE 300	+	Research in Civil Engineering	01	Asimaki, D	A	A	P
			02	Hall, J	A	A	P
			03	Daraio, C	A	A	P
			04	Heaton, T	A	A	P
			05	Lapusta, N	A	A	P
			06	Andrade, J	A	A	P
COMPUTATION & NEURAL SYS							
CNS/Psy/Bi 102A	3-0-6	Brains, Minds, and Society	01	Adolphs, R / O'Doherty, J	MW 14:30 - 15:55	B167 BRD	
Psy/CNS 105A	1.5-0-3.5	Frontiers in Neuroeconomics	01	O'Doherty, J	T 14:30 - 15:55	115 BCK	
CMS/CS/CNS/EE/IDS	3-3-6	Machine Learning & Data Mining <i>class will meet in ANB 105 on 2/20/20</i>	01	Yue, Y	TR 14:30 - 15:55	Institute Auditorium BCK	
Bi/CNS/NB 162	2-4-6	Cellular and Systems Neuroscience Laboratory <i>maximum enrollment: 18 students</i>	01	Bremner, L	M 13:00 - 16:25	B160 CHR	
NB/Bi/CNS 163	3-0-3	The Biological Basis of Neural Disorders	01	Lester, H / Lois, C	MW 09:00 - 10:25	B136 KRK	G
CS/CNS/EE/IDS 165	3-3-6	Foundations of Machine Learning and Statistical Inference	01	Anandkumar, A	TR 13:00 - 14:25	213 ANB	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTATION & NEURAL SYS							
CNS180	+	Research in Computation and Neural Systems	01	Burdick, J	A	A	P
			02	Murray, R	A	A	P
			03	Perona, P	A	A	P
			04	Fraser, S	A	A	P
			05	Oka, Y	A	A	P
			06	Hoffmann, M	A	A	P
			07	Allman, J	A	A	P
			08	Lester, H	A	A	P
			09	Hong, E	A	A	P
			10	Pachter, L	A	A	P
			11	Murray, R	A	A	P
			12	Allman, J	A	A	P
			13	Gradinaru, V	A	A	P
			14	Shimojo, S	A	A	P
			15	Tsao, D	A	A	P
			16	Wold, B	A	A	P
			17	Winfree, E	A	A	P
			18	Rangel, A	A	A	P
			19	Siapas, A	A	A	P
			20	Prober, D	A	A	P
			21	Patterson, P	A	A	P
			22	Andersen, R	A	A	P
			23	Elowitz, M	A	A	P
			24	Anderson, D	A	A	P
			25	Adolphs, R	A	A	P
			26	Kennedy, M	A	A	P
			27	Quartz, S	A	A	P
			28	O'Doherty, J	A	A	P
			29	Camerer, C	A	A	P
			30	Meister, M	A	A	P
			31	Shapiro, M	A	A	P
			32	Yue, Y	A	A	P
			33	Thomson, M	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTATION & NEURAL SYS							
CNS180	+	Research in Computation and Neural Systems	34	Anandkumar, A	A	A	P
			35	Dickinson, M	A	A	P
			36	Rutishauser, U	A	A	P
			37	Ames, A	A	A	P
CNS/Bi/EE/CS/NB 186 4-4-4		Vision: From Computational Theory to Neuronal Mechanisms	01	Shimojo, S / Perona, P / Meister, M / Tsao, D	TR 10:30 - 11:55	B101 BBB	
CNS280	+	Research in Computation and Neural Systems	01	Meister, M	A	A	P
			02	Elowitz, M	A	A	P
			03	Andersen, R	A	A	P
			04	Oka, Y	A	A	P
			05	Winfrey, E	A	A	P
			06	Siapas, A	A	A	P
			07	Quartz, S	A	A	P
			08	Adolphs, R	A	A	P
			09	Murray, R	A	A	P
			10	Tsao, D	A	A	P
			11	Konishi, M	A	A	P
			12	Scherer, A	A	A	P
			13	Camerer, C	A	A	P
			14	Sternberg, P	A	A	P
			15	Perona, P	A	A	P
			16	Allman, J	A	A	P
			17	Gradinaru, V	A	A	P
			18	Pachter, L	A	A	P
			19	Bruck, J	A	A	P
			20	Burdick, J	A	A	P
			21	Shimojo, S	A	A	P
			22	Lester, H	A	A	P
			23	Wold, B	A	A	P
			24	Dickinson, M	A	A	P
			25	Hoffmann, M	A	A	P
			26	Rangel, A	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTATION & NEURAL SYS							
CNS280	+	Research in Computation and Neural Systems	28	O'Doherty, J	A	A	P
			29	Thomson, M	A	A	P
			30	Lois, C	A	A	P
COMPUTER SCIENCE							
CS 002	3-5-1	Introduction to Programming Methods <i>maximum enrollment: 25 students per section</i>	01	Blank, A	MWF 14:00 - 14:55 T 13:00 - 13:55	Institute Auditorium BCK 104 ANB	P
			02	Blank, A	MWF 14:00 - 14:55 T 14:00 - 14:55	Institute Auditorium BCK 104 ANB	P
			03	Blank, A	MWF 14:00 - 14:55 T 15:00 - 15:55	Institute Auditorium BCK 104 ANB	P
			04	Blank, A	MWF 14:00 - 14:55 T 16:00 - 16:55	Institute Auditorium BCK 104 ANB	P
			05	Blank, A	MWF 14:00 - 14:55 T 17:00 - 17:55	Institute Auditorium BCK 104 ANB	P
			06	Blank, A	MWF 14:00 - 14:55 T 18:00 - 18:55	Institute Auditorium BCK 104 ANB	P
			07	Blank, A	MWF 14:00 - 14:55 T 19:00 - 19:55	Institute Auditorium BCK 104 ANB	P
			CS 004	3-4-2	Fundamentals of Computer Programming	01	Vanier, M
Ma/CS 006B	3-0-6	Introduction to Discrete Mathematics <i>taught concurrently with Ma/CS 106B</i>	01	Shikhelman, C	MWF 13:00 - 13:55	387 LINDE	
EE/CS 010A	2-3-1	Introduction to Digital Logic and Embedded Systems	01	George, G	MW 15:00 - 15:55	B270 MRE	
CS 011	0-3-0	Computer Language Lab <i>CS 1 or instructor's permission is required. // Sec 1: C, Sec 2: C++, Sec 3: Java, Sec 4: Javascript, Sec 5: Advanced C++, Sec 11: Special Topics,</i>	01	Vanier, M	OM,M 21:00 - 21:55	105 ANB	P
			02	Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			03	Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTER SCIENCE							
CS 011	0-3-0	Computer Language Lab <i>CS 1 or instructor's permission is required. // Sec 1: C, Sec 2: C++, Sec 3: Java, Sec 4: Javascript, Sec 5: Advanced C++, Sec 11: Special Topics, Sec 12: Projects</i>	04	Vanier, M	OM,M 21:00 - 21:55	105 ANB	P
			05	Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			11	Vanier, M / Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			12	Vanier, M / Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
CS 019B	1-0-1	Introduction to Computer Science in Industry <i>closed to 1st and 2nd term freshmen for credit</i>	01	Ralph, C	M 12:00 - 12:55	105 ANB	P
CS 021	3-0-6	Decidability and Tractability	01	Umans, C	MWF 13:00 - 13:55	105 ANB	G
CS 042	2-2-2	Computer Science Education in K-14 Settings	01	Ralph, C	F 12:00 - 15:55	213 ANB	P
CS/EE/ME 075B	+	Multidisciplinary Systems Engineering <i>6 units (2-3-1), 9 units (2-6-1), or 12 units (2-9-1)</i>	01	Burdick, J	OM,M 19:30 - 20:25	135 GTL	
CS 080B	+	Undergraduate Thesis	01	Chandy, K	A	A	P
			02	Wierman, A	A	A	P
			03	Schroeder, P	A	A	P
			04	Winfree, E	A	A	P
			05	Barr, A	A	A	P
			06	Murray, R	A	A	P
			07	Vidick, T	A	A	P
			08	Yue, Y	A	A	P
			09	Perona, P	A	A	P
			10	Umans, C	A	A	P
			11	Schulman, L	A	A	P
			12	Desbrun, M	A	A	P
			13	Bruck, J	A	A	P
			14	Chung, S	A	A	P
			15	Virgil, S	A	A	P
			16	Katz, N	A	A	P
			17	Anandkumar, A	A	A	P
			18	Adolphs, R	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTER SCIENCE							
CS 080B	+	Undergraduate Thesis	19	Rangel, A	A	A	P
CS 081B	+	Undergraduate Projects in Computer Science <i>Sec 42: TechReach, meets Thursdays from 7-9pm in ANB 213</i>	01	Pinkston, D	A	A	P
			02	Winfree, E	A	A	P
			03	Barr, A	A	A	P
			04	Chandy, K	A	A	P
			05	Mahabal, A	A	A	P
			06	Wierman, A	A	A	P
			07	Desbrun, M	A	A	P
			08	Rangel, A	A	A	P
			09	Vanier, M	A	A	P
			10	Perona, P	A	A	P
			11	Murray, R	A	A	P
			12	Adolphs, R	A	A	P
			13	Umans, C	A	A	P
			14	Burdick, J	A	A	P
			15	Low, S	A	A	P
			16	Plott, C	A	A	P
			17	Yue, Y	A	A	P
			18	Hassibi, B	A	A	P
			19	Djorgovski, S	A	A	P
			20	Schroeder, P	A	A	P
			21	Alvarez, R	A	A	P
			22	Stalzer, M	A	A	P
			23	Ralph, C	A	A	P
			24	George, G	A	A	P
			25	Vidick, T	A	A	P
			26	Schulman, L	A	A	P
			27	Bunn, J	A	A	P
			28	Preskill, J	A	A	P
			29	Abu-Mostafa, Y	A	A	P
			30	Chung, S	A	A	P
			31	Thomson, M	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTER SCIENCE							
CS 081B	+	Undergraduate Projects in Computer Science <i>Sec 42: TechReach, meets Thursdays from 7-9pm in ANB 213</i>	32	Chung, S	A	A	P
			33	Thomson, M	A	A	P
			34	Blank, A	A	A	P
			35	Ames, A	A	A	P
			36	Bruck, J	A	A	P
			37	Rangel, A	A	A	P
			38	Tamuz, O	A	A	P
			39	Anandkumar, A	A	A	P
			40	Van Valen, D	A	A	P
			41	Bouman, K	A	A	P
			42	Ralph, C	R 19:00 - 20:55	213 ANB	P
			43	Stalzer, M	A	A	P
			CS 090	+	Undergraduate Reading in Computer Science	01	Abu-Mostafa, Y
02	Low, S	A				A	P
04	Schroeder, P	A				A	P
05	Winfrey, E	A				A	P
06	Umans, C	A				A	P
07	Desbrun, M	A				A	P
08	Barr, A	A				A	P
10	Perona, P	A				A	P
11	Chandy, K	A				A	P
13	Murray, R	A				A	P
14	Wierman, A	A				A	P
15	Vanier, M	A				A	P
16	Yue, Y	A				A	P
17	Ralph, C	A				A	P
18	Schulman, L	A				A	P
19	Anderson, D	A	A	P			
CS 101B	2-0-7	Special Topics in Computer Science <i>units (0-9-0)</i>	01	Yue, Y	OM,M 10:00 - 10:55	107 ANB	
CS 102B	+	Seminar in Computer Science	01	Staff	A	A	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTER SCIENCE							
CS 103B	+	Reading in Computer Science	01	Staff	A	A	P
Ma/CS 106B	3-0-6	Introduction to Discrete Mathematics <i>taught concurrently with Ma/CS 6b</i>	01	Shikhelman, C	MWF 13:00 - 13:55	387 LINDE	
CS 111	0-3-0	Graduate Programming Practicum <i>Sec 1: C, Sec 2: C++, Sec 3: Java, Sec 4: Javascript, Sec 5: Advanced C++, Sec 11: Special Topics, Sec 12: Projects</i>	01	Vanier, M	OM,M 21:00 - 21:55	105 ANB	P
			02	Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			03	Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			04	Vanier, M	OM,M 21:00 - 21:55	105 ANB	P
			05	Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			11	Vanier, M / Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
			12	Vanier, M / Pinkston, D	OM,M 21:00 - 21:55	105 ANB	P
Ec/ACM/CS 112	3-0-6	Bayesian Statistics	01	Rangel, A	TR 10:30 - 11:55	155 ARM	
EE/Ma/CS 126B	3-0-6	Information Theory <i>Make-up classes - Friday 080 Moore 10:30-noon</i>	01	Effros, M	MW 10:30 - 11:55	B280 MRE	G
EE/Ma/CS/IDS 127	3-0-6	Error-Correcting Codes	01	Kostina, V	MW 14:30 - 15:55	106 ANB	
ME/CS/EE 134	3-6-0	Robotic Systems	01	Niemeyer, G	MWF 15:00 - 15:55	135 GTL	
EE/CS/EST 135	3-3-3	Power System Analysis	01	Low, S	MW 15:00 - 15:55 F 13:00 - 13:55	213 ANB 314 ANB	
CMS/CS/IDS 139	3-0-9	Analysis and Design of Algorithms	01	Vidick, T	MW 10:30 - 11:55	213 ANB	
CMS/CS/EE/IDS 144	3-4-5	Networks: Structure & Economics	01	Wierman, A	TR 10:30 - 11:55	105 ANB	
CS/SS/Ec 149	3-0-6	Algorithmic Economics	01	Pomatto, L / Echenique, F	MWF 10:00 - 10:55	127 BAX	G

