

Open Textbooks Available in The Orange Grove Repository

As of September 8, 2009

Each link (below) will take you to an open textbook inside The Orange Grove Repository. These books may be accessed online or downloaded in accordance with the copyright statements attached to them.

Entries on this list are organized into general subject areas with titles listed alphabetically, each followed by one or more subject terms. The two levels of subject terms are bookmarked.

Biological and Biomedical Sciences

General

1. **Biology.** Biology. This free PDF biology text is a complete educational tool for the high school student, covering ten units. Each chapter contains learning objectives, review questions and vocabulary lists. Unit contents: 1) Introduction to Life Science. 2) Cells. 3) Genetics. 4) Evolution. 5) Ecology. 6) Microorganisms and Fungi. 7) Plants. 8) Invertebrates. 9) Vertebrates. 10) Human Biology.

http://florida.theorange Grove.org/og/items/c15e8e55-faec-78f8-e952-8810ce3e36e3/1/CK12_Biology.pdf

Evolutionary Biology/ Environmental Biology/ Population Biology

2. **What is Biodiversity.** Biological and life sciences, environmental education, evolution. This text provides an overview of what is meant by "biodiversity", and how we measure it. It reviews the different levels of biodiversity; population diversity; species diversity; community diversity; ecosystem diversity; landscape diversity; and historical and ecological biogeographic diversity. It also includes a brief discussion of diversity over geological time.

<http://florida.theorange Grove.org/og/items/1c2bea07-ffdd-fed8-0bd6-cc1c7e8b3320/1/biodiversity.pdf>

Business, Management, and Marketing

Business/Commerce

3. **Business Ethics.** Ethics, ethical instruction, corporations. This interdisciplinary and practical text is designed to support a course in business ethics or corporate governance which is primarily a laboratory or skills-based course, where students develop, practice, and refine decision making and problem solving strategies that they will carry with them into the world of business practice.

<http://florida.theorange Grove.org/og/items/439fe286-20de-cd12-b13e-cd66b8d5bf20/1/BusinessEthics.pdf>

E-Commerce/Electronic Commerce

4. **Electronic Commerce: The Strategic Perspective.** Business education, Internet, marketing. This textbook provides a strategic marketing and managerial perspective of electronic commerce. The research of the four authors provides the basis for the book, allowing for first-hand experience, varied viewpoints, and relevance.

http://florida.theorange Grove.org/og/items/29589c3c-8bcd-72c1-b2f2-37789232eb3c/1/Electronic_Commerce.pdf

5. **eMarketing: The Essential Guide to Online Marketing.** Advertising, business education, marketing, merchandising. An introduction to e-marketing.

http://florida.theorange Grove.org/og/items/0e4789b8-320c-3cf5-8ea8-332611afe119/1/Quirk_eMarketingTextbook.pdf

- 6. Producing Open Source Software: How to Run a Successful Free Software Project.** Business, computer software, entrepreneurship, intellectual property. This textbook is about the human side of open source development. It describes how successful projects operate, the expectations of users and developers, and the culture of free software. The reader need not be a programmer, but should know basic software engineering concepts such as source code, compilers, and patches.
<http://florida.theorange grove.org/og/items/f0136e07-e2d0-c6d5-90fe-56553e60d204/1/producingoss.pdf>

Marketing/Marketing Management

- 7. Core Concepts of Marketing.** Business, marketing, market research. This textbook uses many case studies and practical examples to demonstrate how companies use marketing. It provides specific examples in text discussions, chapter openers, the Integrated Marketing and Newline boxes, and the end of chapter cases.
http://florida.theorange grove.org/og/items/5aac13eb-e41a-d81e-6d11-de39cff96582/1/Core_Concepts_Marketing.pdf

Communication, Journalism and Related Programs

- 8. Handbook of Independent Journalism.** Journalism, reporting, reporters, news media, free press. This handbook covers the ins and outs of what every professional journalist should know — from how to research, write, and edit a story to how to write headlines, choose graphics, and select quotes and sound bites. Print, radio, TV, and Web-based or online journalism forms are discussed in detail, as well as the skills required in beat reporting. Contents: 1) What is News? 2) Getting the Story. 3) Telling the Story. 4) Editing the Story. 5) Broadcast and Online. 6) Specialized Journalism. 7) Ethics and Law. 8) Journalism Resources.
<http://florida.theorange grove.org/og/items/13c8b5a6-7c52-422a-89fa-e0abada5ba62/1/journalism.pdf>

Computer and Information Sciences

Computer Science

- 9. Computing Life.** This text introduces some of the ways that physicists, biologists, and even artists are computing life. Each section focuses on a different research problem, offers examples of current scientific projects, and acquaints learners with the people conducting the work. Links are provided to online extras, for example other opportunities to learn about, and get involved in, this exciting new interdisciplinary field. Contents: 1) Searching for Genetic Treasures. 2) The Next Top Protein Model. 3) Movie Mania. 4) Sim Sickness. 5) Integrating Biology.
http://florida.theorange grove.org/og/items/c3d54f03-c5ea-22cf-24ea-5ee7712ff228/1/computing_life.pdf
- 10. forall x: Introductory Textbook in Formal Logic.** Abstract reasoning, logical thinking, philosophy, thinking skills. This book is an introduction to sentential logic and first-order predicate logic with identity, logical systems that significantly influenced twentieth-century analytic philosophy.
<http://florida.theorange grove.org/og/items/a62529c3-9be8-5ebc-1199-51cca8288191/1/forallx.pdf>
- 11. From Algorithms to Z-Scores: Probabilistic and Statistical Modeling.** Computer science. The materials here form a textbook for a course in mathematical probability and statistics for computer science students. Computer science examples are used throughout, in areas such as: computer networks; data and text mining; computer security; remote sensing; computer performance evaluation; software engineering; data management.
<http://florida.theorange grove.org/og/items/2e13f939-b18f-38f7-3719-2d4257f2690c/1/ProbStatBook.pdf>

