This document lists the required and optional textbooks for Caltech courses offered during the SP 2018-19 term. Not all courses are listed. Only those courses for which the Registrar has solid information are listed.

This document is updated as more information comes in from instructors.

Please consult the Library Catalog (TIND) to view class course reserves. Course reserves are available in the Sherman Fairchild Library only. Reserve material is available for 3-hour checkout.

Changes in the last 7 days

ACM/EE/IDS 217
APh/Ph/Ae 116
Ae/AM/ME 223
CDS244
Ch 102
ChE103C
EE 151
EE/CS/MedE 125
ESE/Ch 176
ESE/Ge 142
ESE/Ge/Ch 171
ESE001
Ge/ESE 143
H/HPS 186
ME 011C
MedE/EE/BE 168B
APh/MS 105C. States of Matter.
Instructor: Brent Fultz

Required textbooks:
Brent Fultz; *Phase Transitions in Materials (1)*, Cambridge Univ. Press, 2014. ISBN: 978-1-107-06724-0

ART HISTORY

Instructor: Juliann Wolfgram

Required textbooks:

ASTROPHYSICS

Ay 102. Physics of the Interstellar Medium.
Instructor: Lynne Hillenbrand

Required textbooks:

Suggested textbooks:

Ay 126. Interstellar and Intergalactic Medium.
Instructor: Lynne Hillenbrand
Required textbooks:


Suggested textbooks:


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**BIOENGINEERING**

**BE 150. Design Principles of Genetic Circuits.**

**Instructors:** Justin Bois, Michael Elowitz

**Required textbooks:**

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**BIOLOGY**

**Bi 009. Cell Biology.**

**Instructors:** David Chan, David Prober

**Required textbooks:**

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**Bi 250B. Topics in Systems Biology.**

**Instructors:** Justin Bois, Michael Elowitz

**Required textbooks:**
BUSINESS, ECONOMICS, AND MANAGEMENT

BEM102. Introduction to Accounting.
Instructor: Michael Ewens

Required textbooks:

BEM104. Investments.
Instructor: Richard Roll

Required textbooks:

CHEMICAL ENGINEERING

ChE/Ch 148. Polymer Physics.
Instructor: Zhen-Gang Wang

Required textbooks:

ChE103C. Transport Phenomena.
Instructor: Richard Flagan

Required textbooks:

ChE105. Dynamics and Control of Chemical Systems.
Instructor: John Seinfeld

Required textbooks:
CHEMISTRY

Ch 102. Introduction to Inorganic Chemistry.

Instructors: Ryan Hadt, Kimberly See

Required textbooks:

COMPUTER SCIENCE

CS 038. Algorithms.

Instructor: Leonard Schulman

Suggested textbooks:


Instructor: Leonard Schulman

Suggested textbooks:

CONTROL & DYNAMICAL SYSTEMS
ECONOMICS
ELECTRICAL ENGINEERING
ENGLISH

En 110. Sinners, Saints, and Sexuality in Premodern Literature.

Instructor: Jennifer Jahner

Required textbooks:
En 118. Classical Mythology.

Instructor: Kristine Haugen

Required textbooks:


Aeschylus; *Aeschylus II: The Oresteia* (The Complete Greek Tragedies), tr. David Grene et al. (3rd), University of Chicago Press, 2013. ISBN: 978-0226311470


En 121. Literature and Its Readers.

Instructor: Kristine Haugen

Required textbooks:


Macpherson, James; *Fingal, an ancient epic poem, in six books: together with several other poems, composed by Ossian the son of Fingal*, Gale, 2010. ISBN: 978-1170043462


En 135. Dicken's London.

Instructor: Dehn Gilmore

Required textbooks:
En 180. Special Topics in English: Fabricating LA.

