Book Adoptions for WI 2018-19

Prepared Thursday, January 03, 2019

This document lists the required and optional textbooks for Caltech courses offered during the WI 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

Hum/En 024
ACM/IDS 101B. Methods of Applied Mathematics.

Instructor: Oscar Bruno

Suggested textbooks:

Ay 021. Galaxies and Cosmology.

Instructor: Charles Steidel

Required textbooks:
- Schneider, Peter; Extragalactic Astronomy and Cosmology (2nd), Springer, 2015. ISBN: 978-3642540820

Ay 127. Cosmology and Galaxy Formation.

Instructors: Christopher Martin, Charles Steidel

Required textbooks:
- Mo, Houjon; van den Bosch, Frank; White, Simon; Galaxy Formation and Evolution, Cambridge Univ. Press, 2011. ISBN: 978-0521857932
Instructor: Justin Bois

Required textbooks:

BIOLOGY

Bi/BE 129. The Biology and Treatment of Cancer.
Instructors: Judith Campbell, Kai Zinn

Required textbooks:

Bi/Ch 111. Biochemistry of Gene Expression.
Instructors: Judith Campbell, Carl Parker

Required textbooks:
Weaver, R.F.; Molecular Biology (5th), McGraw Hill, . ISBN: 978-0073525327

BUSINESS, ECONOMICS, AND MANAGEMENT
CHEMICAL ENGINEERING

Instructor: Rustem Ismagilov

Required textbooks:
Folch, Albert; Introduction to BioMems, , . ISBN: 1439818398

Suggested textbooks:

ChE/Ch 164. Introduction to Statistical Thermodynamics.
Instructor: Zhen-Gang Wang
**Required textbooks:**

**ChE101. Chemical Reaction Engineering.**

**Instructor:** Frances Arnold

**Required textbooks:**

**CHEMISTRY**

**Ch 014. Chemical Equilibrium and Analysis.**

**Instructors:** Kevin Barraza, Jesse Beauchamp

**Required textbooks:**
Harris, Daniel C.; *Quantitative Chemical Analysis (9th)*, MacMillan, 2016. ISBN: 9781464135385

**Ch 021B. Physical Chemistry.**

**Instructor:** Lu Wei

**Required textbooks:**

**COMPUTATION & NEURAL SYS**

**CNS/SS/Psy/Bi 102A. Brains, Minds, and Society.**

**Instructors:** Ralph Adolphs, John O'Doherty

**Required textbooks:**
COMPUTER SCIENCE

CS 021. Decidability and Tractability.
Instructor: Christopher Umans

Required textbooks:

ECONOMICS

Instructor: Robert Sherman

Required textbooks:

ELECTRICAL ENGINEERING

EE 045. Electronics Laboratory.
Instructor: Azita Emami

Required textbooks:

ENGINEERING

E 110. Principles of University Teaching and Learning in STEM.
Instructor: Jennifer Weaver

Required textbooks:
ENGLISH

En 086. Fiction and Creative Nonfiction Writing.
Instructor: Merrill Gerber

**Required textbooks:**

En 107. Medieval Romance.
Instructor: Jennifer Jahner

**Required textbooks:**

En 113A. Shakespeare's Career.
Instructor: George Pigman

**Required textbooks:**

En 142. Post-1945 American Literature and 'The Death of the Author'.
Instructor: Melanie Sherazi

**Required textbooks:**


Demby, William; *King Comus (First edition)*, Ishmael Reed Publishing Company, 2017. ISBN: 978-0918408259


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**En 150. Chaos and Literature.**

**Instructor:** Jocelyn Holland

**Required textbooks:**
- Stoppard, Tom; *Arcadia*, Grove, 2017. ISBN: 0802126995

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**ENVIRONMENTAL SCIENCE & ENGINEERING**

**ESE131A. Physical Oceanography I.**

**Instructor:** Joern Callies

**Required textbooks:**

**Suggested textbooks:**

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**GEOLOGY**

**Ge/Ay 117. Bayesian Statistics and Data Analysis.**
Instructor: Heather Knutson

**Required textbooks:**


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**HISTORY**

**H 114. Mysticism and the Self.**

Instructor: Gabriel Motzkin

**Required textbooks:**

Teresa of Avila; *The Life of Saint Teresa of Avila by Herself*, Penguin, . ISBN: 978-0140440737