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTER SCIENCE							
CMS/CS/CNS/EE/IDS	3-3-6	Machine Learning & Data Mining <i>class will meet in ANB 105 on 2/20/20</i>	01	Yue, Y	TR 14:30 - 15:55	Institute Auditorium BCK	
IDS/ACM/CS 157	3-2-4	Statistical Inference	01	Zuev, K	MW 09:00 - 10:25	105 ANB	
EE/CS/IDS 160	3-0-6	Fundamentals of Information Transmission and Storage	01	Kostina, V	TR 10:30 - 11:55	B280 MRE	
CS/CNS/EE/IDS 165	3-3-6	Foundations of Machine Learning and Statistical Inference	01	Anandkumar, A	TR 13:00 - 14:25	213 ANB	
CS/ACM 177A	3-3-3	Discrete Differential Geometry: Theory and Applications	01	Schroeder, P	TR 10:30 - 11:55	314 ANB	
CS 180	+	Master's Thesis Research	01	Abu-Mostafa, Y	A	A	P
			02	Umans, C	A	A	P
			04	Chandy, K	A	A	P
			05	Desbrun, M	A	A	P
			06	Kitaev, A	A	A	P
			07	Low, S	A	A	P
			08	Martin, A	A	A	P
			09	Yariv, A	A	A	P
			10	Barr, A	A	A	P
			11	Schroeder, P	A	A	P
			12	Wierman, A	A	A	P
			13	Winfree, E	A	A	P
			14	Wold, B	A	A	P
			15	Krause, R	A	A	P
			17	Perona, P	A	A	P
			18	Ligett, K	A	A	P
Bi/BE/CS 183	3-0-6	Introduction to Computational Biology and Bioinformatics	01	Thomson, M / Pachter, L	TR 10:30 - 11:55	119 KRK	
CNS/Bi/EE/CS/NB 186	4-4-4	Vision: From Computational Theory to Neuronal Mechanisms	01	Shimojo, S / Perona, P / Meister, M / Tsao, D	TR 10:30 - 11:55	B101 BBB	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTER SCIENCE							
Ph/CS 219B	3-0-6	Quantum Computation	01	Guadalupe Dos Santos Lins Brandao, F	MW 14:30 - 15:55	103 DWN	P
CS 280	+	Research in Computer Science	01	Abu-Mostafa, Y	A	A	P
			02	Umans, C	A	A	P
			03	Barr, A	A	A	P
			04	Chandy, K	A	A	P
			05	Desbrun, M	A	A	P
			06	Cvitanic, J	A	A	P
			07	Winfrey, E	A	A	P
			08	Low, S	A	A	P
			09	Martin, A	A	A	P
			10	Winfrey, E	A	A	P
			11	Perona, P	A	A	P
			12	Schroeder, P	A	A	P
			13	Chandrasekaran, V	A	A	P
			14	Kitaev, A	A	A	P
			15	Wierman, A	A	A	P
			16	Ligett, K	A	A	P
			17	Doyle, J	A	A	P
			18	Murray, R	A	A	P
			19	Vidick, T	A	A	P
			20	Yue, Y	A	A	P
CS 287	+	Center for the Mathematics of Information Seminar	01	Staff	T 16:00 - 16:55	314 ANB	P
COMPUTING AND MATHEMATICAL SCIENCES							
CMS/CS/IDS 139	3-0-9	Analysis and Design of Algorithms	01	Vidick, T	MW 10:30 - 11:55	213 ANB	
CMS/CS/EE/IDS 144	3-4-5	Networks: Structure & Economics	01	Wierman, A	TR 10:30 - 11:55	105 ANB	
CMS/CS/CNS/EE/IDS	3-3-6	Machine Learning & Data Mining <i>class will meet in ANB 105 on 2/20/20</i>	01	Yue, Y	TR 14:30 - 15:55	Institute Auditorium BCK	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
COMPUTING AND MATHEMATICAL SCIENCES							
CMS270	+	Advanced Topics in Computing and Mathematical Sciences: Frontiers in Computing and Mathematical Sciences	03	Murray, R	OM,M 12:00 - 12:55	213 ANB	
CMS290B	1-0-0	Computing and Mathematical Sciences Colloquium	01	Schroeder, P	M 16:00 - 16:55	105 ANB	P
CMS300	+	Research in Computing and Mathematical Sciences	01	Wierman, A	A	A	P
			02	Vidick, T	A	A	P
			03	Beck, J	A	A	P
			04	Burdick, J	A	A	P
			05	Doyle, J	A	A	P
			06	Murray, R	A	A	P
			07	Owhadi, H	A	A	P
			08	Barr, A	A	A	P
			09	Chandrasekaran, V	A	A	P
			10	Desbrun, M	A	A	P
			11	Low, S	A	A	P
			12	Perona, P	A	A	P
			13	Schroeder, P	A	A	P
			14	Schulman, L	A	A	P
			15	Umans, C	A	A	P
			16	Winfrey, E	A	A	P
			17	Yue, Y	A	A	P
			18	Chung, S	A	A	P
			19	Pachter, L	A	A	P
			20	Anandkumar, A	A	A	P
			21	Stuart, A	A	A	P
			22	Thomson, M	A	A	P
			23	Van Valen, D	A	A	P
CONTROL & DYNAMICAL SYSTEMS							
CDS090B	0-0-9	Senior Thesis in Control & Dynamical Systems	01	Doyle, J	A	A	G
			02	Burdick, J	A	A	G

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
CONTROL & DYNAMICAL SYSTEMS							
CDS112	3-0-6	Optimal Control and Estimation	01	Chung, S	TR 14:30 - 15:55	133 GUG	
CDS190	+	Independent Work in Control and Dynamical Systems	01	Staff	A	A	P
CDS231	3-2-4	Robust Control Theory	01	Doyle, J	TR 13:00 - 14:25	106 ANB	
CDS232	3-0-6	Nonlinear Dynamics	01	Ames, A	MWF 11:00 - 12:25	135 GTL	
CDS300B	+	Research in Control and Dynamical Systems	01	Burdick, J	A	A	P
			02	Adolphs, R	A	A	P
			03	Doyle, J	A	A	P
			04	Owhadi, H	A	A	P
			05	Siapas, A	A	A	P
			06	Goentoro, L	A	A	P
			07	Dickinson, M	A	A	P
			08	Murray, R	A	A	P
			11	Elowitz, M	A	A	P
			12	Desbrun, M	A	A	P
			13	Ortiz, M	A	A	P
			14	Beck, J	A	A	P
			16	Ames, A	A	A	P
			17	Chung, S	A	A	P
ECONOMICS							
Ec 011	3-2-4	Introduction to Economics	01	Rangel, A	TR 13:00 - 14:25	Lecture Hall BAX	
Ec 097	+	Undergraduate Research	01	Echenique, F	A	A	P
		<i>Instructor permission required prior to registering</i>	02	Ledyard, J	A	A	P
			03	Camerer, C	A	A	P
Ec 098B	+	Senior Research and Thesis	01	Staff	A	A	P
		<i>Instructor permission required prior to</i>					

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ECONOMICS							
Ec/ACM/CS 112	3-0-6	Bayesian Statistics	01	Rangel, A	TR 10:30 - 11:55	155 ARM	
Ec 123	3-0-6	Econometric Analysis of Discrete Choice <i>maximum enrollment: 20 students</i>	01	Xin, Y	TR 09:00 - 10:25	B125 BAX	G
Ec 136	3-0-6	Behavioral Decision Theory	01	Saito, K	TR 13:00 - 14:25	125 BAX	G
CS/SS/Ec 149	3-0-6	Algorithmic Economics	01	Pomatto, L / Echenique, F	MWF 10:00 - 10:55	127 BAX	G
Ec/PS 160B	3-3-3	Laboratory Experiments in the Social Sciences <i>Taught concurrently with SS 260// Completion of Ec/PS 160A required for b and c classes //Max of 10 students for both Ec 160 & SS 260</i>	01	Plott, C	TR 09:00 - 10:25	127 BAX	G
Ec 181B	3-0-6	Convex Analysis and Economic Theory	01	Border, K	TR 14:30 - 15:55	127 BAX	G
ELECTRICAL ENGINEERING							
EE 002	1-0-0	Electrical Engineering Entrepreneurial and Research Seminar	01	Emami, A	W 12:00 - 12:55	B270 MRE	P
EE/CS 010A	2-3-1	Introduction to Digital Logic and Embedded Systems	01	George, G	MW 15:00 - 15:55	B270 MRE	
EE 045	3-3-6	Electronics Systems and Laboratory	01	Emami, A / Kalantar Ohanian, R	TR 09:00 - 10:25	B270 MRE	
CS/EE/ME 075B	+	Multidisciplinary Systems Engineering <i>6 units (2-3-1), 9 units (2-6-1), or 12 units (2-9-1)</i>	01	Burdick, J	OM,M 19:30 - 20:25	135 GTL	
EE 080B	+	Senior Thesis	01	Hajimiri, S	A	A	P
			02	Effros, M	A	A	P
			03	Doyle, J	A	A	P
			04	Tai, Y	A	A	P
			05	Hassibi, B	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ELECTRICAL ENGINEERING							
EE 080B	+	Senior Thesis	06	Abbott, R	A	A	P
			07	George, G	A	A	P
			08	Emami, A	A	A	P
			10	Van Valen, D	A	A	P
			11	Scherer, A	A	A	P
EE 091B	1-8-0	Experimental Projects in Electronic Circuits	01	Kalantar Ohanian, R	OM,M 18:00 - 18:55	B270 MRE	
EE 099	+	Advanced Work in Electrical Engineering	01	Scherer, A	A	A	P
			02	Perona, P	A	A	P
			03	George, G	A	A	P
			04	Atwater, H	A	A	P
			05	Murray, R	A	A	P
			06	Emami, A	A	A	P
			07	Gharib, M	A	A	P
			08	Low, S	A	A	P
			09	Yang, C	A	A	P
			10	Hajimiri, S	A	A	P
			11	Burdick, J	A	A	P
			12	Tai, Y	A	A	P
			13	Yariv, A	A	A	P
			14	Bruck, J	A	A	P
			15	Marandi, A	A	A	P
			16	Hassibi, B	A	A	P
			17	Wang, L	A	A	P
EE 105B	1-0-0	Electrical Engineering Seminar	01	Emami, A	A	A	P
ACM/EE 106B	3-0-9	Introductory Methods of Computational Mathematics	01	Hou, Y	TR 13:00 - 14:25	105 ANB	
EE 110B	3-4-2	Embedded Systems Design Laboratory	01	George, G	MW 13:00 - 14:25	B270 MRE	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ELECTRICAL ENGINEERING							
EE 112	3-0-6	Introduction to Signal Processing from Data	01	Vaidyanathan, P	TR 13:00 - 14:25	B270 MRE	
EE/Ma/CS 126B	3-0-6	Information Theory <i>Make-up classes - Friday 080 Moore 10:30-noon</i>	01	Effros, M	MW 10:30 - 11:55	B280 MRE	G
EE/Ma/CS/IDS 127	3-0-6	Error-Correcting Codes	01	Kostina, V	MW 14:30 - 15:55	106 ANB	
ME/CS/EE 134	3-6-0	Robotic Systems	01	Niemeyer, G	MWF 15:00 - 15:55	135 GTL	
EE/CS/EST 135	3-3-3	Power System Analysis	01	Low, S	MW 15:00 - 15:55 F 13:00 - 13:55	213 ANB 314 ANB	
CMS/CS/EE/IDS 144	3-4-5	Networks: Structure & Economics	01	Wierman, A	TR 10:30 - 11:55	105 ANB	
EE/APh 149	3-0-6	Frontiers of Nonlinear Photonics	01	Marandi, A	TR 13:00 - 14:25	B280 MRE	
CMS/CS/CNS/EE/IDS	3-3-6	Machine Learning & Data Mining <i>class will meet in ANB 105 on 2/20/20</i>	01	Yue, Y	TR 14:30 - 15:55	Institute Auditorium BCK	
EE/Ae 157B	3-0-6	Introduction to the Physics of Remote Sensing	01	Van Zyl, J	MW 14:30 - 15:55	B280 MRE	
EE/CS/IDS 160	3-0-6	Fundamentals of Information Transmission and Storage	01	Kostina, V	TR 10:30 - 11:55	B280 MRE	
CS/CNS/EE/IDS 165	3-3-6	Foundations of Machine Learning and Statistical Inference	01	Anandkumar, A	TR 13:00 - 14:25	213 ANB	
MedE/EE/BE 168A	4-0-5	Biomedical Optics: Principles and Imaging	01	Wang, L	WF 15:30 - 17:25	142 KCK	G
CNS/Bi/EE/CS/NB 186	4-4-4	Vision: From Computational Theory to Neuronal Mechanisms	01	Shimojo, S / Perona, P / Meister, M / Tsao, D	TR 10:30 - 11:55	B101 BBB	
EE 291	+	Advanced Work in Electrical Engineering	01 02	Abu-Mostafa, Y Kostina, V	A A	A A	P P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ELECTRICAL ENGINEERING							
EE 291	+	Advanced Work in Electrical Engineering	03	Bruck, J	A	A	P
			04	Burdick, J	A	A	P
			05	Heath, J	A	A	P
			06	Doyle, J	A	A	P
			07	Effros, M	A	A	P
			08	Vahala, K	A	A	P
			09	George, G	A	A	P
			10	Yeh, N	A	A	P
			11	Hajimiri, S	A	A	P
			12	Hassibi, B	A	A	P
			13	Zmuidzinas, J	A	A	P
			14	Low, S	A	A	P
			15	Anderson, D	A	A	P
			16	Atwater, H	A	A	P
			17	Murray, R	A	A	P
			18	Perona, P	A	A	P
			19	Gharib, M	A	A	P
			20	Hoffmann, M	A	A	P
			22	Phillips, R	A	A	P
			23	Cvitanic, J	A	A	P
			24	Quartz, S	A	A	P
			26	Scherer, A	A	A	P
			27	Pellegrino, S	A	A	P
			28	Tai, Y	A	A	P
			29	Vaidyanathan, P	A	A	P
			30	Yariv, A	A	A	P
			31	Chandrasekaran, V	A	A	P
			32	Roukes, M	A	A	P
			33	Avouac, J	A	A	P
			34	Weinreb, S	A	A	P
			35	Hallinan, G	A	A	P
			36	Martin, A	A	A	P
			37	Yang, C	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ELECTRICAL ENGINEERING							
EE 291	+	Advanced Work in Electrical Engineering	38	Emami, A	A	A	P
			39	Painter, O	A	A	P
			40	Faraon, A	A	A	P
			41	Lahouti, F	A	A	P
			42	Minnich, A	A	A	P
			43	Rees, D	A	A	P
			44	Yue, Y	A	A	P
			45	Van Zyl, J	A	A	P
			46	Shapiro, M	A	A	P
			47	Wang, L	A	A	P
			48	Tsao, D	A	A	P
			49	Marandi, A	A	A	P
ENERGY SCIENCE AND TECHNOLOGY							
EE/CS/EST 135	3-3-3	Power System Analysis	01	Low, S	MW 15:00 - 15:55 F 13:00 - 13:55	213 ANB 314 ANB	
ENGINEERING							
E/H/VC 089	3-0-6	New Media Arts in the 20th and 21st Centuries <i>maximum enrollment: 15 students</i>	01	Mushkin, H	TR 13:00 - 14:25	128 BAX	G
E 110	2-0-1	Principles of University Teaching and Learning in STEM <i>maximum enrollment: 20 students</i>	01	Weaver, J	W 10:00 - 11:55	360 CSS	P
ENGLISH							
Hum/En 020	3-0-6	Greek Epic and Drama <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Pigman, G	TR 14:30 - 15:55	117 DAB	G
Hum/En 022	3-0-6	Inequality <i>class cancelled</i>	01	Staff	A	A	
			02	Staff	A	A	
Hum/En 025	3-0-6	Human Animal <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Holland, J	TR 09:00 - 10:25	128 BAX	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ENGLISH							
En 086	3-0-6	Fiction and Creative Nonfiction Writing <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 12 students</i>	01	Gerber, M	R 19:30 - 22:25	128 BAX	
En 098	+	Reading in English <i>Instructor permission required prior to registering</i>	01	Sobelle, S	A	A	P
En 099A	1-0-8	Senior Tutorial for English Majors <i>Instructor permission required prior to registering</i>	01	Staff	A	A	G
En 099B	1-0-8	Senior Tutorial for English Majors <i>Instructor permission required prior to registering</i>	01	Gilmartin, K	A	A	G
En 109	3-0-6	Madness and Reason <i>maximum enrollment: 15 students</i>	01	Holland, J	TR 10:30 - 11:55	128 BAX	
En/VC 117	3-0-6	Picturing the Universe <i>maximum enrollment: 15 students</i>	01	Sullivan, A	TR 14:30 - 15:55	101 KRK	G
En 120	3-0-6	What Women Want: Desire and the Modern American Novel <i>maximum enrollment: 15 students</i>	01	Jurca, C	TR 10:30 - 11:55	TR DAB	
En 127	3-0-6	Jane Austen <i>open by lottery; see link on the REGIS home page to enter by November 20th // maximum enrollment: 22 students</i>	01	Gilmartin, K	T 19:00 - 21:55	TR DAB	
En/VC 160A	3-0-6	Classical Hollywood Cinema <i>maximum enrollment: 15 students</i>	01	Jurca, C	TR 14:30 - 15:55	128 BAX	
ENGLISH AS A SECOND LANGUAGE							
ESL101B	3-0-0	Oral Communication and Pronunciation	01	Ashleigh, S	M 17:00 - 18:25 W 16:45 - 18:10	104 WAT 104 WAT	P
ENVIRONMENTAL SCIENCE & ENGINEERING							