Instructor: Stefanie Sobelle

**Required textbooks:**
- Joan Didion; *Play it As it Lays (2nd edition)*, FSG Classics, 2005. ISBN: 0374529949

**Suggested textbooks:**
- Mike Davis; *City of Quartz*, Verso, 2006. ISBN: 1844675688

ENVIRONMENTAL SCIENCE & ENGINEERING

ESE135. Topics in Atmosphere and Ocean Dynamics.

Instructor: Joern Callies

**Required textbooks:**
- Archer, David (Editor), Pierrehumbert, Raymond (Editor); *The Warming Papers: The Scientific Foundation for the Climate Change Forecast*, , , ISBN: 978-1-405-19616-1

GEOLOGY

Ge 001. Earth and Environment.

Instructor: Paul Asimow
**Required textbooks:**

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**HISTORY**

**H 132. Humanistic Ecology.**

**Instructor:** Daniel Lewis

**Required textbooks:**

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**H 135. War, Conquest, and Empires.**

**Instructor:** Philip Hoffman

**Required textbooks:**

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**H 151. The Long(er) Civil Rights Movement: From Emancipation to Black Lives Matter.**

**Instructor:** Michael Savage

**Required textbooks:**
Moody, Anne; *Coming of Age in Mississippi*, Delta Trade Paperbacks, . ISBN: 978-0385337816

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**HISTORY AND PHILOSOPHY OF SCIENCE**

**HPS/H 160. Einstein and His Generation: The History of Modern Physical Sciences.**
Instructor: Diana Kormos-Buchwald

**Required textbooks:**

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**HPS/H 168. History of Electromagnetism and Heat Science.**

Instructor: Jed Buchwald

**Required textbooks:**

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**HPS/Pl 125. Philosophical Issues in Quantum Physics.**

Instructor: Charles Sebens

**Required textbooks:**

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**HUMANITIES**

**Hum/En 021. The Marvelous and the Monstrous: Literature at the Boundaries of the Real.**

Instructor: Jennifer Jahner

**Required textbooks:**
Harvey, Michael; *The Nuts and Bolts of College Writing*, Hackett, . ISBN: 978-1-60384-898-5
Hum/En 023. Literature and Medicine.

Instructor: Dehn Gilmore

Required textbooks:
- Forney, Ellen; Marbles, . ISBN: 9781592407323
- Williams, Ian; Bad Doctor, . ISBN: 9780271067544
- Mancuso, Sarah; Two Kinds of Decay, . ISBN: 0312428448
- Ishiguro, Kazuo; never let me go, . ISBN: 9781400078776
- Stone, John; On Doctoring, . ISBN: 9781451624120
- Sontag, Susan; illness as metaphor, . ISBN: 0312420137
- Dunlap-Shohl, Peter; My Degeneration, . ISBN: 9780271071022

Hum/H 003. The United States in the Twentieth Century.

Instructor: Michael Savage

Required textbooks:
- Sinclair, Upton; The Jungle, Bantam Classics, . ISBN: 978-0553212457
- Howard-Pitney, David; Martin Luther King Jr., Malcolm X, and the Civil Rights Struggle of the 1950s and 1960s: A Brief History with Documents, Bedford/St. Martin's, 2004. ISBN: 978-0312395056


Instructor: Jed Buchwald

Required textbooks:

Hum/H 009C. European Civilization: Modern Europe.

Instructor: Diana Kormos-Buchwald

Required textbooks:
Hum075 (Section 2). Selected Topics in Humanities: Racing the Future: Multi-Ethnic Science and Speculative Fiction.

Instructor: Stefanie Sobelle

**Required textbooks:**


**LANGUAGES**

L 102C. Elementary French.

Instructor: Christiane Orcel

**Required textbooks:**


L 103C. Intermediate French.

Instructor: Christiane Orcel

**Required textbooks:**


L 106C. Elementary Japanese.

Instructor: Megumi Fujio

**Required textbooks:**
L 110C (Section 1). Elementary Spanish.

Instructor: Daniel Garcia

Required textbooks:

L 132C. Intermediate German.

Instructor: Andreas Aebi

Required textbooks:

L 167A. Latin Literature.