12. Introduction to Programming Using Java. Computer science. This textbook is on introductory programming using Java. This book is directed mainly toward beginning programmers, although it might also be useful for experienced programmers who want to learn more about Java. It is an introductory text and does not provide complete coverage of the Java language. The text is a PDF and is suitable for printing or on-screen reading. It contains internal links for navigation and external links to source code files, exercise solutions, and other resources. Contents: 1) Overview: The Mental Landscape. 2) Programming in the Small I: Names and Things. 3) Programming in the Small II: Control. 4) Programming in the Large I: Subroutines. 5) Programming in the Large II: Objects and Classes. 6) Introduction to GUI Programming. 7) Arrays. 8) Correctness and Robustness. 9) Linked Data Structures and Recursion. 10) Generic Programming and Collection Classes. 11) Files and Networking. 12) Advanced GUI Programming. Appendices: Source Code for All Examples in this Book, and News and Errata.

<http://florida.theorange grove.org/og/items/a091ee49-9ae0-c1c7-548d-edf18c8fba34/1/ProgrammingInJava.pdf>

13. Principles of Object-Oriented Programming. Programming. An introduction to object-oriented programming with a focus on objects-first and design patterns. Includes a Java syntax primer, glossary, and problem and solution sets.

<http://florida.theorange grove.org/og/items/33bf62f3-8ad1-7dde-e23f-6f17aca953c7/1/OOProgramming.pdf>

14. Programming from the Ground Up. Computer science. This is an introductory book to programming and computer science using assembly language. It assumes the reader has never programmed before, and introduces the concepts of variables, functions, and flow control. The reason for using assembly language is to get the reader thinking in terms of how the computer actually works underneath. Knowing how the computer works from a "bare-metal" standpoint is often the difference between top-level programmers and programmers who can never quite master their art. Contents: 1) Computer Architecture. 2) Functions. 3) Files. 4) Developing Robust Programs. 5) Sharing Functions with Code Libraries. 6) Counting Like A Computer. 7) High Level Languages. 8) GUI Programming. 9) Common x86 Instructions. 10) Important System Calls. 11) Table of ASCII Codes. 12) Idioms in Assembly Language. For further information and downloads, go to

<http://www.bartlett publishing.com/site/bartpub/section/9>

<http://florida.theorange grove.org/og/items/6d9fe012-ffe1-1469-3a77-f65d56c0e41b/1/ProgrammingGroundUp-1-0-pdf.pdf>

15. Programming Fundamentals: A Modular Structured Approach Using C++. Computer science, programming. The approach of this text is to take learners through a progression of materials in order to develop skills of modular, structured programming. The text was written, for the most part, without consideration of a specific programming language. However, in many cases the C++ language is discussed as part of the explanation of the concept. Often the examples used for C++ are exactly the same for the Java programming language.

<http://florida.theorange grove.org/og/items/9391cbd0-7459-27f5-f2a9-414a702a912e/1/Programming.pdf>

- 16. Wireless Networking in the Developing World: A practical guide to planning and building low-cost telecommunications infrastructure.** Computer networks, development, Internet, technological advancement, technology. This free textbook provides instructions on how to build low-cost telecommunications infrastructure. Topics covered range from basic radio physics and network design to equipment and troubleshooting, a chapter on voice-over IP (VoIP), and a selection of four case studies from networks deployed in Latin America. The text was written and reviewed by a team of experts in the field of long distance wireless networking in urban, rural, and remote areas. Contents: 1) Where to Begin. 2) A Practical Introduction to Radio Physics. 3) Network Design. 4) Antennas & Transmission Lines. 5) Networking Hardware. 6) Security & Monitoring. 7) Solar Power. 8) Building an Outdoor Node. 9) Troubleshooting. 10) Economic Sustainability. 11) Case Studies. See the website for translations, including French, Spanish, Portuguese, Italian, Arabic, and others, and additional case studies, training course material, and related information: <http://wndw.net/>

http://florida.theorange grove.org/og/items/cc52a4a0-c60f-8ef4-2874-0643f297f9a0/1/Wireless_Networking.pdf

Information Science

- 17. Focus on Intellectual Property Rights.** Copyrights, intellectual property. Essays by government, academic, and industry experts introduce intellectual property (IP) rights issues and key concepts -- patents, trademarks, copyrights, trade secrets, and new forms of IP. Articles also explain why countries need effective intellectual property systems, and what governments in each region are doing to enforce IPR. Includes a glossary of IP terms, a list of print and Internet IP resources, and a separate resource list for children and young adults.
<http://florida.theorange grove.org/og/items/330670f5-0037-d0d8-d50d-bd05c2e61e2e/1/IPRights.pdf>
- 18. Information Systems.** Communications, information systems, information technology. This textbook teaches students how to exploit IS in a technology-rich environment. It emphasizes why, no matter what their major, information and communications technologies (ICT) are, and increasingly will be, a critical element in their personal success and the success of their organizations.
<http://florida.theorange grove.org/og/items/0743cd9c-4be2-e69a-c1a8-151d47b61f3f/1/InformationSystems.pdf>
- 19. Introduction to Open Educational Resources.** Copyright, intellectual property, open education. A free PDF text introducing open educational resources as alternatives to textbooks for college teachers. Contents: 1) Introduction. 2) Open Courseware. 3) OER Fair Use, Copyright, and TEACH Act. 4) Identifying Sources. 5) Discipline Specific Sources. 6) Public Domain Textbook Sources. 7) Use of Primary Sources. 8) OER Development. 9) Delivery, Storage, and Organization.
<http://florida.theorange grove.org/og/items/d40ed145-b944-01ad-fe4f-2c1bdcd608cf/1/OpenResources.pdf>
- 20. Strategies for Sustaining Digital Libraries.** Electronic libraries, electronic publishing, information technology, library automation This collection of essays on sustaining digital libraries is a report of early findings from pioneers who have worked to establish digital libraries, not merely as experimental projects, but as ongoing services and collections intended to be sustained over time in ways consistent with the long-held practices of print-based libraries.
<http://florida.theorange grove.org/og/items/f4ae8113-16ed-9549-e50e-125131b80cb6/1/StrategiesforSustainingDigitalLibraries.pdf>
- 21. The Public Domain: Enclosing the Commons of the Mind.** Copyright, electronic publishing, information technology, intellectual property. Author James Boyle describes what he calls the range wars of the information age — today's heated battles over intellectual property. Boyle argues that just as every informed citizen needs to know at least something about the environment or civil rights, every citizen should also understand intellectual property law.
<http://florida.theorange grove.org/og/items/22465687-9a21-7be8-9220-7bd01e9abc bc/1/the public domain1.pdf>

Education

Educational/Instructional Media

22. Virtual Worlds: A Second Life beginner's guide. Computer mediated communication, computer simulation, role playing, simulation. This textbook introduces virtual worlds in general and Second Life in particular. It covers a range of topics ranging from basic movement and building techniques to some theories on virtual identities.

http://florida.theorange grove.org/og/items/52ac65c1-0c7f-daba-4d84-fc87d07408f1/1/Second_life.pdf

23. Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge. Open content, open educational resources, OER, open education In the book's 30 essays, prominent leaders and thinkers in the open education movement reflect on current and past open education initiatives, offer critical analyses, share the strategic underpinnings of their own work, and delve into open education's implications in three areas: technology, content, and knowledge. Together, they address the central question of how open education can improve the quality of education. The authors – comprised of faculty, researchers, administrators, academic technology experts, foundation program officers and scholars, and directors of major open education projects – examine what challenges need to be addressed, what potential synergies can be realized, and what opportunities should be seized for a better future for education. Based on this collective agenda, the editors found that in order to “open up” education in ways that can dramatically advance learning and teaching, educators and administrators need to: 1) Investigate the transformative potential and ecological transitions of open education. 2) Change education's culture and policy. 3) Make open education solutions sustainable. 4) Make practice and knowledge visible and shareable. 5) Build the teaching and learning commons through the collectivity culture.

<http://florida.theorange grove.org/og/items/86b3ba4b-3cb8-75fb-712e-b5c1beb17833/1/Open.pdf>

General

24. HIV-AIDS for Educators. Acquired immunodeficiency syndrome, health education. HIV-AIDS for Educators. Teachers Without Borders present educational resources and strategies for HIV-AIDS education. Contents: 1) Our Philosophy. 2) HIV-AIDS Basics for Teachers. 3) Assessing Youth Attitudes. 4) Sexuality/Personal Relationships. 5) HIV-Infected Children. 6) Care for AIDS Orphans. 7) Condoms and Controversy. 8) Global Research. 9) Building Your HIV-AIDS Program.

<http://florida.theorange grove.org/og/items/3513d14a-2e05-82bc-0092-6f5a1d475b81/1/HIV.pdf>

Engineering

Chemical Engineering

25. Nanotechnology for the Oil and Gas Industry. Sciences, technology, fuels. Provides an overview of nanotechnology for students, researchers, and industry, especially in relation the oil and gas sector. Contents: 1) History of Nanotechnology. 2) Synthesis of Nanomaterials. 3) Characterization of Nanomaterials. 4) Fundamentals for Nanotechnology.

<http://florida.theorange grove.org/og/items/d20709bb-ec24-b191-ccb8-bc39910235d0/1/Nano.pdf>

Engineering Science

26. The Age of Einstein. Engineering, fluid mechanics. This book describes the fundamentals of fluid mechanics phenomena for engineers and others. This book is designed to replace all introductory textbook(s) or instructor's notes for the fluid mechanics in undergraduate classes for engineering/science students but also for technical people.

<http://florida.theorange grove.org/og/items/3af4658d-9550-a358-13cb-e9c0cb4b4270/1/ageofeinstein.pdf>

- 27. The Calculus of Functions of Several Variables.** Engineering, fluid mechanics. This book describes the fundamentals of fluid mechanics phenomena for engineers and others. This book is designed to replace all introductory textbook(s) or instructor's notes for the fluid mechanics in undergraduate classes for engineering/science students but also for technical people. It is hoped that the book could be used as a reference book for people who have at least some basics knowledge of science areas such as calculus, physics, etc. This version is a PDF document. The website [<http://www.potto.org/FM/fluidMechanics.pdf>] contains the book broken into sections, and also has LaTeX resources.
<http://florida.theorange grove.org/og/items/51b0da04-5079-ab29-52ca-71023e1057c0/1/CalculusFunctionSeveralVariables.pdf>

Electrical, Electronics and Communications Engineering

- 28. Fundamentals of Electrical Engineering I.** Electromechanical technology, electronics, engineering. The course focuses on the creation, manipulation, transmission, and reception of information by electronic means.
<http://florida.theorange grove.org/og/items/c7d013ec-2b4d-6971-65f9-b1a6af2d9092/1/ElectricalEngineering.pdf>
- 29. Introduction to Physical Electronics.** Electronics. An introduction to solid state device including field effect and bipolar transistors. Contents: 1) Conductors, Semiconductors and Diodes. 2) Bipolar Transistors. 3) FETs. 4) IC Manufacturing. 5) Introduction to Transmission Lines. 6) AC Steady-State Transmission. 7) Glossary.
<http://florida.theorange grove.org/og/items/61c67a61-35f0-83cc-dfd3-1a7ab8713c74/1/IntroPhysElectr.pdf>
- 30. Signals and Systems.** Engineering, physics. This text deals with signals, systems, and transforms, from their theoretical mathematical foundations to practical implementation in circuits and computer algorithms. At its conclusion, learners will have a deep understanding of the mathematics and practical issues of signals in continuous and discrete time, linear time invariant systems, convolution, and Fourier transforms.
<http://florida.theorange grove.org/og/items/e66b88b8-2801-ee81-1d88-cacd33185dd7/1/Signals.pdf>

English Language and Literature

American Literature (United States)

- 31. Three Modules on Clear Writing Style: An Introduction to The Craft of Argument, by Joseph M. Williams and Gregory Colomb.** Language Arts, persuasive discourse, writing (composition). A free PDF text on the fundamentals of good writing style, with particular emphasis on persuasive writing and the correct way to structure and present an argument. Also includes links to free downloadable PowerPoint presentations that can be used in the classroom. Contents: Introductory Note: Common Objectives. 1) Clear Narrative: "Characters" and "Actions" 2) Problem Statements, Introductions, and Issues of Audience 3) Five Essential Parts of Argument.
<http://florida.theorange grove.org/og/items/fe29100-7692-0270-1988-f3f41baaa814/1/Argument.pdf>
- 32. Outline of American Literature** US literature, American writers, American fiction. The Outline of American literature, newly revised, traces the paths of American narrative, fiction, poetry and drama as they move from pre-colonial times into the present, through such literary movements as romanticism, realism and experimentation.
http://florida.theorange grove.org/og/items/c075a45f-4627-9ae0-835c-3cb8f4ac82af/1/Outline_US_Lit.pdf

- 33. USA Literature in Brief** US literature, American writers, American fiction, American Poetry. This is a condensed version of The Outline of American literature. Newly revised, it traces the paths of American narrative, fiction, poetry and drama as they move from pre-colonial times into the present, through such literary movements as romanticism, realism and experimentation.
<http://florida.theorange grove.org/og/items/d60cd0cb-637d-8667-e282-748b272c08f8/1/literature-in-brief.pdf>

English Literature (British and Commonwealth)

- 34. Destiny Unfulfilled: A Critique of The Harry Potter Series.** Adolescent literature, children's literature, language arts, literary criticism, literature. This is a book-length critique of the Harry Potter series. The critique makes use of literary analysis, logic, and persuasive writing, and has the ultimate goal of convincing the reader that J.K. Rowling owes her fans a revised edition of the Potter series. Destiny Unfulfilled might prove useful to teachers of literature, creative writing, and composition, as well as to those who oversee debate clubs. The book is broken into two parts. Part 1 is the Thematic Discussion, while Part 2 dedicates one chapter to each book of the Potter series.
<http://florida.theorange grove.org/og/items/1c8115fc-50d1-7dd6-0a2a-6446e33c7437/1/destiny.pdf>

Foreign Languages, Literatures and Linguistics

French Language and Literature

- 35. Liberté: a First Year French Textbook.** French, foreign languages, romance languages. Liberté is a free French language textbook for first-year college students. A separate instructor guide is also provided. The textbook features include:

- 1) Each chapter is built around communicative strategies. Clearly defined objectives in communication, culture, and grammar are given at the start of each chapter, and summary exercises at the end allow students to measure their mastery of these objectives.
- 2) The exercises in the in-class (A) sections are composed mainly of guided practice and extension activities, along with occasional comprehension checks and comprehensible input. Some further activities are indicated in the instructor's marginal notes..
- 3) The grammar included is explained in a more narrative form and in more detail than is typical for first-year textbooks. The grammar (B) sections should be read by the students outside of class before the communicative activities requiring those grammar points are done in class.
- 4) The amount of grammar is less than is typically contained in a first-year text. The grammar included has been chosen to meet the needs of the communicative goals of each chapter, and these have been selected based on what a student ranking intermediate-low to -mid on the ACTFL oral proficiency scale should be able to accomplish. The grammatical concepts included in this book focus on those that will be needed for the sentences and questions that a typical low-intermediate speaker can form, and those are emphasized repeatedly.
- 5) The book implicitly and explicitly recycles material from previous chapters on a regular basis, so that students can see their learning as a continual progression rather than as a rush from one grammar point to the next.

http://florida.theorange grove.org/og/items/4a4a6ebe-cce2-9920-fff9-910425c58b6f/1/french_student.pdf

History

American History (United States)

- 36. US History since 1877.** United States History. This is a textbook to be used for the second part of the US History survey course (US after 1877). Contents: 1) Progressive Era (Part I). 2) The Progressive Era (Part II). 3) The Great War (Part I). 4) Great War (Part II).
<http://florida.theorange grove.org/og/items/06ac618b-0a76-6750-00a0-97016bd0bdfd/1/USHistory.pdf>

- 37. Women of Influence.** US history, American history, Women in America. This collection chronicles how 21 notable American women broke new ground, some by championing equal rights for all and others by their accomplishments in fields such as government, literature, and even in war.

<http://florida.theorange grove.org/og/items/01195851-85ee-a8f2-740e-8e5493ffb6ab/1/WomenInUS.pdf>

General

- 38. A Comprehensive Outline of World History.** World history, ancient history, modern history. This textbook presents Jack E. Maxfield's "A Comprehensive Outline of World History" as originally organized, chronologically by era and across regions within an era. Each chapter covers a period of historical time (e.g., a century). Sections within chapters describe what was going on in every geographical region of the world; each section provides a reference for that region in the subsequent chapter, i.e., in the next time period. The reader can thus get a snapshot of the entire world at a point in time by reading one chapter, or can follow the history of a region through time by linking to sections in successive chapters.

<http://florida.theorange grove.org/og/items/f796f14f-c573-1fcd-1cb1-d2a21d9b32b2/1/WorldHistory.pdf>

Mathematics and Statistics

Computational Mathematics

- 39. A = B.** Computer Science, mathematics, statistics. This book is of interest to mathematicians and computer scientists working in finite mathematics and combinatorics. This book is about identities in general, and hypergeometric identities in particular, with emphasis on computer methods of discovery and proof.

<http://florida.theorange grove.org/og/items/12105711-d70a-2352-a968-f94661e60715/1/A%3DB.pdf>

- 40. A Computational Introduction to Number Theory and Algebra.** Algebra, calculus, mathematics. A book introducing basic concepts from computational number theory and algebra, including all the necessary mathematical background. The mathematical prerequisites are minimal: no particular mathematical concepts beyond what is taught in a typical undergraduate calculus sequence are assumed. The computer science prerequisites are also quite minimal: it is assumed that the reader is proficient in programming, and has had some exposure to the analysis of algorithms, essentially at the level of an undergraduate course on algorithms and data structures. A separate attachment with errata is provided.

<http://florida.theorange grove.org/og/items/73fd1ebb-dc58-d676-8a29-b2f2318226bd/1/CompuNumberTheory.pdf>

General Mathematics

- 41. A First Course in Linear Algebra.** Algebra, matrices. This textbook is designed to college sophomores and juniors the basics of linear algebra and the techniques of formal mathematics. There are no prerequisites other than ordinary algebra.

<http://florida.theorange grove.org/og/items/c871aca9-a06e-6a47-a569-4632fe26998e/1/LinearAlgebra.pdf>

- 42. A Problem Course in Mathematical Logic.** Mathematical logic, mathematics. This text is intended to serve as the text for an introduction to mathematical logic for undergraduates with some mathematical sophistication.

<http://florida.theorange grove.org/og/items/b98210c1-f896-9122-63a2-c793ab9eb6ef/1/ProblemCourseMathLogic.pdf>

- 43. Advanced Calculus.** Calculus, mathematics, statistics. This book is based on an honors Calculus course given in the 1960s. The book contains more material than was normally covered in any one year. It can be used (with omissions) for a year's course in Advanced Calculus, or as a text for a 3-semester introduction to analysis.

http://florida.theorange grove.org/og/items/6d971024-c35c-23b8-012c-39f6a710dc6f/1/Advanced_Calculus.pdf

- 44. Algebra: Abstract and Concrete.** Algebra, mathematics. This textbook provides a thorough introduction to "modern" or "abstract" algebra at a level suitable for upper-level undergraduates and beginning graduate students. The book addresses the conventional topics: groups, rings, fields, and linear algebra, with symmetry as a unifying theme.
http://florida.theorange grove.org/og/items/dfec981-4975-50e6-cca6-fc25a8f098b0/1/Abstract_Algebra.pdf
- 45. Difference Equations to Differential Equations.** Calculus, equations (mathematics), mathematics. This book covers the following topics: Sequences, limits, and difference equations; functions and their properties; best affine approximations; integration; polynomial approximations and Taylor series; transcendental functions; the complex plane; differential equations.
<http://florida.theorange grove.org/og/items/a4006fdc-1af1-770c-a5a0-ce45d6d64349/1/DiffEquations2DiffEquations.pdf>
- 46. Elementary Algebra.** Mathematics, algebra. Elementary Algebra is a work text that covers the traditional topics studied in a modern elementary algebra course. It is intended for students who (1) have no exposure to elementary algebra, (2) have previously had an unpleasant experience with elementary algebra, or (3) need to review algebraic concepts and techniques. Includes glossary, sample sets and practice sets, section and review exercises, and solutions. Contents: 1) Arithmetic Review. 2) Basic Properties of Real Numbers. 3) Basic Operations with Real Numbers. 4) Algebraic Expressions and Equations. 5) Solving Linear Equations and Inequalities. 6) Factoring Polynomials. 7) Graphing Linear Equations and Inequalities in One and Two Variables. 8) Rational Expressions. 9) Roots, Radicals, and Square Root Equations. 10) Quadratic Equations. 11) Systems of Linear Equations.
<http://florida.theorange grove.org/og/items/a9ddf3ff-a17d-7503-d845-24d16a38f278/1/ElementaryAlgebra.pdf>
- 47. Elementary Calculus: An Infinitesimal Approach.** Calculus, mathematics. This is a calculus textbook at the college freshman level based on Abraham Robinson's infinitesimals, which date from 1960. Robinson's modern infinitesimal approach puts the intuitive ideas of the founders of the calculus on a mathematically sound footing, and is easier for beginners to understand than the more common approach via limits.
<http://florida.theorange grove.org/og/items/7d91e091-4fcc-6180-b970-ee815c8c36a0/1/ElementaryCalclnInfinitesimal.pdf>
- 48. The Handbook of Essential Mathematics.** Mathematics, algebra, geometry, measurement, money management, probability, statistics. The Handbook of Essential Mathematics contains formulas, processes and tables plus applications in personal finance. This is a compendium of mathematical formulas and other useful technical information that will well serve both students and teachers alike from early grades through early college.
http://florida.theorange grove.org/og/items/3a8c652c-11d0-e967-95fb-b5bbae2586d6/1/math_handbook.pdf
- 49. Introduction to Groups, Invariants and Particles.** Mathematics, physics. This is a book for seniors and advanced juniors who are majoring in the Physical Sciences or Mathematics. The book places the subject matter in its historical context with discussions of Galois groups, algebraic invariants, Lie groups and differential equations, presented at a level that is not the standard fare for students majoring in the Physical Sciences. A sound mathematical basis is thereby provided for the study of special unitary groups and their applications to Particle Physics.
<http://florida.theorange grove.org/og/items/b752010c-b23d-1cfe-eb24-6ea6083a8b11/1/introgroups.pdf>

50. Lie Algebras. Algebra, mathematics. This book addresses the following topics: The Campbell Baker Hausdor formula; $sl(2)$ and its Representations; classical simple algebras; Engel-Lie-Cartan-Weyl; conjugacy of Cartan subalgebras; simple finite dimensional algebras; cyclic highest weight modules; Serre's theorem; Clifford algebras and spin representations; The Kostant Dirac operator; The center of $U(\mathfrak{g})$; and Chevalley's theorem.

http://florida.theorange grove.org/og/items/b11aec6b-b27e-f0b8-b135-774f3a6f22b0/1/lie_algebras.pdf

51. Linear Algebra. Algebra, mathematics. The text covers the material of a first undergraduate Linear Algebra course. Answers are provided as a separate attachment. You can use the text as a main text, as a supplement to another text, or for independent study. Prerequisites: A semester of calculus; students with three semesters of calculus can skip a few sections. Each chapter has three or four discussions of additional topics and applications suitable for independent study or for small group work. The approach is developmental. Although the presentation is focused on covering the requisite material by proving things, it does not start with an assumption that students are already able at abstract work. Instead, it proceeds with a great deal of motivation, many computational examples, and exercises that range from routine verifications to (a few) challenges. The goal is, in the context of developing the usual material of an undergraduate linear algebra course, to help raise the level of mathematical maturity of the class. Note: both the textbook and answers to exercises are included. Author suggests you save the two files in the same directory, so that clicking on an exercise will send you to its answer and clicking on an answer will send you to its exercise. Go to:

<http://joshua.smcvt.edu/linalg.html/> to get the source. You need to know LaTeX and MetaPost to work with it; there is a readme file to get started and some optional material. For instructors considering adoption: the author suggests looking at the second chapter. The first chapter is necessarily computational but the second chapter shows more clearly what the book works on: bridging between lower-division mathematics with its reliance on explicitly-given algorithms, and upper division college mathematics with its emphasis on concepts and proof.

<http://florida.theorange grove.org/og/items/b7338794-63a4-e13d-1b79-1297f6fea895/1/LinearAlgebraText.pdf>

52. Semi-Riemann Geometry and General Relativity. Mathematics. This free textbook by Harvard Professor Shlomo Sternberg provides a one semester course at the undergraduate level giving an introduction to Riemannian geometry and its principal physical application, Einstein's theory of general relativity. The background assumed is a good grounding in linear algebra and in advanced calculus, preferably in the language of differential forms. Contents: 1) The Principal Curvatures. 2) Rules of Calculus. 3) Levi-Civita Connections. 4) The Bundle of Frames. 5) Connections on Principal Bundles. 6) Gauss's lemma. 7) Special Relativity. 8) Die Grundlagen der Physik. 9) Submersions. 10) Petrov types. 11) Star.

http://florida.theorange grove.org/og/items/48bbe19e-1a0e-dba4-ec70-b85054a28ba7/1/semi_riemannian_geometry.pdf

53. Theory of functions of a real variable. Algebra, mathematical concepts, transformations. This is a text for a beginning graduate course in real variables and functional analysis. It assumes that the student has seen the basics of real variable theory and point set topology. Contents: 1) The topology of metric spaces. 2) Hilbert Spaces and Compact operators. 3) The Fourier Transform. 4) Measure theory. 5) The Lebesgue integral. 6) The Daniell integral. 7) Wiener measure, Brownian motion and white noise. 8) Haar measure. 9) Banach algebras and the spectral theorem. 10) The spectral theorem. 11) Stone's theorem. 12) More about the spectral theorem. 13) Scattering theory.

http://florida.theorange grove.org/og/items/0bde9c78-0ef5-b513-c152-5ddaf33adace/1/Real_Variables.pdf

54. Understanding Algebra. Algebra, mathematics. An introductory algebra textbook, covering concepts including arithmetic, word problems, graphing and lines, equations and expressions, exponents, and polynomials. Includes a graphing applet, a prime factorization machine, and a prime number list. This resource is part of the Teaching Quantitative Skills in the Geosciences collection.

<http://serc.carleton.edu/quantskills/>

<http://florida.theorange grove.org/og/items/66b477dc-7824-fa97-6bf9-2afd81af94f4/1/Understanding%20Algebra.pdf>

55. Yet Another Calculus Text: A Short Introduction with Infinitesimals. Calculus, mathematics. This free textbook is an introduction to calculus based on the hyper-real number system. For example, much of the content deals with infinitesimal and infinite numbers. The text is aimed primarily at readers who already have some familiarity with calculus. Although the book does not explicitly assume any prerequisites beyond basic algebra and trigonometry.

<http://florida.theorange grove.org/og/items/bebd4a12-1e70-a559-545d-02a16a45e7fe/1/yact-05102007.pdf>

Statistics

56. Collaborative Statistics. Mathematics, statistical analysis, statistical distributions, statistics. This textbook is intended for introductory statistics courses being taken by students at two- and four-year colleges who are majoring in fields other than math or engineering. Intermediate algebra is the only prerequisite. The book focuses on applications of statistical knowledge rather than the theory behind it. Note: This book retailed for \$160.00 in bookstores. Today, under a Creative Commons license (<http://creativecommons.org/about/licenses>) the book is available for \$31.98 plus shipping from cnx.org, or, free to download or print on your own printer.)

<http://florida.theorange grove.org/og/items/687aa918-8ada-78a1-e889-f532825afd6b/1/col10522.pdf>

57. Grinstead and Snell's Introduction to Probability. Mathematics, probability. This is an introductory probability textbook, published by the American Mathematical Society. It is designed for an introductory probability course taken by mathematics, the physical and social sciences, engineering, and computer science students. The text can be used in a variety of course lengths, levels, and areas of emphasis. For use in a standard one-term course, in which both discrete and continuous probability is covered, students should have taken as a prerequisite two terms of calculus, including an introduction to multiple integrals. In order to cover Chapter 11, which contains material on Markov chains, some knowledge of matrix theory is necessary. The text can also be used in a discrete probability course. For use in a discrete probability course, students should have taken one term of calculus as a prerequisite. All of the computer programs that are used in the text have been written in each of the languages TrueBASIC, Maple, and Mathematica. Contents: 1) Discrete Probability Distributions. 2) Continuous Probability Densities. 3) Combinatorics. 4) Conditional Probability. 5) Distributions and Densities. 6) Expected Value and Variance. 7) Sums of Random Variables. 8) Law of Large Numbers. 9) Central Limit Theorem. 10) Generating Functions. 11) Markov Chains. 12) Random Walks. The text is best used in conjunction with software and exercises available online at http://www.dartmouth.edu/~chance/teaching_aids/books_articles/probability_book/book.html

<http://florida.theorange grove.org/og/items/7cb5df2e-2fc1-a777-ab6a-6043d60339ba/1/IntroToProb.pdf>

58. Introduction to Statistical Thought. Bayesian Statistics, mathematics, probability, regression (statistics), statistical distributions, statistics. This textbook is intended as an upper level undergraduate or introductory graduate textbook in statistical thinking. It is best suited to students with a good knowledge of calculus and the ability to think abstractly. The focus of the text is the ideas that statisticians care about as opposed to technical details of how to put those ideas into practice. Another unusual aspect is the use of statistical software as a pedagogical tool. That is, instead of viewing the computer merely as a convenient and accurate calculating device, the book uses computer calculation and simulation as another way of explaining and helping readers understand the underlying concepts. The book is written with the statistical language R embedded throughout. R software and accompanying manuals are available for free download from <http://www.r-project.org>.

<http://florida.theorange grove.org/og/items/d1462a9c-bc1e-4a1e-67de-90c5a8ed39f5/1/StatisticalThought.pdf>

Natural Resources and Conservation

Environmental Science

59. AP Environmental Science. Environmental science, Earth science, ecology, natural resources. Text associated with University of California College Prep (UCCP) Advanced Placement (AP) Environmental Science online course.

<http://florida.theorange grove.org/og/items/b2f1fd15-5d36-5b31-87fe-5d5097716e33/1/APEnviroScience.pdf>

Physical Sciences

Chemistry

60. Concept Development Studies in Chemistry. Chemistry. This textbook is designed for an Introductory General Chemistry course. Each module develops a central concept in Chemistry from experimental observations and inductive reasoning.

<http://florida.theorange grove.org/og/items/7119131d-8df9-3fe6-e60d-8e201d5b4f42/1/ConceptDevelopmentStudiesChemistry.pdf>

Physics

61. A Radically Modern Approach to Introductory Physics Volumes 1 and 2. Optics, physics. This is a textbook for a one-year introductory physics course. The text was developed out of an alternate beginning physics course at New Mexico Tech designed for students with a strong interest in physics.

Volume 1: <http://florida.theorange grove.org/og/items/68e10bba-1ba4-7ba0-dc7b-4bfa59bd8ea8/1/RadModernApproachIntPhysics1.pdf>

Volume 2: <http://florida.theorange grove.org/og/items/68e10bba-1ba4-7ba0-dc7b-4bfa59bd8ea8/1/RadModApproachIntPhysics2.pdf>

62. Basics of Fluid Mechanics. Mechanics, physics. This book describes the fundamentals of fluid mechanics phenomena for engineers and others. This book is designed to replace all introductory textbook(s) or instructor's notes for the fluid mechanics in undergraduate classes for engineering/science students but also for technical people.