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ENVIRONMENTAL SCIENCE & ENGINEERING							
ESE090	+	Undergraduate Laboratory Research in Environmental Science and Engineering	01	Leadbetter, J	A	A	P
			02	Flagan, R	A	A	P
			03	Sessions, A	A	A	P
			04	Hoffmann, M	A	A	P
			05	Newman, D	A	A	P
			06	Thompson, A	A	A	P
			07	Bordoni, S	A	A	P
			08	Adkins, J	A	A	P
ESE100	+	Special Problems in Environmental Engineering Science <i>up to 12 units by arrangement // Sec 14: Fundamentals of Sustainability - 9 units (3-0-6), meets TR 11:30-1pm in SPL 102, taught concurrently with ChE 190 and MS 150</i>	01	Schneider, T	A	A	P
			02	Ingersoll, A	A	A	P
			03	Wennberg, P	A	A	P
			04	Hoffmann, M	A	A	P
			05	Adkins, J	A	A	P
			06	Leadbetter, J	A	A	P
			07	Bordoni, S	A	A	P
			08	Yung, Y	A	A	P
			09	Seinfeld, J	A	A	P
			10	Orphan, V	A	A	P
			11	Thompson, A	A	A	P
			12	Sessions, A	A	A	P
			14	Diallo, M / Kornfield, J	A	A	P
			ESE103	3-0-6	Earth's Biogeochemical Cycles	01	Frankenberg, C
ESE104	1-0-0	Current Problems in Environmental Science and Engineering <i>class cancelled</i>	01	Staff	A	A	P
Bi/Ge/ESE 105	3-4-5	Evolution <i>maximum enrollment: 15 students</i>	01	Phillips, R / Orphan, V	MW 13:00 - 14:25	100 - Rock Auditorium BRD	
ESE106	+	Research in Environmental Science and Engineering	01	Adkins, J	A	A	P
			02	Blake, G	A	A	P
			03	Bordoni, S	A	A	P
			04	Eiler, J	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme			
ENVIRONMENTAL SCIENCE & ENGINEERING										
ESE106	+	Research in Environmental Science and Engineering	05	Flagan, R	A	A	P			
			06	Hoffmann, M	A	A	P			
			07	Ingersoll, A	A	A	P			
			08	Lamb, M	A	A	P			
			09	Leadbetter, J	A	A	P			
			10	Newman, D	A	A	P			
			11	Okumura, M	A	A	P			
			12	Orphan, V	A	A	P			
			13	Schneider, T	A	A	P			
			14	Seinfeld, J	A	A	P			
			15	Sessions, A	A	A	P			
			16	Wennberg, P	A	A	P			
			17	Yung, Y	A	A	P			
			18	Thompson, A	A	A	P			
			19	Frankenberg, C	A	A	P			
			20	Callies, J	A	A	P			
			ESE110B	1-0-0	Seminar in Environmental Science and Engineering	01	Frankenberg, C	W 16:00 - 16:55	365 SMD	P
			ESE130	3-0-6	Introduction to Atmosphere and Ocean Dynamics	01	Callies, J	MWF 09:00 - 09:55	135 L+R	
			Ge/ESE 139	3-0-6	Introduction to Atmospheric Radiation	01	Yung, Y	MWF 11:00 - 11:55	162 SMD	
			Ge/ESE 149	3-0-6	Marine Geochemistry	01	Adkins, J	MWF 13:00 - 13:55	135 L+R	
Ge/ESE 150	3-0-6	Planetary Atmospheres	01	Ingersoll, A	TR 14:30 - 15:55	162 SMD				
Ge/ESE 154	+	Readings in Paleoclimate <i>meets Fridays 3-4pm in 136 L+R // 3 units</i>	01	Adkins, J	A	A	P			
ESE/Ch 175	3-0-6	Physical Chemistry of Engineered Waters	01	Hoffmann, M	MWF 10:00 - 10:55	135 L+R				

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
ENVIRONMENTAL SCIENCE & ENGINEERING							
Ge/Bi/ESE 246	2-0-4	Molecular Geobiology Seminar	01	Orphan, V	R 14:00 - 15:55	251 ARM	P
ESE300	+	Thesis Research	01	Adkins, J	A	A	P
			02	Sessions, A	A	A	P
			03	Flagan, R	A	A	P
			04	Hoffmann, M	A	A	P
			05	Ingersoll, A	A	A	P
			06	Leadbetter, J	A	A	P
			07	Newman, D	A	A	P
			08	Bordoni, S	A	A	P
			09	Yung, Y	A	A	P
			10	Wennberg, P	A	A	P
			11	Schneider, T	A	A	P
			12	Seinfeld, J	A	A	P
			13	Eiler, J	A	A	P
			14	Orphan, V	A	A	P
			15	Okumura, M	A	A	P
			16	Thompson, A	A	A	P
			17	Fischer, W	A	A	P
			18	Callies, J	A	A	P
			19	Frankenberg, C	A	A	P
FRESHMAN SEMINARS							
FS/Ph 011B	2-0-4	Freshman Seminar: Beyond Physics	01	Phillips, R	A	A	P
GEOLOGY							
Ge 010	2-0-0	Frontiers in Geological and Planetary Sciences	01	Thompson, A	F 12:00 - 12:55	151 ARM	P
Ge 011B	3-3-3	Introduction to Earth and Planetary Sciences: Earth and the Biosphere <i>Field Trip Dates: TBD</i>	01	Fischer, W / Kirschvink, J	MWF 14:00 - 14:55 W 19:00 - 21:55	251 ARM 251 ARM	

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
GEOLOGY							
Ge 011D	3-0-6	Introduction to Earth and Planetary Sciences: Geophysics <i>taught concurrently with Ge 102 // tentative field trip dates: TBD</i>	01	Clayton, R / Gurnis, M	MWF 09:00 - 09:55	162 SMD	G
Ge 040	+	Special Problems for Undergraduates	01	Kirschvink, J	A	A	P
			02	Orphan, V	A	A	P
			03	Lamb, M	A	A	P
			04	Ingersoll, A	A	A	P
			05	Adkins, J	A	A	P
			06	Rossmann, G	A	A	P
			07	Sessions, A	A	A	P
			08	Stevenson, D	A	A	P
			09	Yung, Y	A	A	P
			10	Jackson, J	A	A	P
			11	Fischer, W	A	A	P
			12	Tsai, V	A	A	P
			13	Brown, M	A	A	P
			14	de Kleer, K	A	A	P
Ge 041B	+	Undergraduate Research and Bachelor's Thesis	01	Rossmann, G	A	A	P
			02	Kirschvink, J	A	A	P
			03	Grotzinger, J	A	A	P
			04	Orphan, V	A	A	P
			05	Stolper, E	A	A	P
			06	Stock, J	A	A	P
			07	Grotzinger, J	A	A	P
			08	Asimow, P	A	A	P
			09	Brown, M	A	A	P
			10	Fischer, W	A	A	P
			11	Eiler, J	A	A	P
			12	Ingersoll, A	A	A	P
			13	Sessions, A	A	A	P
			14	Leadbetter, J	A	A	P
			15	Lamb, M	A	A	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
GEOLOGY							
Ge 041B	+	Undergraduate Research and Bachelor's Thesis	16	Adkins, J	A	A	P
			17	Simons, M	A	A	P
Ge 102	3-0-6	Introduction to Geophysics <i>taught concurrently with Ge 11D // tentative field trip dates: TBD</i>	01	Clayton, R / Gurnis, M	MWF 09:00 - 09:55	162 SMD	G
Ge 104	3-0-6	Introduction to Geobiology <i>taught concurrently with Ge 11b // Field Trip Dates: TBD</i>	01	Fischer, W / Kirschvink, J	MWF 14:00 - 14:55 W 19:00 - 21:55	251 ARM 251 ARM	
Bi/Ge/ESE 105	3-4-5	Evolution <i>maximum enrollment: 15 students</i>	01	Phillips, R / Orphan, V	MW 13:00 - 14:25	100 - Rock Auditorium BRD	
Ge 106	3-0-6	Introduction to Structural Geology	01	Avouac, J	TWR 15:00 - 15:55	215 NMD	
Ge 109	+	Oral Presentation <i>Section 1: Geophysics // Section 2: Geochemistry // Sections 3, 5 & 6: Geobiology // Section 4: Planetary Science</i>	01	Jackson, J	W 12:00 - 12:55	254 SMD	P
			02	Rossmann, G	A	A	P
			03	Sessions, A	A	A	P
			04	Knutson, H	A	A	P
			05	Orphan, V	A	A	P
			06	Leadbetter, J	A	A	P
Ge 111A	3-3-0	Applied Geophysics Seminar and Field Course <i>Field Trip dates: March 19-20</i>	01	Clayton, R / Simons, M	T 09:00 - 09:55	162 SMD	G
Ge 115A	3-3-3	Petrology and Petrography: Igneous Petrology	01	Stolper, E	MWF 10:00 - 10:55	251 ARM	
Ge 116	1-4-4	Analytical Techniques Laboratory <i>Ge 116 Lab: 4 hours per week, scheduling will vary over the quarter // Maximum enrollment: 12 students</i>	01	Asimow, P / Jackson, J / Rossmann, G	T 11:00 - 11:55	267 ARM	G
Ge/Ay 117	3-0-6	Bayesian Statistics and Data Analysis	01	Knutson, H	MWF 14:00 - 14:55	269 LAU	
Ge 121B	0-9-3	Advanced Field Geology	01	Grotzinger, J	OM,M 14:30 - 15:25	215 NMD	G

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
GEOLOGY							
Ge 123	1-0-2	Continental Crust Seminar	01	Bucholz, C	F 11:00 - 11:55	267 ARM	P
Ge 126	2-0-4	Topics in Earth Surface Processes	01	Lamb, M	T 16:00 - 18:55	267 ARM	
Ge 136B	1-0-2	Regional Field Geology of the Southwestern United States <i>Field Trip Dates: TBD</i>	01	Kirschvink, J	OM,R 13:00 - 13:55	251 ARM	P
Ge/Ay 137	3-0-6	Planetary Physics	01	Batygin, K	MWF 13:00 - 13:55	162 SMD	
Ge/ESE 139	3-0-6	Introduction to Atmospheric Radiation	01	Yung, Y	MWF 11:00 - 11:55	162 SMD	
Ge 140B	3-0-6	Radiogenic Isotope Geochemistry	01	Tissot, F	TR 09:00 - 10:25	251 ARM	
Ge/ESE 149	3-0-6	Marine Geochemistry	01	Adkins, J	MWF 13:00 - 13:55	135 L+R	
Ge/ESE 150	3-0-6	Planetary Atmospheres	01	Ingersoll, A	TR 14:30 - 15:55	162 SMD	
Ge/ESE 154	+	Readings in Paleoclimate <i>meets Fridays 3-4pm in 136 L+R // 3 units</i>	01	Adkins, J	A	A	P
Ae/Ge/ME 160B	3-0-6	Continuum Mechanics of Fluids and Solids	01	Ortiz, M	TR 14:30 - 15:55	384 FIR	
Ge 161	3-0-6	Plate Tectonics	01	Stock, J	TR 10:30 - 11:55	215 NMD	
Ge 162	3-0-6	Seismology	01	Zhan, Z	MWF 10:00 - 10:55	162 SMD	G
Ge 167	3-0-6	Tectonic Geodesy <i>class cancelled - will be offered spring term</i>	01	Staff	A	A	
Ge 194	2-0-4	Special Topics in the Planetary Sciences: Volcanism across the Solar System	01	de Kleer, K	T 13:00 - 14:25	176 SMD	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
GEOLOGY							
Ge 218	3-0-3	Stable Isotopes Seminar	01	Eiler, J	TR 13:30 - 14:25	215 NMD	P
Ge/Bi/ESE 246	2-0-4	Molecular Geobiology Seminar	01	Orphan, V	R 14:00 - 15:55	251 ARM	P
Ae/AM/CE/ME/Ge 265	3-0-6	Static and Dynamic Failure of Brittle Solids and Interfaces, from the Micro to the Mega	01	Rosakis, A	MWF 10:00 - 10:55	135 GTL	
Ge 277	2-0-4	Active Tectonics Seminar	01	Avouac, J	W 11:00 - 11:55	212 NMD	
Ge 297	+	Advanced Study	01	Adkins, J	A	A	P
			02	Eiler, J	A	A	P
			03	Clayton, R	A	A	P
			04	Asimow, P	A	A	P
			05	Blake, G	A	A	P
			06	Brown, M	A	A	P
			07	Grotzinger, J	A	A	P
			08	Stock, J	A	A	P
			09	Sessions, A	A	A	P
			10	Avouac, J	A	A	P
			11	Gurnis, M	A	A	P
			12	Saleeby, J	A	A	P
			13	Helmberger, D	A	A	P
			14	Ingersoll, A	A	A	P
			15	Jackson, J	A	A	P
			16	Kirschvink, J	A	A	P
			17	Farley, K	A	A	P
			18	Newman, D	A	A	P
			19	Ampuero Saenz, J	A	A	P
			20	Fischer, W	A	A	P
			21	Lamb, M	A	A	P
			22	Rossmann, G	A	A	P
			23	Schneider, T	A	A	P
			24	Bordoni, S	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
GEOLOGY							
Ge 297	+	Advanced Study	25	Simons, M	A	A	P
			26	Stevenson, D	A	A	P
			27	Ehlmann, B	A	A	P
			28	Stolper, E	A	A	P
			29	Kulkarni, S	A	A	P
			30	Miller, T	A	A	P
			31	Batygin, K	A	A	P
			32	Wennberg, P	A	A	P
			33	Wernicke, B	A	A	P
			34	Aharonson, O	A	A	P
			35	Yung, Y	A	A	P
			36	Lapusta, N	A	A	P
			37	Kulkarni, S	A	A	P
			38	Orphan, V	A	A	P
			39	Tsai, V	A	A	P
			40	Knutson, H	A	A	P
			41	Leadbetter, J	A	A	P
			42	Zhan, Z	A	A	P
			43	Bucholz, C	A	A	P
			44	Leadbetter, J	A	A	P
45	Tissot, F	A	A	P			
46	Ross, Z	A	A	P			
Ge 299	+	Thesis Research	01	Adkins, J	A	A	P
			02	Ehlmann, B	A	A	P
			03	Avouac, J	A	A	P
			04	Asimow, P	A	A	P
			05	Blake, G	A	A	P
			06	Brown, M	A	A	P
			07	Clayton, R	A	A	P
			08	Eiler, J	A	A	P
			09	Farley, K	A	A	P
			10	Grotzinger, J	A	A	P
			11	Heaton, T	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
GEOLOGY							
Ge 299	+	Thesis Research	12	Helmberger, D	A	A	P
			13	Gurnis, M	A	A	P
			14	Kirschvink, J	A	A	P
			15	Fischer, W	A	A	P
			16	Newman, D	A	A	P
			17	Orphan, V	A	A	P
			18	Knutson, H	A	A	P
			19	Rossmann, G	A	A	P
			20	Saleeby, J	A	A	P
			21	Lamb, M	A	A	P
			22	Schneider, T	A	A	P
			23	Sessions, A	A	A	P
			24	Bucholz, C	A	A	P
			25	Simons, M	A	A	P
			26	Stevenson, D	A	A	P
			27	Stock, J	A	A	P
			28	Stolper, E	A	A	P
			29	Leadbetter, J	A	A	P
			30	Zhan, Z	A	A	P
			31	Yung, Y	A	A	P
			32	Batygin, K	A	A	P
			33	Wennberg, P	A	A	P
			34	Wernicke, B	A	A	P
35	Ampuero Saenz, J	A	A	P			
36	Lapusta, N	A	A	P			
37	Kulkarni, S	A	A	P			
38	Jackson, J	A	A	P			
39	Ingersoll, A	A	A	P			
40	Tsai, V	A	A	P			
41	Bordoni, S	A	A	P			
42	Ross, Z	A	A	P			
HISTORY							

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
HISTORY							
Hum/H 002	3-0-6	Which Side Are You On? 20th Century African American History Through Debate <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students // first class meeting will be held Tuesday, January 14th</i>	01	Wiggins, D	TR 14:30 - 15:55	106 ANB	
Hum/H 008B	3-0-6	Civilization, Science, and Archaeology: The Development of Science from Babylon though the Renaissance <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Buchwald, J	TR 09:00 - 10:25	B119 BAX	
Hum/H 009B	3-0-6	European Civilization: Early Modern Europe <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Wey-Gomez, N	TR 09:00 - 10:25	115 DAB	
Hum/H 010	3-0-6	Medieval Europe: The Problem of Violence <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Brown, W	TR 14:30 - 15:55	TR DAB	
Hum/H 011	3-0-6	Love and Death: Using Demography to Study the History of Europe from 1700 <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Dennison, T	TR 09:00 - 10:25	TR DAB	
Hum/H/HPS 018	3-0-6	Introduction to the History of Science <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Feingold, M	M 19:00 - 21:55	TR DAB	
E/H/VC 089	3-0-6	New Media Arts in the 20th and 21st Centuries <i>maximum enrollment: 15 students</i>	01	Mushkin, H	TR 13:00 - 14:25	128 BAX	G
H 098	+	Reading in History <i>Instructor permission required prior to registering</i>	01	Kousser, J	A	A	P
			02	Dennison, T	A	A	P
H 099B	1-0-8	Research Tutorial <i>Instructor permission required prior to registering</i>	01	Dennison, T	A	A	
			02	Hoffman, P	A	A	
			03	Brown, W	A	A	
			04	Gronningsater, S	A	A	
			05	Dykstra, M	A	A	

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
HISTORY							
H 099B	1-0-8	Research Tutorial	06	Wey-Gomez, N	A	A	
		<i>Instructor permission required prior to registering</i>	07	Kousser, J	A	A	
H 112	3-0-6	The Vikings <i>class open for enrollment // maximum enrollment: 25 students</i>	01	Brown, W	MWF 13:00 - 13:55	125 BAX	
H 115B	3-0-6	British History <i>class cancelled</i>	01	Staff	A	A	G
H 123	3-0-6	Ordinary People: Uncovering Everyday Life in the European Past <i>maximum enrollment: 15 students</i>	01	Dennison, T	TR 13:00 - 14:25	117 DAB	
Law/PS/H 148A	3-0-6	The Supreme Court in U.S. History <i>maximum enrollment: 30 students // Writing Intensive Course</i>	01	Kousser, J	T 19:30 - 22:25	127 BAX	G
H 149	3-0-6	Age of Fracture: America Since 1974 <i>maximum enrollment: 20 students // first class meeting will be held January 15th</i>	01	Wiggins, D	W 19:00 - 21:55	TR DAB	G
H 161	3-0-6	Selected Topics in History: The First Industrial Revolution, 1750 to 1850, in Global Perspective <i>maximum enrollment: 15 students</i>	01	Styles, J	W 19:00 - 21:55	127 BAX	G
HPS/H 166	3-0-6	Historical Perspectives on the Relations between Science and Religion <i>maximum enrollment: 15 students</i>	01	Feingold, M	T 19:00 - 21:55	117 DAB	
H/HPS/VC 186	3-0-6	From Plato to Pluto: Maps, Exploration and Culture from Antiquity to the Present <i>maximum enrollment: 15 students</i>	01	Wey-Gomez, N / Ceva, J	TR 13:00 - 14:25	TR DAB	G
HISTORY AND PHILOSOPHY OF SCIENCE							
Hum/H/HPS 018	3-0-6	Introduction to the History of Science <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Feingold, M	M 19:00 - 21:55	TR DAB	

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
HISTORY AND PHILOSOPHY OF SCIENCE							
HPS102B	2-0-10	Senior Research Seminar <i>Instructor permission required prior to registering</i>	01	Staff	A	A	P
HPS103	1-0-0	Public Lecture Series	01	Eberhardt, F	A	A	P
HPS/PI 124	3-0-6	Philosophy of Space and Time <i>maximum enrollment: 15 students</i>	01	Hubert, M	TR 09:00 - 10:25	125 BAX	G
HPS/PI 138	3-0-6	Human Nature and Society <i>open by lottery; see link on the REGIS home page to enter by Nov 20th // maximum enrollment: 15 students</i>	01	Quartz, S	TR 13:00 - 14:25	B133 BAX	
HPS/H 166	3-0-6	Historical Perspectives on the Relations between Science and Religion <i>maximum enrollment: 15 students</i>	01	Feingold, M	T 19:00 - 21:55	117 DAB	
H/HPS/VC 186	3-0-6	From Plato to Pluto: Maps, Exploration and Culture from Antiquity to the Present <i>maximum enrollment: 15 students</i>	01	Wey-Gomez, N / Ceva, J	TR 13:00 - 14:25	TR DAB	G
HUMANITIES							
Hum/H 002	3-0-6	Which Side Are You On? 20th Century African American History Through Debate <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students // first class meeting will be held Tuesday, January 14th</i>	01	Wiggins, D	TR 14:30 - 15:55	106 ANB	
Hum/H 008B	3-0-6	Civilization, Science, and Archaeology: The Development of Science from Babylon through the Renaissance <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Buchwald, J	TR 09:00 - 10:25	B119 BAX	
Hum/H 009B	3-0-6	European Civilization: Early Modern Europe <i>Attendance at the first class meeting is required. // maximum enrollment: 15 students</i>	01	Wey-Gomez, N	TR 09:00 - 10:25	115 DAB	