Instructor: George Pigman

Required textbooks:
Carlon, Jacqueline; , , , ISBN: 9780199340613

L 170C. Introduction to Chinese.

Instructor: Xiangyun Wang

Required textbooks:

L 172C. Intermediate Chinese.

Instructor: Xiangyun Wang
MATHEMATICS

Ma 001C (Analytical). Calculus of One and Several Variables and Linear Algebra.
Instructor: Nets Katz

Required textbooks:

Ma 001C (Practical). Calculus of One and Several Variables and Linear Algebra.
Instructor: Matthias Flach

Required textbooks:
Marsden, Jerry, Tromba, Anthony; Vector Calculus, W.H. Freeman, ISBN: 978-1-4292-1508-4

Ma 005C. Introduction to Abstract Algebra.
Instructor: Daxin Xu

Suggested textbooks:

Ma 105C. Introduction to Abstract Algebra.
Instructor: Daxin Xu

Suggested textbooks:

Ma 108C. Classical Analysis.
Instructor: Oleg Ivrii

Suggested textbooks: 

Ma 110C. Analysis, I.
Instructor: Polona Durcik

Required textbooks: 

Ma 111B. Topics in Analysis.
Instructor: Kirill Lazebnik

Required textbooks: 
Ransford, T; Potential Theory in the Complex Plane, , . ISBN: 9780511623776

Ma 191C (Section 6). Selected Topics in Mathematics.
Instructor: Christopher Campbell

Required textbooks: 
Gaitsgory, Dennis, Rozenblyum, Nick; A Study in Derived Algebraic Geometry, , . ISBN: 978-1470435691

Instructor: Philip Isett

Suggested textbooks: 
Evans, Lawrence; Partial Differential Equations, , . ISBN: 978-0821849743

MECHANICAL ENGINEERING

ME 012C. Mechanics.
Instructor: Chiara Daraio
**Suggested textbooks:**


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**MEDICAL ENGINEERING**

**MUSIC**

Mu 139. History III: Music History from 1850 to the Present.

**Instructor:** Thomas Neenan

**Required textbooks:**

Ross, Alex; *The Rest Is Noise*, Picador. ISBN: 978-0312427719


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**PHYSICS**

Ph 001C (Analytical). Classical Mechanics and Electromagnetism.

**Instructor:** David Hsieh

**Required textbooks:**

Purcell, EM, Morin, DJ; *Electricity and Magnetism (3)*, ISBN: 978-1107014022

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Ph 001C (Practical). Classical Mechanics and Electromagnetism.

**Instructor:** Jason Alicea

**Required textbooks:**

Serway, Raymond A., Jewett, John W.; *Physics for Scientists and Engineers (9th)*, ISBN: 978-1133947271

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Ph 002C. Waves, Quantum Mechanics, and Statistical Physics.

**Instructor:** Bradley Filippone

**Required textbooks:**

Kittel, Charles, Kroemer, Herbert; *Thermal Physics (2nd)*, ISBN: 0716710889
Ph 003. Introductory Physics Laboratory.

Instructors: Eric Black, Kenneth Libbrecht

Required textbooks:
Taylor, John R.; An Introduction to Error Analysis (2), ISBN: 978-0-935702-75-0

Ph 012C. Waves, Quantum Physics, and Statistical Mechanics.

Instructor: David Simmons-Duffin

Required textbooks:

Ph 106C. Topics in Classical Physics.

Instructor: Sunil Golwala

Required textbooks:

Suggested textbooks:

Ph 125C. Quantum Mechanics.

Instructor: Clifford Cheung

Required textbooks:

Ph 136C. Applications of Classical Physics.

Instructor: Saul Teukolsky

Required textbooks:
Thorne, Kip, Blandford, Roger; Modern Classical Physics, Princeton University Press, ISBN: 0691159025
SS 222C. Econometrics.

Instructor: Robert Sherman

Required textbooks: