Book Adoptions for SP 2018-19

Prepared Friday, March 08, 2019

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

BE 150
BEM104
Bi 001
Bi 009
Bi 250B
Bi 252
Bi/BE 024
ESE131B
Ec 140
En 110
En 180
Hum075
Ma/ACM 142
APPLIED PHYSICS

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:
ISBN: 978-3-662-05866-4

Suggested textbooks:

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

Required textbooks:
ISBN: 978-3-662-05866-4

**Suggested textbooks:**


**BIOENGINEERING**

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

**Instructors:** Justin Bois, Michael Elowitz

**Required textbooks:**


**BIOLOGY**

**Bi 009. Cell Biology.**

**Instructors:** David Chan, David Prober

**Required textbooks:**


**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:**
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:

ECONOMICS

ENGLISH

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

Instructor: Jennifer Jahner

Required textbooks:
Radice, B. and M. Clanchy (trans.); The Letters of Abelard and Heloise, . ISBN: 978-0140448993
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:
Dickens, Charles; *Bleak House*, . ISBN: 9780141439723
Dickens, Charles; *selected journalism*, . ISBN: 0140435808
Flanders, Judith; *the victorian city*, . ISBN: 1250068266

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

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**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

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**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:

H 135. War, Conquest, and Empires.
Instructor: Philip Hoffman

Required textbooks:
Hassig, Ross ; Mexico and the Spanish Conquest, Oklahoma, 2006. ISBN: 978-0806137933

Instructor: Michael Savage

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

HISTORY AND PHILOSOPHY OF SCIENCE

Instructor: Diana Kormos-Buchwald

Required textbooks:
Einstein, Albert; Ideas and Opinions (any, paper), Broadway, 1995. ISBN: 0517884402
Instructor: Jed Buchwald

Required textbooks:

Instructor: Charles Sebens

Required textbooks:

HUMANITIES

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

Required textbooks:

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
Hum/H 003. The United States in the Twentieth Century.
Instructor: Michael Savage

Required textbooks:

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:**
Ritsuko Hirai; *First Year Japanese (6)*, Pearson, . ISBN: 9781323419014
Ritsuko Hirai; *First Year Japanese Workbook (7)*, Pearson, . ISBN: 9781323587829

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

*Required textbooks:*

MATHEMATICS

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

**Required textbooks:**


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**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

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**Ma 005C. Introduction to Abstract Algebra.**

Instructor: Daxin Xu

**Suggested textbooks:**


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**Ma 105C. Introduction to Abstract Algebra.**

Instructor: Daxin Xu

**Suggested textbooks:**


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**Ma 108C. Classical Analysis.**

Instructor: Oleg Ivrii

**Suggested textbooks:**


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**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:

MUSIC

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

Instructor: Thomas Neenan

Required textbooks:
PHYSICS

Ph 001C (Analytical). Classical Mechanics and Electromagnetism.
Instructor: David Hsieh

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

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

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:**
Heald, Mark A., Marion, Jerry B.; *Classical Electromagnetic Radiation (3)*, Dover, 2012. ISBN: 978-0486490601

Ph 125C. Quantum Mechanics.
Instructor: Clifford Cheung

**Required textbooks:**
Shankar, R; *Principles of Quantum Mechanics (2)*, ISBN: 0-306-44790-8

Ph 136C. Applications of Classical Physics.
Instructor: Saul Teukolsky

**Required textbooks:**

SOCIAL SCIENCE

SS 222C. Econometrics.
Instructor: Robert Sherman

**Required textbooks:**