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
HUMANITIES							
Hum/H 010	3-0-6	Medieval Europe: The Problem of Violence <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Brown, W	TR 14:30 - 15:55	TR DAB	
Hum/H 011	3-0-6	Love and Death: Using Demography to Study the History of Europe from 1700 <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Dennison, T	TR 09:00 - 10:25	TR DAB	
Hum015	3-0-6	Special Topics in Humanities <i>both sections will count as a Hum/VC frosh hum course // Sec 1: Housing America // Sec 2: Cancelled // maximum enrollment: 15 students per section</i>	01 02	Sobelle, S Staff	T 19:00 - 21:55 A	115 DAB A	
Hum/H/HPS 018	3-0-6	Introduction to the History of Science <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Feingold, M	M 19:00 - 21:55	TR DAB	
Hum/En 020	3-0-6	Greek Epic and Drama <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Pigman, G	TR 14:30 - 15:55	117 DAB	G
Hum/En 022	3-0-6	Inequality <i>class cancelled</i>	01 02	Staff Staff	A A	A A	
Hum/En 025	3-0-6	Human Animal <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Holland, J	TR 09:00 - 10:25	128 BAX	
Hum/PI 040	3-0-6	Right and Wrong <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Hay, R	R 19:00 - 21:55	TR DAB	
Hum/PI 043	3-0-6	Meaning in Life <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Quartz, S	TR 14:30 - 15:55	B133 BAX	
Hum/PI 045	3-0-6	Ethics & AI <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students per section</i>	01 02	Eberhardt, F Eberhardt, F	TR 13:00 - 14:25 TR 14:30 - 15:55	B119 BAX B119 BAX	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
HUMANITIES							
Hum114B	3-0-6	Spanish and Latin American Literature <i>maximum enrollment: 20 students between L 114b and Hum 114b</i>	01	Arjona, G	TR 19:00 - 20:25	125 BAX	
INFORMATION AND DATA SCIENCES							
ACM/IDS 101B	4-4-4	Methods of Applied Mathematics	01	Bruno, O	TR 14:30 - 16:25	213 ANB	
EE/Ma/CS/IDS 127	3-0-6	Error-Correcting Codes	01	Kostina, V	MW 14:30 - 15:55	106 ANB	
CMS/CS/IDS 139	3-0-9	Analysis and Design of Algorithms	01	Vidick, T	MW 10:30 - 11:55	213 ANB	
Ma/ACM/IDS 140A	3-0-6	Probability	01	Tamuz, O	MWF 13:00 - 13:55	187 LINDE	
CMS/CS/EE/IDS 144	3-4-5	Networks: Structure & Economics	01	Wierman, A	TR 10:30 - 11:55	105 ANB	
CMS/CS/CNS/EE/IDS	3-3-6	Machine Learning & Data Mining <i>class will meet in ANB 105 on 2/20/20</i>	01	Yue, Y	TR 14:30 - 15:55	Institute Auditorium BCK	
IDS/ACM/CS 157	3-2-4	Statistical Inference	01	Zuev, K	MW 09:00 - 10:25	105 ANB	
EE/CS/IDS 160	3-0-6	Fundamentals of Information Transmission and Storage	01	Kostina, V	TR 10:30 - 11:55	B280 MRE	
CS/CNS/EE/IDS 165	3-3-6	Foundations of Machine Learning and Statistical Inference	01	Anandkumar, A	TR 13:00 - 14:25	213 ANB	
IDS197	+	Undergraduate Reading in the Information and Data Sciences	01	Staff	A	A	P
IDS198	+	Undergraduate Projects in Information and Data Sciences	01	Wierman, A	A	A	P
			02	Zuev, K	A	A	P
			03	Murray, R	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
INFORMATION AND DATA SCIENCES							
IDS199	+	Undergraduate Thesis in the Information and Data Sciences	01	Staff	A	A	P
ACM/IDS 204	3-0-9	Topics in Linear Algebra and Convexity: Randomized Algorithms for Linear Algebra	01	Tropp, J	TR 10:30 - 11:55	213 ANB	
ACM/IDS 216	3-0-6	Markov Chains, Discrete Stochastic Processes and Applications	01	Owhadi, H	TR 09:00 - 10:25	105 ANB	
LANGUAGES							
L 102B	3-0-6	Elementary French <i>maximum enrollment: 15 students</i>	01	Orcel, C	W 16:00 - 16:55 R 17:00 - 17:55 F 12:00 - 12:55	125 BAX 127 BAX 125 BAX	G
L 103B	3-0-6	Intermediate French <i>maximum enrollment: 15 students</i>	01	Merrill, T	MWF 12:00 - 12:55	B119 BAX	
L 106B	4-0-5	Elementary Japanese	01 02	Fujio, M Fujio, M	MTWR 15:00 - 15:55 MTWR 16:00 - 16:55	228 BAX 228 BAX	
L 107B	3-0-6	Intermediate Japanese <i>maximum enrollment: 15 students // Taught by Dr. Hirai</i>	01	Toner, R	MW 16:00 - 17:25	115 DAB	
L 108B	3-0-6	Advanced Japanese <i>maximum enrollment: 15 students // Taught by Dr. Hirai</i>	01	Toner, R	TR 16:00 - 17:25	115 DAB	
L 110B	3-0-6	Elementary Spanish <i>maximum enrollment: 20 students per section</i>	01 02	Garcia, D Arjona, G	MWR 12:00 - 12:55 TR 16:00 - 17:25	117 DAB 125 BAX	
L 112B	3-0-6	Intermediate Spanish <i>maximum enrollment: 20 students</i>	01	Garcia, D	MW 16:00 - 17:25	128 BAX	
L 114B	3-0-6	Spanish and Latin American Literature <i>maximum enrollment: 20 students between L 114b and Hum 114b</i>	01	Arjona, G	TR 19:00 - 20:25	125 BAX	
L 130B	3-0-6	Elementary German	01	Aebi, A	MWR 13:00 - 13:55	115 DAB	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
LANGUAGES							
L 132B	3-0-6	Intermediate German	01	Aebi, A	MWR 12:00 - 12:55	115 DAB	
L/VC 153	3-0-6	Refugees and Migrants' Visual and Textual Representations <i>maximum enrollment: 15 students</i>	01	Orcel, C	TR 13:00 - 14:25	228 BAX	G
L 167	3-0-6	Latin Literature <i>maximum enrollment: 15 students</i>	01	Pigman, G	TR 11:30 - 12:55	208 DAB	
L 170B	3-0-6	Introduction to Chinese <i>maximum enrollment: 20 students</i>	01	Wang, X	MTW 12:00 - 12:55	128 BAX	
L 171B	3-0-6	Elementary Chinese <i>maximum enrollment: 20 students</i>	01	Ming, F	MTW 16:00 - 16:55	117 DAB	
L 172B	3-0-6	Intermediate Chinese <i>maximum enrollment: 20 students</i>	01	Wang, X	TR 09:00 - 10:25	117 DAB	
L 173B	3-0-6	Advanced Chinese <i>maximum enrollment: 20 students</i>	01	Ming, F	MW 17:00 - 18:25	117 DAB	
LAW							
Law/PS/H 148A	3-0-6	The Supreme Court in U.S. History <i>maximum enrollment: 30 students // Writing Intensive Course</i>	01	Kousser, J	T 19:30 - 22:25	127 BAX	G
MATERIALS SCIENCE							
MS 078B	+	Senior Thesis	01	Johnson, W	A	A	P
			03	Greer, J	A	A	P
			05	Goddard, W	A	A	P
			06	Gharib, M	A	A	P
			07	Minnich, A	A	A	P
			08	Ravichandran, G	A	A	P
			09	Fultz, B	A	A	P
			10	Rossmann, G	A	A	P
			11	Faber, K	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MATERIALS SCIENCE							
MS 078B	+	Senior Thesis	12	Daraio, C	A	A	P
MS 078C	+	Senior Thesis	01	Ravichandran, G	A	A	P
MS 100	+	Advanced Work in Materials Science	01	Faber, K	A	A	P
			02	Fultz, B	A	A	P
			04	Davis, M	A	A	P
			07	Johnson, W	A	A	P
			08	Minnich, A	A	A	P
			09	Greer, J	A	A	P
MS 110B	1-0-0	Materials Research Lectures	01	Faber, K	W 16:00 - 16:55	106 SPL	P
MS/ME/MedE 116	3-0-6	Mechanical Behavior of Materials	01	Greer, J	TR 14:30 - 15:55	104 WAT	
MS 121	1-4-4	Laboratory Research Methods in Materials Science	01	Ahn, C	T 13:00 - 13:55	111 KCK	
MS 131	3-0-6	Structure and Bonding in Materials	01	Bernardi, M	TR 13:00 - 14:25	104 WAT	
MS 150B	3-0-6	Topics in Materials Science: Fundamentals of Sustainability <i>taught concurrently with ChE 190 and ESE 100</i>	01	Kornfield, J / Diallo, M	TR 11:30 - 12:55	102 SPL	
MS 200	+	Advanced Work in Materials Science	01	Ortiz, M	A	A	P
			02	Kornfield, J	A	A	P
			03	Atwater, H	A	A	P
			04	Minnich, A	A	A	P
			05	Fultz, B	A	A	P
			06	Goddard, W	A	A	P
			08	Johnson, W	A	A	P
			09	Blake, G	A	A	P
			10	Greer, J	A	A	P
			12	Daraio, C	A	A	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MATERIALS SCIENCE							
MS 200	+	Advanced Work in Materials Science	13	Lewis, N	A	A	P
			14	Bhattacharya, K	A	A	P
			15	Faber, K	A	A	P
			17	Bernardi, M	A	A	P
			18	Rees, D	A	A	P
			19	Yeh, N	A	A	P
			20	Ahn, C	A	A	P
			21	See, K	A	A	P
MS 300	+	Thesis Research	01	Atwater, H	A	A	P
			02	Ortiz, M	A	A	P
			03	Rosakis, A	A	A	P
			04	Fultz, B	A	A	P
			05	Goddard, W	A	A	P
			07	Johnson, W	A	A	P
			09	Greer, J	A	A	P
			11	Cross, M	A	A	P
			13	Lewis, N	A	A	P
			14	Bhattacharya, K	A	A	P
			15	Faber, K	A	A	P
			16	Minnich, A	A	A	P
			17	Bernardi, M	A	A	P
			MATHEMATICS				
Ma 001B	4-0-5	Calculus of One and Several Variables and Linear Algebra <i>Sections 1-4 & 8 Practical Track -- Sections 5-7 & 9 Analytical Track // maximum enrollment: 45 students per section</i>	01	Kechris, A	MWF 10:00 - 10:55 R 09:00 - 09:55	119 KRK 119 DWN	P
			02	Kechris, A	MWF 10:00 - 10:55 R 10:00 - 10:55	119 KRK 119 DWN	P
			03	Kechris, A	MWF 10:00 - 10:55 R 13:00 - 13:55	119 KRK 107 DWN	P
			04	Kechris, A	MWF 10:00 - 10:55 R 14:00 - 14:55	119 KRK B111 DWN	P
			05	Makarov, N	MWF 10:00 - 10:55 R 10:00 - 10:55	310 LINDE B111 DWN	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MATHEMATICS							
Ma 001B	4-0-5	Calculus of One and Several Variables and Linear Algebra <i>Sections 1-4 & 8 Practical Track -- Sections 5-7 & 9 Analytical Track // maximum enrollment: 45 students per section</i>	06	Makarov, N	MWF 10:00 - 10:55 R 13:00 - 13:55	310 LINDE 102 STL	P
			07	Makarov, N	MWF 10:00 - 10:55 R 14:00 - 14:55	310 LINDE 119 DWN	P
			08	Kechris, A	MWF 10:00 - 10:55 R 10:00 - 10:55	119 KRK 103 DWN	P
			09	Makarov, N	MWF 10:00 - 10:55 R 19:00 - 19:55	310 LINDE 387 LINDE	P
Ma 001D	2-0-2	Series	01	Rains, E	TR 09:00 - 09:55	387 LINDE	
Ma 003	4-0-5	Introduction to Probability and Statistics <i>taught concurrently with Ma 103 // maximum enrollment: 50 students per section</i>	01	Border, K	MWF 10:00 - 10:55 R 09:00 - 09:55	Lecture Hall BAX 310 LINDE	G
			02	Border, K	MWF 10:00 - 10:55 R 10:30 - 11:25	Lecture Hall BAX 310 LINDE	G
			03	Border, K	MWF 10:00 - 10:55 R 13:00 - 13:55	Lecture Hall BAX 310 LINDE	G
			04	Border, K	MWF 10:00 - 10:55 R 14:30 - 15:25	Lecture Hall BAX 310 LINDE	G
			05	Border, K	MWF 10:00 - 10:55 R 09:00 - 09:55	Lecture Hall BAX 103 DWN	G
			06	Border, K	MWF 10:00 - 10:55 R 10:30 - 11:25	Lecture Hall BAX 142 KCK	G
			07	Border, K	MWF 10:00 - 10:55 R 13:00 - 13:55	Lecture Hall BAX B111 DWN	G
			08	Border, K	MWF 10:00 - 10:55 R 14:30 - 15:25	Lecture Hall BAX 119 KRK	G
Ma 005B	3-0-6	Introduction to Abstract Algebra <i>taught concurrently with Ma 105b</i>	01	Campbell, C	MWF 09:00 - 09:55	387 LINDE	
Ma/CS 006B	3-0-6	Introduction to Discrete Mathematics <i>taught concurrently with Ma/CS 106B</i>	01	Shikhelman, C	MWF 13:00 - 13:55	387 LINDE	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MATHEMATICS							
Ma 013	2-0-0	Problem Solving in Vector Calculus	01	Rains, E	TR 19:30 - 20:55	310 LINDE	P
Ma 092B	+	Senior Thesis	01	Kechris, A	A	A	P
			02	Marcolli, M	A	A	P
Ma 098	+	Independent Reading	01	Staff	A	A	P
Ma 103	4-0-5	Introduction to Probability and Statistics <i>taught concurrently with Ma 3</i>	01	Border, K	MWF 10:00 - 10:55 R 13:00 - 13:55	Lecture Hall BAX 310 LINDE	G
Ma 105B	3-0-6	Introduction to Abstract Algebra <i>taught concurrently with Ma 5b</i>	01	Campbell, C	MWF 09:00 - 09:55	387 LINDE	
Ma/CS 106B	3-0-6	Introduction to Discrete Mathematics <i>taught concurrently with Ma/CS 6b</i>	01	Shikhelman, C	MWF 13:00 - 13:55	387 LINDE	
Ma 108B	3-0-6	Classical Analysis	01	Durcik, P	MWF 11:00 - 11:55	310 LINDE	
Ma 109B	3-0-6	Introduction to Geometry and Topology	01	Smillie, P	MWF 10:00 - 10:55	387 LINDE	
Ma 110B	3-0-6	Analysis	01	Rains, E	MWF 11:00 - 11:55	255 LINDE	
Ma 111B	3-0-6	Topics in Analysis	01	Radziwill, M	TR 14:30 - 15:55	187 LINDE	
Ma 116B	3-0-6	Mathematical Logic and Axiomatic Set Theory	01	Panagiotopoulos, A	TR 10:30 - 11:55	187 LINDE	
Ma 120B	3-0-6	Abstract Algebra	01	Zhu, X	MWF 09:00 - 09:55	255 LINDE	
Ma 121A	3-0-6	Combinatorial Analysis	01	Tyomkyn, M	TR 13:00 - 14:25	255 LINDE	
EE/Ma/CS 126B	3-0-6	Information Theory <i>Make-up classes - Friday 080 Moore 10:30-noon</i>	01	Effros, M	MW 10:30 - 11:55	B280 MRE	G

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MATHEMATICS							
EE/Ma/CS/IDS 127	3-0-6	Error-Correcting Codes	01	Kostina, V	MW 14:30 - 15:55	106 ANB	
Ma 128	3-0-6	Homological Algebra	01	Zhu, X	MWF 14:00 - 14:55	255 LINDE	
Ma 130B	3-0-6	Algebraic Geometry	01	Xu, D	MWF 13:00 - 13:55	255 LINDE	
Ma/ACM/IDS 140A	3-0-6	Probability	01	Tamuz, O	MWF 13:00 - 13:55	187 LINDE	
Ma/ACM 142	3-0-6	Ordinary and Partial Differential Equations	01	Frank, R	TR 09:00 - 10:25	187 LINDE	P
Ma 145B	3-0-6	Representation Theory	01	Kivinen, O	TR 14:00 - 15:25	183 LINDE	G
Ma 147B	3-0-6	Dynamical Systems	01	Lazebnik, K	TR 13:00 - 14:25	187 LINDE	
Ma 148A	3-0-6	Topics in Mathematical Physics	01	Parikh, S	MWF 10:00 - 10:55	187 LINDE	P
Ma 151B	3-0-6	Algebraic and Differential Topology	01	Ni, Y	MWF 10:00 - 10:55	255 LINDE	
Ma 157A	3-0-6	Riemannian Geometry	01	Smillie, P	MWF 13:00 - 13:55	289 LINDE	
Ma 160B	3-0-6	Number Theory	01	Campbell, C	MWF 14:00 - 14:55	187 LINDE	
Ma 162B	3-0-6	Topics in Number Theory	01	Burungale, A	TR 10:30 - 11:55	289 LINDE	
Ma 191B	3-0-6	Selected Topics in Mathematics	01	Durcik, P	TR 10:30 - 11:55	387 LINDE	
		<i>Sec 1: Topics in Harmonic Analysis // Sec 2:</i>	02	Shikhelman, C	WF 14:30 - 15:55	387 LINDE	
		<i>TBA //Sec 3: Introduction to Mathematical General Relativity</i>	03	Angelopoulos, I	TR 14:30 - 15:55	289 LINDE	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MATHEMATICS							
Ma 290	+	Reading	01	Conlon, D	A	A	P
			02	Flach, M	A	A	P
			03	Frank, R	A	A	P
			04	Graber, T	A	A	P
			05	Isett, P	A	A	P
			06	Katz, N	A	A	P
			07	Kechris, A	A	A	P
			08	Makarov, N	A	A	P
			09	Mantovan, E	A	A	P
			10	Marcolli, M	A	A	P
			11	Markovic, V	A	A	P
			12	Ni, Y	A	A	P
			13	Radziwill, M	A	A	P
			14	Rains, E	A	A	P
			15	Ramakrishnan, D	A	A	P
			16	Wang, L	A	A	P
			17	Zhu, X	A	A	P
			18	Gukov, S	A	A	P
			19	Kapustin, A	A	A	P
			20	Kitaev, A	A	A	P
			21	Oguri, H	A	A	P
			22	Tamuz, O	A	A	P
			23	Cvitanic, J	A	A	P
			24	Owhadi, H	A	A	P
Ma 390	+	Research	01	Conlon, D	A	A	P
			02	Flach, M	A	A	P
			03	Frank, R	A	A	P
			04	Graber, T	A	A	P
			05	Isett, P	A	A	P
			06	Katz, N	A	A	P
			07	Kechris, A	A	A	P
			08	Makarov, N	A	A	P
			09	Mantovan, E	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme			
MATHEMATICS										
Ma 390	+	Research	10	Marcolli, M	A	A	P			
			11	Markovic, V	A	A	P			
			12	Ni, Y	A	A	P			
			13	Radziwill, M	A	A	P			
			14	Rains, E	A	A	P			
			15	Ramakrishnan, D	A	A	P			
			16	Wang, L	A	A	P			
			17	Zhu, X	A	A	P			
			18	Gukov, S	A	A	P			
			19	Kapustin, A	A	A	P			
			20	Kitaev, A	A	A	P			
			21	Oguri, H	A	A	P			
			22	Tamuz, O	A	A	P			
			23	Cvitanic, J	A	A	P			
			24	Owhadi, H	A	A	P			
			MECHANICAL ENGINEERING							
			ME 011B	3-0-6	Thermal Science	01	Hunt, M	MWF 14:00 - 14:55	135 GTL	G
			ME 012B	3-0-6	Mechanics	01	Daraio, C	TR 13:00 - 14:25	135 GTL	G
			ME 013	0-4-0	Mechanical Prototyping <i>maximum enrollment of 25 students between ME 13/113</i>	01	Van Deusen, J / Stovall, P	OM,M 18:00 - 18:55	B224 SPL	P
			ME 050A	0-6-3	Experiments and Modeling in Mechanical Engineering	01	Mello, M	MW 14:00 - 15:25	115 GTL	G
			ME 072B	1-8-0	Engineering Design Laboratory	01	Mello, M / Van Deusen, J	TR 15:00 - 16:25	115 GTL	G
			CS/EE/ME 075B	+	Multidisciplinary Systems Engineering <i>6 units (2-3-1), 9 units (2-6-1), or 12 units (2- 9-1)</i>	01	Burdick, J	OM,M 19:30 - 20:25	135 GTL	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme			
MECHANICAL ENGINEERING										
ME 090B	0-9-0	Senior Thesis, Experimental	01	Minnich, A	A	A	G			
ME 100	+	Independent Studies in Mechanical Engineering	01	Colonius, T	A	A	P			
			02	Burdick, J	A	A	P			
			03	Scherer, A	A	A	P			
			04	Phillips, R	A	A	P			
			05	Ames, A	A	A	P			
			07	Tai, Y	A	A	P			
			08	Hunt, M	A	A	P			
			09	Minnich, A	A	A	P			
			11	Blanquart, G	A	A	P			
			12	Perona, P	A	A	P			
			13	Doyle, J	A	A	P			
			14	Daraio, C	A	A	P			
			15	Gharib, M	A	A	P			
			16	Murray, R	A	A	P			
			17	McKeon, B	A	A	P			
			Ae/APh/CE/ME 101B	3-0-6	Fluid Mechanics	01	Austin, J	MWF 10:00 - 10:55	133 GUG	G
			Ae/AM/CE/ME 102B	3-0-6	Mechanics of Structures and Solids	01	Bhattacharya, K	TR 09:00 - 10:25	135 GTL	
ME 110	+	Special Laboratory Work in Mechanical Engineering	01	Shepherd, J	A	A				
			02	Scherer, A	A	A				
			03	Ravichandran, G	A	A				
			04	Burdick, J	A	A				
ME 113	0-4-0	Mechanical Prototyping <i>maximum enrollment of 25 students between ME 13/113</i>	01	Van Deusen, J / Stovall, P	OM,M 18:00 - 18:55	B224 SPL	P			
MS/ME/MedE 116	3-0-6	Mechanical Behavior of Materials	01	Greer, J	TR 14:30 - 15:55	104 WAT				