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**H 137. Criminals, Outlaws, and Justice in a Thousand Years of Chinese History.**

Instructor: Maura Dykstra

**Required textbooks:**

Shi Nai'an, translated by J H Jackson; *The Water Margin*, Tuttle Classics, . ISBN: 9780804840958

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**H 138. From Sage Kings to the CCP: A Primer on Ruler, State and Empire in the History of Chinese Government.**

Instructor: Maura Dykstra

**Required textbooks:**

Harold David Roth; *Original Tao : inward training (nei-yeh) and the foundations of Taoist mysticism.*, New York ; Chichester ; Columbia University Press, 2004. ISBN: 0231115652

HUMANITIES

Hum/En 020. Greek Epic and Drama.

Instructor: George Pigman

Required textbooks:
- Homer; The Iliad. ISBN: 9780140275360
- Mary Lefkowitz and James Romm; The Greek Plays. ISBN: 978-0812983098

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

Instructor: Jennifer Jahner

Required textbooks:
- Harvey, Michael; Nuts and Bolts of College Writing. ISBN: 978-1-60384-898-5
- Marie de France; trans. by Glyn S. Burgess and Keith Busby; The Lais of Marie de France. ISBN: 978-0-14-044759-0
- Carter, Angela; The Bloody Chamber. ISBN: 978-0-14-017821-0

Hum/En 022 (Section 1). Inequality.

Instructor:

Required textbooks:
- Ovid; The Metamorphoses of Ovid, tr. Allen Mandelbaum. ISBN: 978-0156001267
- King, Maggie Shen; An Excess Male: A Novel. ISBN: 978-0062662552
- Oz, Amos; Silverston, Sondra; Between Friends (reprint). ISBN: 978-0544227743
Hum/En 022 (Section 2). Inequality.

Instructor:

**Required textbooks:**

- Oz, Amos, Silverston, Sondra; *Between Friends (reprint)*, Mariner, 2014. ISBN: 978-0544227743

Hum/En 024. The Scientific Imagination in English Literature.

Instructor: Dehn Gilmore

**Required textbooks:**

- Marlowe, Christopher; *Doctor Faustus*, ISBN: 9780199537068
- Shakespeare, William; *The Tempest*, ISBN: 9780393978193
- Bacon, Francis; *Three Modern Utopias*, ISBN: 9780199537990
- Stoppard, Tom; *Arcadia*, ISBN: 9780571169344
- Wells, HG; *Island of Dr Moreau*, ISBN: 9781784872106
- Conan Doyle; *Hound of the Baskervilles*, ISBN: 1551117223
- McEwan, Ian; *Enduring Love*, ISBN: 978-0385491129
- Shelley, Mary; *Frankenstein*, ISBN: 9780199537150
Hum/En 033. Modern Metamorphoses.

Instructor: Jocelyn Holland

Required textbooks:
Stevenson, Robert Louis; The Strange Case of Dr. Jeckyll and Mr. Hyde, Seawolf, ISBN: 1948132850

Hum/H 009B (Section 1). European Civilization: Early Modern Europe.

Instructor: Philip Hoffman

Required textbooks:

Hum/Pl 040 (Section 1). Right and Wrong.

Instructor: Ryan Hay

Required textbooks:

Hum/Pl 040 (Section 2). Right and Wrong.

Instructor: Ryan Hay

Required textbooks:

Hum105B. Topics in French Culture and Literature.

Instructor: Christiane Orcel
**Required textbooks:**

### LANGUAGES

#### L 102B. Elementary French.
**Instructor:** Christiane Orcel

**Required textbooks:**

#### L 105B. Topics in French Culture and Literature.
**Instructor:** Christiane Orcel

**Required textbooks:**

#### L 106B (Section 2). 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 106B (Section 1). 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 110B (Section 1). Elementary Spanish.

Instructor: Daniel Garcia

Required textbooks:

L 130B. Elementary German.

Instructor: Andreas Aebi

Required textbooks:

L 170B. Introduction to Chinese.

Instructor: Xiangyun Wang

Required textbooks:

L 172B. Intermediate Chinese.