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MECHANICAL ENGINEERING							
ME/CS/EE 134	3-6-0	Robotic Systems	01	Niemeyer, G	MWF 15:00 - 15:55	135 GTL	
AM/CE/ME 150B	1-0-0	Graduate Engineering Seminar	01	Lapusta, N	R 11:00 - 11:55	135 GTL	P
Ae/Ge/ME 160B	3-0-6	Continuum Mechanics of Fluids and Solids	01	Ortiz, M	TR 14:30 - 15:55	384 FIR	
ME 200	+	Advanced Work in Mechanical Engineering	01	Burdick, J	A	A	P
			02	Murray, R	A	A	P
			03	Ravichandran, G	A	A	P
			05	Brady, J	A	A	P
Ae/AM/ME 223	3-0-6	Plasticity	01	Andrade, J	TR 14:30 - 15:55	135 GTL	
Ae/ACM/ME 232B	3-0-6	Computational Fluid Dynamics	01	Meiron, D	TR 14:30 - 15:55	232 GUG	P
AM/CE/ME 252	2-1-6	Linear and Nonlinear Waves in Structured Media <i>maximum enrollment: 20 students</i>	01	Daraio, C	F 14:00 - 15:55	115 GTL	
Ae/AM/CE/ME/Ge 265	3-0-6	Static and Dynamic Failure of Brittle Solids and Interfaces, from the Micro to the Mega	01	Rosakis, A	MWF 10:00 - 10:55	135 GTL	
ME 300	+	Research in Mechanical Engineering	01	Blanquart, G	A	A	P
			02	Fultz, B	A	A	P
			03	Burdick, J	A	A	P
			04	Colonus, T	A	A	P
			05	Chung, S	A	A	P
			06	Hunt, M	A	A	P
			07	Murray, R	A	A	P
			08	Lewis, N	A	A	P
			09	Bhattacharya, K	A	A	P
			10	Shepherd, J	A	A	P
			11	Andrade, J	A	A	P
			12	Bellan, P	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MECHANICAL ENGINEERING							
ME 300	+	Research in Mechanical Engineering	13	Leonard, A	A	A	P
			14	Ortiz, M	A	A	P
			15	Pachter, L	A	A	P
			16	Greer, J	A	A	P
			17	Lapusta, N	A	A	P
			18	Gharib, M	A	A	P
			19	Troian, S	A	A	P
			20	Brady, J	A	A	P
			21	Daraio, C	A	A	P
			22	Dickinson, M	A	A	P
			23	Ravichandran, G	A	A	P
			24	Atwater, H	A	A	P
			25	Adkins, J	A	A	P
			26	Kochmann, D	A	A	P
			27	McKeon, B	A	A	P
			28	Hoffmann, M	A	A	P
			29	Asimaki, D	A	A	P
			30	Minnich, A	A	A	P
			31	van de Walle, A	A	A	P
			32	Scherer, A	A	A	P
33	Ames, A	A	A	P			
34	Pellegrino, S	A	A	P			
35	Heath, J	A	A	P			
36	Heaton, T	A	A	P			
37	Schneider, T	A	A	P			
38	Stuart, A	A	A	P			
39	Rosakis, A	A	A	P			
40	Dabiri, J	A	A	P			
MEDICAL ENGINEERING							
MedE 099	+	Undergraduate Research in Medical Engineering	01	Petrasek, D	A	A	P
			02	Shapiro, M	A	A	P
			03	Tai, Y	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MEDICAL ENGINEERING							
MedE 099	+	Undergraduate Research in Medical Engineering	04	Gao, W	A	A	P
			05	Pickar, K	A	A	P
			06	Wang, L	A	A	P
MedE 100B	1-0-0	Medical Engineering Seminar	01	Tai, Y / Gao, W	R 16:00 - 16:55	105 ANB	P
ChE/BE/MedE 112	3-0-6	Design, Invention, and Fundamentals of Microfluidic Systems <i>Maximum enrollment: 20 students</i>	01	Ismagilov, R	TR 13:00 - 14:25	102 SPL	
MS/ME/MedE 116	3-0-6	Mechanical Behavior of Materials	01	Greer, J	TR 14:30 - 15:55	104 WAT	
MedE/EE/BE 168A	4-0-5	Biomedical Optics: Principles and Imaging	01	Wang, L	WF 15:30 - 17:25	142 KCK	G
MedE 201A	3-0-6	Principles and Design of Medical Devices	01	Gao, W / Tai, Y	MW 13:00 - 14:25	142 KCK	G
MedE 202	3-0-6	Sensors in Medicine	01	Gao, W	MW 09:00 - 10:25	142 KCK	G
MedE/BE/Ae 243	3-0-6	Physiological Mechanics	01	Roh, C	TR 09:00 - 10:25	232 GUG	G
MedE 291	+	Research in Medical Engineering	01	Burdick, J	A	A	P
			02	Choo, H	A	A	P
			03	Gao, W	A	A	P
			04	Emami, A	A	A	P
			05	Faraon, A	A	A	P
			06	Gharib, M	A	A	P
			07	Greer, J	A	A	P
			08	Hajimiri, S	A	A	P
			09	Scherer, A	A	A	P
			10	Tai, Y	A	A	P
			11	Yang, C	A	A	P
			12	Chandy, K	A	A	P
			13	Pickar, K	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
MEDICAL ENGINEERING							
MedE 291	+	Research in Medical Engineering	14	Colonus, T	A	A	P
			15	Grubbs, R	A	A	P
			16	Ismagilov, R	A	A	P
			17	Shapiro, M	A	A	P
			18	Wang, L	A	A	P
			19	Pachter, L	A	A	P
			20	Gradinaru, V	A	A	P
			21	Daraio, C	A	A	P
			22	Kornfield, J	A	A	P
MUSIC							
Mu 056	3-0-6	Jazz History <i>maximum enrollment: 25 students</i>	01	Neenan, T	MW 11:00 - 12:25	B133 BAX	
Mu 138	3-0-6	History II: Music History from 1750 to 1850 <i>maximum enrollment: 20 students</i>	01	Neenan, T	MW 14:30 - 15:55	B133 BAX	
NEUROBIOLOGY							
Bi/CNS/NB 162	2-4-6	Cellular and Systems Neuroscience Laboratory <i>maximum enrollment: 18 students</i>	01	Bremner, L	M 13:00 - 16:25	B160 CHR	
NB/Bi/CNS 163	3-0-3	The Biological Basis of Neural Disorders	01	Lester, H / Lois, C	MW 09:00 - 10:25	B136 KRK	G
CNS/Bi/EE/CS/NB 186	4-4-4	Vision: From Computational Theory to Neuronal Mechanisms	01	Shimojo, S / Perona, P / Meister, M / Tsao, D	TR 10:30 - 11:55	B101 BBB	
NB 299	+	Graduate Research	01	Adolphs, R	A	A	P
			02	Allman, J	A	A	P
			03	Andersen, R	A	A	P
			04	Anderson, D	A	A	P
			05	Bronner Hansen, M	A	A	P
			06	Dickinson, M	A	A	P
			07	Gradinaru, V	A	A	P
			08	Hong, E	A	A	P
			09	Kennedy, M	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
NEUROBIOLOGY							
NB 299	+	Graduate Research	10	Lester, H	A	A	P
			11	Lois, C	A	A	P
			12	Meister, M	A	A	P
			13	Oka, Y	A	A	P
			14	Prober, D	A	A	P
			15	Roukes, M	A	A	P
			16	Shapiro, M	A	A	P
			17	Shimojo, S	A	A	P
			18	Siapas, A	A	A	P
			19	Sternberg, P	A	A	P
			20	Tsao, D	A	A	P
			21	Wagenaar, D	A	A	P
			22	Zinn, K	A	A	P
23	Parker, J	A	A	P			
PERFORMING AND VISUAL ARTS							
PVA030B	0-3-0	Guitar <i>Sec 1: Beginning Guitar / Sec 2: Intermediate Guitar / Sec 3: Advanced Guitar</i>	01	Elgart, M	T 16:30 - 17:25	Fr Rehearsal Hall HAM	P
			02	Elgart, M	T 15:30 - 16:25	Fr Rehearsal Hall HAM	P
			03	Elgart, M	T 17:30 - 18:25	Fr Rehearsal Hall HAM	P
PVA031B	0-3-0	Chamber Music <i>Sec 1: Mixed Ensembles // Sec 2: Piano four-hands // Sec 3: Guitar Ensemble</i>	01	Jasper White, M	OM,A	A	P
			02	Ward, R	OM,A	A	P
			03	Elgart, M	OM,A	A	P
PVA032B	0-3-0	Symphony Orchestra	01	Price, G	T 19:30 - 22:15	A	P
PVA033B	0-3-0	Wind Orchestra	01	Price, G	R 19:30 - 21:45	Ramo Auditorium BAX	P
PVA034B	0-3-0	Jazz Band/Jazz Improvisation	01	Catlin, B	W 19:30 - 21:15	Fr Rehearsal Hall HAM	P
					W 21:30 - 22:55	Fr Rehearsal Hall HAM	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PERFORMING AND VISUAL ARTS							
PVA035B	0-3-0	Glee Club	01	Sulahian, N	M 19:00 - 20:25 W 17:05 - 18:35	Fr Rehearsal Hall HAM Fr Rehearsal Hall HAM	P
PVA037B	0-3-0	Chamber Singers	01	Sulahian, N	M 20:40 - 21:55	Fr Rehearsal Hall HAM	P
PVA040B	2-0-1	Moth to the Flame	01	Brophy, B	W 19:00 - 20:25	Ramo Auditorium BAX	P
PVA041B	2-0-1	Storytelling for Scientists	01	Brophy, B	W 19:00 - 20:25	Ramo Auditorium BAX	P
PVA042B	2-0-1	Improvisation for Scientists	01	Brophy, B	W 20:30 - 21:55	Ramo Auditorium BAX	P
PVA061B	0-3-0	Silkscreen and Silk Painting	01	Barry, J	M 19:00 - 21:55	Garage TCT	P
PVA062B	0-3-0	Drawing and Painting	01 02	Barry, J Barry, J	T 19:00 - 21:55 W 19:00 - 21:55	Garage TCT Garage TCT	P P
PVA063B	0-3-0	Ceramics <i>maximum enrollment: 15 students</i>	01	Plunkett, L	W 19:00 - 21:55 F 19:00 - 21:55	Ceramic Room POLY Ceramic Room POLY	P
PHILOSOPHY							
Hum/PI 040	3-0-6	Right and Wrong <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Hay, R	R 19:00 - 21:55	TR DAB	
Hum/PI 043	3-0-6	Meaning in Life <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students</i>	01	Quartz, S	TR 14:30 - 15:55	B133 BAX	
Hum/PI 045	3-0-6	Ethics & AI <i>Attendance at the first class meeting is required.</i> <i>// maximum enrollment: 15 students per section</i>	01 02	Eberhardt, F Eberhardt, F	TR 13:00 - 14:25 TR 14:30 - 15:55	B119 BAX B119 BAX	

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHILOSOPHY							
PI 090A	1-0-8	Senior Thesis	01	Quartz, S	A	A	G
PI 090B	1-0-8	Senior Thesis <i>Instructor permission required prior to registering</i>	01	Staff	A	A	
PI 098	+	Reading in Philosophy	01	Staff	A	A	P
PI 100	3-0-6	Free Will <i>maximum enrollment: 15 students</i>	01	Hitchcock, C	TR 10:30 - 11:55	115 DAB	
HPS/PI 124	3-0-6	Philosophy of Space and Time <i>maximum enrollment: 15 students</i>	01	Hubert, M	TR 09:00 - 10:25	125 BAX	G
HPS/PI 138	3-0-6	Human Nature and Society <i>open by lottery; see link on the REGIS home page to enter by Nov 20th // maximum enrollment: 15 students</i>	01	Quartz, S	TR 13:00 - 14:25	B133 BAX	
PHYSICAL EDUCATION							
PE 001	3-0-0	Student Designed Fitness	01	Mitchell, B	A	A	P
PE 003	3-0-0	Hiking <i>maximum enrollment: 18 students</i>	01	Bonafede, J / Raphelson, B	F 09:00 - 12:55	BAC	P
PE 008	3-0-0	Fitness Training, Beginning <i>maximum enrollment: 18 students</i>	01	Alway, S	MW 13:00 - 14:25	BAC	P
PE 010	3-0-0	Aerobic Dance <i>maximum enrollment: 18 students</i>	01	Waterman, D	TR 13:00 - 14:25	BAC	P
PE 020	3-0-0	Fencing, Beginning <i>class cancelled</i>	01	Staff	A	A	P
PE 024	3-0-0	Yoga, Beginning <i>maximum enrollment: 24 students</i>	01	Alvarado-Orozco, J	MW 10:00 - 11:25	BAC	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICAL EDUCATION							
PE 027	3-0-0	Frisbee Golf <i>maximum enrollment: 24 students</i>	01	Jordan, J	TR 14:30 - 15:55	BAC	P
PE 031	3-0-0	Indoor/Outdoor Cycling <i>maximum enrollment: 18 students // Spin Class</i>	01	Morgan, H	TR 10:00 - 11:25	BAC	P
PE 036	3-0-0	Swimming, Beginning/Intermediate <i>Beginning // maximum enrollment: 8 students</i>	01	Butler, E	MW 13:00 - 14:25	Pool BRW	P
PE 048	3-0-0	T'ai-Chi Ch'uan, Beginning and Intermediate <i>class cancelled</i>	01	Staff	A	A	P
PE 054	3-0-0	Racquetball, Beginning and Intermediate <i>maximum enrollment: 16 students</i>	01	Cohen, J	MW 09:00 - 10:25	BAC	P
PE 060	3-0-0	Tennis, Beginning and Intermediate <i>maximum enrollment: 12 students</i>	01	Becker, M	TR 10:00 - 11:25	TCT BAC	P
PE 070	3-0-0	Weight Training, Beginning/Intermediate <i>beginning, for students who are new to the weight room and strength training // maximum enrollment: 18 students</i>	01	Gould, E	MW 14:00 - 15:25	BAC	P
PE 077	3-0-0	Volleyball, Beginning and Intermediate <i>maximum enrollment: 18 students</i>	01	Gardner, T	TR 09:00 - 10:25	BAC	P
PE 081	3-0-0	Bouldering <i>maximum enrollment: 12 students</i>	01	Ngo, J	TR 14:30 - 15:55	BRW	P
PE 082	3-0-0	Rock Climbing, Beginning and Intermediate <i>Sec 1: Beginning // Sec 2: Intermediate/Advanced (limited to students with previous rock climbing experience) // maximum enrollment: 12 students per section</i>	01 02	Ngo, J Ngo, J	TR 10:30 - 11:55 TR 13:00 - 14:25	BRW BRW	P P
PE 084	3-0-0	Table Tennis, Beginning, Intermediate, and Advanced <i>maximum enrollment: 16 students</i>	01	Gamble, M	MW 10:00 - 11:25	BRW	P
PE 085A	3-0-0	Intercollegiate Track and Field Teams	01	Raphelson, B	MTWRF 16:00 - 17:55	BAC	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICAL EDUCATION							
PE 087B	3-0-0	Intercollegiate Swimming and Diving Teams	01	Brabson, A	MTWRFS 16:00 - 17:55	POOL BRN	P
PE 089B	3-0-0	Intercollegiate Fencing Teams	01	Morgan, H	MTWRFS 16:00 - 17:55	BRW	P
PE 090B	3-0-0	Intercollegiate Water Polo Teams	01	Bonafede, J	MTWRFS 16:00 - 17:55	POOL BAC	P
PE 091B	3-0-0	Intercollegiate Basketball Teams	01	Reyes, B / Eslinger, O	MTWRFS 16:00 - 17:55	BAC	P
PE 093A	3-0-0	Intercollegiate Baseball Team	01	Whitehead, K	MTWRFS 16:00 - 17:55	BAC	P
PE 095A	3-0-0	Intercollegiate Tennis Teams	01	Gamble, M / Cohen, J	MTWRFS 16:00 - 17:55	TCT BAC	P
PHYSICS							
Ph 001B	4-0-5	Classical Mechanics and Electromagnetism <i>Practical Track- Sections 1-5 // Analytical Track - Sections 6-10//Maximum Enrollment: 35 students per section</i>	01	Refael, G	WF 15:00 - 15:55	201 BRG	P
					MR 13:00 - 13:55	269 LAU	
			02	Refael, G	WF 15:00 - 15:55	201 BRG	P
					MR 13:00 - 13:55	269 LAU	
			03	Refael, G	WF 15:00 - 15:55	201 BRG	P
					MR 15:00 - 15:55	269 LAU	
			04	Refael, G	WF 15:00 - 15:55	201 BRG	P
					MR 15:00 - 15:55	107 DWN	
			05	Refael, G	WF 15:00 - 15:55	201 BRG	P
		MR 15:00 - 15:55	142 KCK				
06	Hsieh, D	WF 11:00 - 11:55	201 BRG	P			
		MR 15:00 - 15:55	102 STL				
07	Hsieh, D	WF 11:00 - 11:55	201 BRG	P			
		MR 13:00 - 13:55	119 DWN				
08	Hsieh, D	WF 11:00 - 11:55	201 BRG	P			
		MR 15:00 - 15:55	115 BCK				
09	Hsieh, D	WF 11:00 - 11:55	201 BRG	P			

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 001B	4-0-5	Classical Mechanics and Electromagnetism <i>Practical Track- Sections 1-5 // Analytical Track - Sections 6-10//Maximum Enrollment: 35 students per section</i>	09	Hsieh, D	MR 13:00 - 13:55	155 ARM	P
			10	Hsieh, D	WF 11:00 - 11:55	201 BRG	P
					MR 15:00 - 15:55	119 DWN	
Ph 002B	4-0-5	Waves, Quantum Mechanics, and Statistical Physics <i>Maximum enrollment: 35 students per section</i>	01	Cheung, C	TR 11:00 - 11:55	201 BRG	G
					WF 11:00 - 11:55	B111 DWN	
			02	Cheung, C	TR 11:00 - 11:55	201 BRG	G
					WF 13:00 - 13:55	269 LAU	
Ph 003	0-3-3	Introductory Physics Laboratory <i>Maximum enrollment: 24 students per section</i>	01	Black, E / Libbrecht, K	OM,M 13:00 - 13:55	201 BRG	
					W 13:00 - 15:55	308 BRG	
			02	Black, E / Libbrecht, K	OM,M 13:00 - 13:55	201 BRG	
				R 13:00 - 15:55	308 BRG		
			03	Black, E / Libbrecht, K	OM,M 13:00 - 13:55	201 BRG	
					F 13:00 - 15:55	308 BRG	
Ph 006	0-9-0	Physics Laboratory	01	Rice, F / Politzer, H	OM,T 15:00 - 15:55	201 BRG	
Ph 008B	0-3-0	Experiments in Electromagnetism <i>Maximum enrollment: 13 students</i>	01	Spiropulu, M	OM,M 15:00 - 15:55	201 BRG	P
FS/Ph 011B	2-0-4	Freshman Seminar: Beyond Physics	01	Phillips, R	A	A	P
Ph 012B	4-0-5	Waves, Quantum Physics, and Statistical Mechanics	01	Filippone, B	TR 10:30 - 11:55	269 LAU	G
Ph 020	0-6-0	Computational Physics Laboratory I	01	Mach, C / Weinstein, A	OM,M 15:00 - 15:55	304 BRG	P
Ph 021	0-6-0	Computational Physics Laboratory II	01	Mach, C / Weinstein, A	OM,M 15:00 - 15:55	304 BRG	P
Ph 022	0-6-0	Computational Physics Laboratory III	01	Mach, C / Weinstein, A	OM,M 15:00 - 15:55	304 BRG	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 050B	1-0-3	Caltech Physics League	01	Refael, G	A	A	
Ph 077A	0-5-4	Advanced Physics Laboratory	01	Black, E / Libbrecht, K	OM,M 15:00 - 15:55	210 BRG	
Ph 077B	0-5-4	Advanced Physics Laboratory	01	Black, E / Libbrecht, K	OM,M 15:00 - 15:55	210 BRG	
Ph 077C	0-5-4	Advanced Physics Laboratory	01	Black, E / Libbrecht, K	OM,M 15:00 - 15:55	210 BRG	
Ph 078B	+	Senior Thesis	01	Libbrecht, K	A	A	P
Ph 106B	4-0-5	Topics in Classical Physics	01	Golwala, S	TR 10:30 - 11:55	107 DWN	
APh/Ph 115	3-0-9	Physics of Momentum Transport in Hydrodynamic Systems <i>class cancelled</i>	01	Staff	A	A	
Ph 121B	0-6-0	Computational Physics Lab	01	Simmons-Duffin, D	A	A	P
Ph 125B	4-0-5	Quantum Mechanics	01	Wise, M	MWF 10:00 - 10:55	107 DWN	
Ph 127B	4-0-5	Statistical Physics	01	Motrunich, O	MW 13:00 - 14:25	107 DWN	
Ph 129B	4-0-5	Mathematical Methods of Physics <i>Group Theory</i>	01	Chen, X	TR 09:00 - 10:25	107 DWN	
Ph/APh 137B	3-0-6	Atoms and Photons	01	Endres, M	TR 10:30 - 11:55	469 LAU	
Ph 171	+	Reading and Independent Study	01	Adhikari, R	A	A	P
			02	Alicea, J	A	A	P
			03	Atwater, H	A	A	P
			04	Bernardi, M	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 171	+	Reading and Independent Study	05	Bock, J	A	A	P
			06	Guadalupe Dos Santos Lins Brandao, F	A	A	P
			07	Carroll, S	A	A	P
			08	Chen, X	A	A	P
			09	Chen, Y	A	A	P
			10	Cheung, C	A	A	P
			11	Eisenstein, J	A	A	P
			12	Endres, M	A	A	P
			13	Filippone, B	A	A	P
			14	Golwala, S	A	A	P
			15	Gukov, S	A	A	P
			16	Harrison, F	A	A	P
			17	Hitlin, D	A	A	P
			18	Hopkins, P	A	A	P
			19	Hsieh, D	A	A	P
			20	Hunt, M	A	A	P
			21	Hutzler, N	A	A	P
			22	Kapustin, A	A	A	P
			23	Kimble, H	A	A	P
			24	Kitaev, A	A	A	P
			25	Knutson, H	A	A	P
			26	Libbrecht, K	A	A	P
			27	Martin, C	A	A	P
			28	Mawet, D	A	A	P
			29	Motrunich, O	A	A	P
			30	Nad Perge, S	A	A	P
			31	Newman, H	A	A	P
			32	Oguri, H	A	A	P
			33	Painter, O	A	A	P
			34	Patterson, R	A	A	P
			35	Phillips, R	A	A	P
			36	Phinney, E	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 171	+	Reading and Independent Study	37	Politzer, H	A	A	P
			38	Porter, F	A	A	P
			39	Preskill, J	A	A	P
			40	Prince, T	A	A	P
			41	Refael, G	A	A	P
			42	Rosenbaum, T	A	A	P
			43	Roukes, M	A	A	P
			44	Scherer, A	A	A	P
			45	Schwab, K	A	A	P
			46	Schwarz, J	A	A	P
			47	Simmons-Duffin, D	A	A	P
			48	Spiropulu, M	A	A	P
			49	Stone, E	A	A	P
			50	Teukolsky, S	A	A	P
			51	Troian, S	A	A	P
			52	Weinstein, A	A	A	P
			53	Wise, M	A	A	P
54	Yeh, N	A	A	P			
55	Yue, Y	A	A	P			
56	Zmuidzinas, J	A	A	P			
57	Rangel, A	A	A	P			
Ph 172	+	Research in Physics	01	Adhikari, R	A	A	P
			02	Atwater, H	A	A	P
			03	Bock, J	A	A	P
			04	Eisenstein, J	A	A	P
			05	Endres, M	A	A	P
			06	Filippone, B	A	A	P
			07	Golwala, S	A	A	P
			08	Harrison, F	A	A	P
			09	Hitlin, D	A	A	P
			10	Hsieh, D	A	A	P
			11	Hunt, M	A	A	P
			12	Hutzler, N	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 172	+	Research in Physics	13	Kimble, H	A	A	P
			14	Knutson, H	A	A	P
			15	Libbrecht, K	A	A	P
			16	Martin, C	A	A	P
			17	Mawet, D	A	A	P
			18	Nad Perge, S	A	A	P
			19	Newman, H	A	A	P
			20	Oguri, H	A	A	P
			21	Painter, O	A	A	P
			22	Patterson, R	A	A	P
			23	Phillips, R	A	A	P
			24	Porter, F	A	A	P
			25	Prince, T	A	A	P
			26	Rosenbaum, T	A	A	P
			27	Roukes, M	A	A	P
			28	Scherer, A	A	A	P
			29	Schwab, K	A	A	P
			30	Spiropulu, M	A	A	P
			31	Stone, E	A	A	P
			32	Weinstein, A	A	A	P
			33	Yeh, N	A	A	P
			34	Zmuidzinas, J	A	A	P
			35	Kirby, E	A	A	P
			36	Yue, Y	A	A	P
			37	Wise, M	A	A	P
			38	Simmons-Duffin, D	A	A	P
			39	Refael, G	A	A	P
			40	Preskill, J	A	A	P
			41	Bernardi, M	A	A	P
			42	Hopkins, P	A	A	P
			43	Kapustin, A	A	A	P
			44	Gukov, S	A	A	P
			45	Cheung, C	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 172	+	Research in Physics	46	Chen, Y	A	A	P
			47	Chen, X	A	A	P
			48	Guadalupe Dos Santos Lins Brandao, F	A	A	P
			49	Faraon, A	A	A	P
			50	Alicea, J	A	A	P
			51	Bellan, P	A	A	P
			52	Teukolsky, S	A	A	P
			53	Ravi, V	A	A	P
			54	Zurek, K	A	A	P
			55	Rees, D	A	A	P
			56	Chan, G	A	A	P
Ph 177	0-4-5	Advanced Experimental Physics	01	Hutzler, N / Rice, F	OM,T 14:00 - 14:55	201 BRG	
Ph 205B	3-0-6	Relativistic Quantum Field Theory	01	Gukov, S	MW 10:30 - 11:55	103 DWN	
Ph/CS 219B	3-0-6	Quantum Computation	01	Guadalupe Dos Santos Lins Brandao, F	MW 14:30 - 15:55	103 DWN	P
Ph/APh 223A	3-0-6	Advanced Condensed-Matter Physics	01	Alicea, J	MW 09:00 - 10:25	103 DWN	
Ph 236B	3-0-6	Relativity	01	Teukolsky, S	TR 14:30 - 15:55	103 DWN	P
Ph 242B	2-0-2	Physics Seminar	01	Patterson, R	F 12:00 - 13:55	B157 BRG	P
Ph 300	+	Thesis Research	01	Adhikari, R	A	A	P
			02	Alicea, J	A	A	P
			03	Atwater, H	A	A	P
			04	Bernardi, M	A	A	P
			05	Bock, J	A	A	P
			06	Guadalupe Dos Santos Lins Brandao, F	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 300	+	Thesis Research	07	Carroll, S	A	A	P
			08	Chen, X	A	A	P
			09	Chen, Y	A	A	P
			10	Cheung, C	A	A	P
			11	Eisenstein, J	A	A	P
			12	Endres, M	A	A	P
			13	Filippone, B	A	A	P
			14	Golwala, S	A	A	P
			15	Gukov, S	A	A	P
			16	Harrison, F	A	A	P
			17	Hitlin, D	A	A	P
			18	Hopkins, P	A	A	P
			19	Hsieh, D	A	A	P
			20	Hunt, M	A	A	P
			21	Hutzler, N	A	A	P
			22	Kapustin, A	A	A	P
			23	Kimble, H	A	A	P
			24	Kitaev, A	A	A	P
			25	Knutson, H	A	A	P
			26	Libbrecht, K	A	A	P
			27	Martin, C	A	A	P
			28	Mawet, D	A	A	P
			29	Motrunich, O	A	A	P
			30	Nad Perge, S	A	A	P
			31	Newman, H	A	A	P
			32	Oguri, H	A	A	P
			33	Painter, O	A	A	P
			34	Patterson, R	A	A	P
			35	Phillips, R	A	A	P
			36	Phinney, E	A	A	P
			37	Politzer, H	A	A	P
			38	Porter, F	A	A	P
			39	Preskill, J	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PHYSICS							
Ph 300	+	Thesis Research	40	Prince, T	A	A	P
			41	Refael, G	A	A	P
			42	Rosenbaum, T	A	A	P
			43	Roukes, M	A	A	P
			44	Scherer, A	A	A	P
			45	Schwab, K	A	A	P
			46	Schwarz, J	A	A	P
			47	Simmons-Duffin, D	A	A	P
			48	Spiropulu, M	A	A	P
			49	Stone, E	A	A	P
			50	Teukolsky, S	A	A	P
			51	Troian, S	A	A	P
			52	Weinstein, A	A	A	P
			53	Wise, M	A	A	P
			54	Yeh, N	A	A	P
			55	Yue, Y	A	A	P
			56	Zmuidzinas, J	A	A	P
			57	Marcolli, M	A	A	P
58	Scoville, N	A	A	P			
POLITICAL SCIENCE							
PS 020	3-0-6	Political-Economic Development and Material Culture <i>course counts as additional HSS, not intro SS // maximum enrollment: 30 students</i>	01	Ordeshook, P	TR 14:30 - 15:55	110 BAX	G
PS 097	+	Undergraduate Research <i>Instructor permission required prior to registering</i>	01	Staff	A	A	P
PS 099A	3-0-6	Political Science Research Seminar <i>Designated as Writing Intensive Course // Instructor permission required prior to registering</i>	01	Alvarez, R	A	A	
			02	Ordeshook, P	A	A	