Instructor: Xiangyun Wang

Required textbooks:
LAW

Law/PS/H 148A. The Supreme Court in U.S. History.
Instructor: J. Kousser

**Required textbooks:**

MATHEMATICS

Ma 001B (Analytical). Calculus of One and Several Variables and Linear Algebra.
Instructor: Eric Rains

**Required textbooks:**
- Apostol, T; *Calculus II*, . ISBN: 978-0471000075

Ma 001D. Series.
Instructor:

**Required textbooks:**
- Apostol, T; *Calculus Volume I*, . ISBN: 978-0471000051

Ma 003. Introduction to Probability and Statistics.
Instructor: Kim Border

**Required textbooks:**

Ma 005B. Introduction to Abstract Algebra.
Instructor: Elena Mantovan

**Required textbooks:**
Dummit, D, Foote, R; *Abstract Algebra* (3), ISBN: 978-0471433347

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Ma 013. Problem Solving in Vector Calculus.

Instructor:

**Required textbooks:**
Schey, HM; *div, grad, curl and all that - an informal text on vector calculus* (4), ISBN: 978-0393925166

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Ma 105B. Introduction to Abstract Algebra.

Instructor: Elena Mantovan

**Required textbooks:**
Dummit, D, Foote, R; *Abstract Algebra* (3), ISBN: 978-0471433347

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Ma 108B. Classical Analysis.

Instructor: Polona Durcik

**Required textbooks:**
Wheeden, RL, Zygmund, A; *Measure and Integral: An Introduction to Real Analysis* (2), ISBN: 978-1498702898

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Ma 109B. Introduction to Geometry and Topology.

Instructor: Lei Chen

**Required textbooks:**
Do Carmo; *Differential geometry of curves and surfaces*, ISBN: 9780132125895

**Suggested textbooks:**
John Milnor; *Morse Theory*, ISBN: 0691080089
Colding, Minicozzi; *A course of Minimal Surface*, ISBN: 0821853236
Ma 110B. Analysis.
Instructor: Nikolai Makarov

*Required textbooks:*

Ma 120B. Abstract Algebra.
Instructor: Xinwen Zhu

*Required textbooks:*
Lang, Serge; *Algebra*, ISBN: 978-0-387-95385-4

Ma 128. Homological Algebra.
Instructor: You Qi

*Suggested textbooks:*
Gelfand and Manin; *Methods of homological algebra*, ISBN: 3-540-43583-2

Ma 145B. Representation Theory.
Instructor: Eric Rains

*Required textbooks:*

Ma 148. Topics in Mathematical Physics.
Instructor: Sarthak Parikh

*Suggested textbooks:*
Ma 151B. Algebraic and Differential Topology.
Instructor: You Qi

*Suggested textbooks:*
Allen Hatcher; *Algebraic Topology*, ISBN: 978-0521795401

Ma/CS 006B. Introduction to Discrete Mathematics.
Instructor: Polona Durcik

*Required textbooks:*
West, D; *Introduction to Graph Theory*, ISBN: 978-0130144003

Ma/CS 106B. Introduction to Discrete Mathematics.
Instructor: Polona Durcik

*Required textbooks:*
West, D; *Introduction to Graph Theory*, ISBN: 978-0130144003

MUSIC

Mu 058. Harmony I.
Instructor: Thomas Neenan

*Required textbooks:*

Mu 138. History II: Music History from 1750 to 1850.
Instructor: Thomas Neenan

*Required textbooks:*
PHYSICS

Instructor: David Hsieh

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

Instructor: Gil Refael

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

Ph 012B. Waves, Quantum Physics, and Statistical Mechanics.
Instructor: Bradley Filippone

Required textbooks:

Ph 106B. Topics in Classical Physics.
Instructors: Yanbei Chen, Sunil Golwala

Required textbooks:

Suggested textbooks:
Ph 136B. Applications of Classical Physics.

Instructor: E Phinney

**Required textbooks:**

**Suggested textbooks:**

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SOCIAL SCIENCE

SS/Ma 214. Mathematical Finance.

Instructor: Jaksa Cvitanic

**Required textbooks:**
Steven E. Shreve; *Stochastic Calculus for Finance II: Continuous-Time Models*, ISBN: 978-0387401010