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
POLITICAL SCIENCE							
PS 099B	3-0-6	Political Science Research Seminar <i>Designated as Writing Intensive Course // Instructor permission required prior to registering</i>	01	Alvarez, R	A	A	
PS 123	3-0-6	Regulation and Politics <i>designated as Writing Intensive course // maximum enrollment: 35 students</i>	01	Kiewiet, D	W 19:00 - 21:55	B125 BAX	G
PS 125	3-0-6	Analyzing Political Conflict and Violence	01	Gibilisco, M	TR 10:30 - 11:55	125 BAX	G
An/PS 127	3-0-6	Corruption <i>maximum enrollment: 15 students // Designated as Writing Intensive Course</i>	01	Ensminger, J	MW 14:30 - 15:55	127 BAX	G
PS 141A	3-0-6	A History of Budgetary Politics in the United States <i>designated as Writing Intensive course // maximum enrollment: 75 students // class will meet in Baxter Lecture Hall on 1/16 and 1/28</i>	01	Kiewiet, D	TR 14:30 - 15:55	B180 BBB	G
Law/PS/H 148A	3-0-6	The Supreme Court in U.S. History <i>maximum enrollment: 30 students // Writing Intensive Course</i>	01	Kousser, J	T 19:30 - 22:25	127 BAX	G
Ec/PS 160B	3-3-3	Laboratory Experiments in the Social Sciences <i>Taught concurrently with SS 260// Completion of Ec/PS 160A required for b and c classes //Max of 10 students for both Ec 160 & SS 260</i>	01	Plott, C	TR 09:00 - 10:25	127 BAX	G
PSYCHOLOGY							
CNS/Psy/Bi 102A	3-0-6	Brains, Minds, and Society	01	Adolphs, R / O'Doherty, J	MW 14:30 - 15:55	B167 BRD	
Psy/CNS 105A	1.5-0-3.5	Frontiers in Neuroeconomics	01	O'Doherty, J	T 14:30 - 15:55	115 BCK	
Psy283B	1.5-0-1.5	Graduate Proseminar in Social and Decision Neuroscience	01	Rangel, A	F 13:00 - 14:25	128 BAX	P

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
PSYCHOLOGY							
Psy283B	1.5-0-1.5	Graduate Proseminar in Social and Decision Neuroscience <i>this course is only open to graduate students in the Social and Decision Neuroscience, Computational and Neural Systems and Social Science PhD programs</i>					
SCIENTIFIC AND ENGINEERING COMMUNICATION							
SEC010	3-0-0	Technical Seminar Presentations <i>maximum enrollment: 18 students per section</i>	01	Javier, R	MWF 09:00 - 09:55	100 PWL/BTH	G
			02	Javier, R	MWF 10:00 - 10:55	100 PWL/BTH	G
			03	Javier, R	MWF 11:00 - 11:55	100 PWL/BTH	G
SEC011	1-0-2	Written Academic Communication in Engineering and Applied Science <i>Limited to seniors in E&AS only // maximum enrollment: 20 students per section</i>	01	Burkett, E	W 11:00 - 11:55	142 KCK	G
			02	Burkett, E	R 13:00 - 13:55	142 KCK	G
SEC012	1-0-2	Written Professional Communication in Engineering and Applied Science <i>Limited to seniors in E&AS only // maximum enrollment: 20 students</i>	01	Voong, L	T 11:00 - 11:55	142 KCK	G
SEC130	3-0-3	Science Activation: Bringing Science to Society <i>class cancelled</i>	01	Staff	A	A	
SOCIAL SCIENCE							
CS/SS/Ec 149	3-0-6	Algorithmic Economics	01	Pomatto, L / Echenique, F	MWF 10:00 - 10:55	127 BAX	G
SS 201B	3-0-6	Analytical Foundations of Social Science <i>Open to Social Science graduate students only</i>	01	Saito, K	TR 10:30 - 11:55	127 BAX	G
SS 202B	3-0-6	Political Theory <i>Open to Social Science graduate students only</i>	01	Katz, J	R 13:00 - 15:55	237 BAX	G
SS 205B	3-0-6	Foundations of Economics <i>Open to Social Science graduate students only.</i>	01	Echenique, F	MWF 09:00 - 09:55	127 BAX	G

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
SOCIAL SCIENCE							
SS 210B	3-0-6	Foundations of Political Economy	01	Gibilisco, M	MW 09:00 - 10:25	125 BAX	G
SS 211B	3-0-6	Advanced Economic Theory	01	Echenique, F / Pomatto, L	TR 10:30 - 11:55	117 DAB	G
SS 213B	3-0-6	Financial Economics	01	Jin, J	W 09:00 - 11:55	B125 BAX	G
SS 222B	3-0-6	Econometrics	01	Xin, Y	TW 13:00 - 14:25	127 BAX	G
SS 223B	3-0-6	Topics in Theoretical and Applied Econometrics <i>Open to graduate students only</i>	01	Sherman, R	MW 10:30 - 11:55	B119 BAX	G
SS 228B	3-0-6	Applied Empirical Methods in the Social Sciences	01	Ewens, M	W 13:00 - 15:55	128 BAX	G
SS 229B	3-0-6	Theoretical and Quantitative Dimensions of Historical Development	01	Rosenthal, J	TR 09:00 - 10:25	237 BAX	G
SS 260	3-3-3	Experimental Methods of Political Economy <i>Taught concurrently with Ec/PS 160B // Maximum 10 students for both Ec 160 & SS 260 //sec a required for secs b & c</i>	01	Plott, C	TR 09:00 - 10:25	127 BAX	G
SS 282B	1.5-0-1.5	Graduate Proseminar in Social Science	01	Gibilisco, M	M 13:00 - 14:25	127 BAX	P
SS 300	+	Research in Social Science	01	Adolphs, R	A	A	P
			02	Palfrey, T	A	A	P
			03	Gillen, B	A	A	P
			04	O'Doherty, J	A	A	P
			05	Jin, J	A	A	P
			06	Katz, J	A	A	P
			07	Kiewiet, D	A	A	P
			08	Echenique, F	A	A	P
			09	Tamuz, O	A	A	P
			10	Plott, C	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
SOCIAL SCIENCE							
SS 300	+	Research in Social Science	11	Alvarez, R	A	A	P
			12	Camerer, C	A	A	P
			13	Border, K	A	A	P
			14	Cvitanic, J	A	A	P
			15	Snowberg, E	A	A	P
			16	Rosenthal, J	A	A	P
			17	Hirsch, A	A	A	P
			18	Shum, M	A	A	P
			19	Rangel, A	A	A	P
			20	Yariv, L	A	A	P
			21	Perona, P	A	A	P
			23	Hoffman, P	A	A	P
			24	O'Doherty, J	A	A	P
			25	O'Doherty, J	A	A	P
			26	Lester, H	A	A	P
			27	Mobbs, D	A	A	P
			28	Sherman, R	A	A	P
			STUDENT ACTIVITIES				
SA 015B	1-0-3	Student Publications <i>class cancelled</i>	01	Staff	A	A	P
SA 016B	0-3-0	Cooking Basics <i>maximum enrollment: 16 students // location: 400 S. Hill</i>	01	Staff	R 18:30 - 21:25	A	P
SA 042	0-2-2	Computer Science Education in K-14 Settings Practicum	01	Ralph, C	A	A	P
SA 080B	1-1-1	Health Advocates <i>maximum enrollment: 24 students per section</i>	01	Stapf, M	W 19:00 - 21:55	YHC	P
			02	Stapf, M	R 19:00 - 21:55	YHC	P
STUDY ABROAD							
CAM100	36-0-0	Cambridge Scholars Program	01	Staff	A	A	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
STUDY ABROAD							
CPH100	36-0-0	Copenhagen Scholars Program	01	Staff	A	A	P
UCL100	36-0-0	University College London Scholars Program	01	Staff	A	A	P
EDN100	36-0-0	University of Edinburgh Scholars Program	01	Staff	A	A	P
VISUAL CULTURE							
VC 060	3-0-3	Art/Media <i>Studies in Visual Biography // maximum enrollment: 15 students</i>	01	Helfand, J	TR 10:30 - 11:55	B119 BAX	
E/H/VC 089	3-0-6	New Media Arts in the 20th and 21st Centuries <i>maximum enrollment: 15 students</i>	01	Mushkin, H	TR 13:00 - 14:25	128 BAX	G
En/VC 117	3-0-6	Picturing the Universe <i>maximum enrollment: 15 students</i>	01	Sullivan, A	TR 14:30 - 15:55	101 KRK	G
L/VC 153	3-0-6	Refugees and Migrants' Visual and Textual Representations <i>maximum enrollment: 15 students</i>	01	Orcel, C	TR 13:00 - 14:25	228 BAX	G
En/VC 160A	3-0-6	Classical Hollywood Cinema <i>maximum enrollment: 15 students</i>	01	Jurca, C	TR 14:30 - 15:55	128 BAX	
H/HPS/VC 186	3-0-6	From Plato to Pluto: Maps, Exploration and Culture from Antiquity to the Present <i>maximum enrollment: 15 students</i>	01	Wey-Gomez, N / Ceva, J	TR 13:00 - 14:25	TR DAB	G
WRITING							
Wr 003	+	Reading and Composing Academic Writing <i>meets Tuesdays/Thursdays from 9-10:25am /// maximum enrollment: 12 students</i>	01	Daley, C	A	A	P
Wr 004	1-0-2	Principles and Practices of Academic Writing	01	Hall, S	OM,W 12:00 - 12:55	127 BAX	P

CALIFORNIA INSTITUTE OF TECHNOLOGY
OFFICE OF THE REGISTRAR
Course Schedule WI 2019-20

Web Address - <http://www.registrar.caltech.edu/>

Course Offering	Units	Offering Title	Section	Instructor	Days/Time	Location	Grade Scheme
WRITING							
Wr 050	+	Tutorial in Writing	01	Hall, S	A	A	P