<http://florida.theorange grove.org/og/items/3af22a83-06cb-53c6-c1d4-010dadbe5e17/1/fluidMechanics.pdf>

- 63. Calculus-Based Physics I and II.** Mathematics, physics. This is an introductory physics textbook designed for use in the two-semester introductory physics course typically taken by science and engineering students.
Part I: <http://florida.theorange grove.org/og/items/9c2fc878-bf43-0701-7d71-96780a1dd31b/1/cbPhysicsIa18.pdf>
Part 2: <http://florida.theorange grove.org/og/items/9c2fc878-bf43-0701-7d71-96780a1dd31b/1/cbPhysicsIb24.pdf>
- 64. Conservation Laws.** Physics. This is a text for an introductory college physics class, covering conservation of energy, momentum, and angular momentum. The treatment is algebra-based, with applications of calculus discussed in optional sections.
<http://florida.theorange grove.org/og/items/e279dcdf-28d6-e6dd-34c8-f3125fbc2d7f/1/ConservationLaws.pdf>
- 65. Electricity and Magnetism.** Energy, physics, scientific concepts. This is a text on electricity and magnetism for an introductory college physics class. The treatment is algebra-based, with applications of calculus discussed in optional sections.
<http://florida.theorange grove.org/og/items/c04f56d6-847d-84ba-ead6-0e13d5257220/1/Electricity.pdf>
- 66. Essential Physics Part 1.** Physics. An intensive introduction to classical and special relativity, Newtonian dynamics and gravitation, Einsteinian dynamics and gravitation, and wave motion.
<http://florida.theorange grove.org/og/items/7138502d-5ea5-9922-fc61-144ba23dedfc/1/essentialphysics1.pdf>
- 67. Introduction to String Field Theory.** Physics, quantum mechanics. An introduction to string field theory, including comprehensive index and exercises for learners. Contents: 1) Introduction. 2) General Light Cone. 3) General BRST. 4) General Gauge Theory. 5) Particle. 6) Classical Mechanics. 7) Light-Cone Quantum Mechanics. 8) BRST Quantum Mechanics. 9) Graphs. 10) Light-Cone Field Theory. 11) BRST Field Theory. 12) Gauge-Invariant Interactions.
<http://florida.theorange grove.org/og/items/80908088-299f-2a46-778f-52287f8ab7e7/1/String.pdf>
- 68. Mathematical Tools for Physics.** Physics, Algebra, Calculus, Mathematics, Trigonometry. This text is for the undergraduate level, and provides a one-semester bridging course between introductory math courses and the physics courses in which students usually use the mathematics. This is the course typically called Mathematical Methods in Physics.
http://florida.theorange grove.org/og/items/1c209593-cda8-0cd4-f311-bcf6592f9ad8/1/mathematical_methods.pdf
- 69. Motion Mountain: The Adventure of Physics.** Physics. This free physics textbook explores mechanics, thermodynamics, special and general relativity, electrodynamics, quantum theory and modern attempts at unification. The text presents modern physics as consequence of the notions of minimum entropy, maximum speed, maximum force, minimum change of charge and minimum action. Contents: 1) Fall, Flow and Heat. 2) Relativity. 3) Light, Charges and Brains. 4) Quantum Theory: The Smallest Change. 5) Pleasure, Technology and Stars. 6) Motion without Motion.
<http://florida.theorange grove.org/og/items/94a9b795-113a-88c3-5058-5b9191b059b2/1/motionmountain.pdf>
- 70. Newtonian Physics.** Physics. This is an introductory physics textbook designed for use in a typical one year survey course. Contents: 1) Scaling and Order-of-Magnitude Estimates. 2) Velocity and Relative Motion. 3) Acceleration and Free Fall. 4) Force and Motion. 5) Analysis of Forces. 6) Newton's Laws in Three Dimensions. 7) Vectors. 8) Vectors and Motion. 9) Circular Motion. 10) Gravity. This is book 1 in the Light and Matter series of free introductory physics textbooks.
<http://florida.theorange grove.org/og/items/9cd82068-db1b-67b0-7344-a0c5e46d8c23/1/NewtonianPhysics.pdf>

- 71. Optics.** Physics. This is a text on optics for an introductory college physics class. The treatment is algebra-based, with applications of calculus discussed in optional sections. Contents: 1) The Ray Model of Light. 2) Images by Reflection. 3) Images, Quantitatively. 4) Refraction. 5) Wave Optics. This is book 5 in the Light and Matter series of free introductory physics textbooks.
<http://florida.theorange grove.org/og/items/1f373ab7-9f2b-abe6-abb4-9346ceab143b/1/Optics.pdf>
- 72. Simple Nature: An Introduction to Physics for Engineering and Physical Science Students.** Physics. Simple Nature is a physics textbook intended for students in a three-semester introductory calculus-based course. Contents: 1) Introduction. 2) Conservation of Mass. 3) Conservation of Energy. 4) Conservation of Momentum. 5) Conservation of Angular Momentum. 6) Thermodynamics. 7) Waves. 8) Relativity. 9) Atoms and Electromagnetism. 10) DC Circuits. 11) Fields. 12) Electromagnetism. 13) Optics. 14) Quantum Physics.
<http://florida.theorange grove.org/og/items/9343a816-a17e-aab3-6a19-aaec5d386347/1/simple.pdf>
- 73. Superspace or One Thousand and One Lessons in supersymmetry.** Physics. Free college physics textbook on superspace and supersymmetry. Contents: 1) Introduction. 2) A Toy Superspace. 3) Representations of Supersymmetry. 4) Classical, global, simple ($N = 1$) superfields. 5) Classical $N = 1$ supergravity. 6) Quantum global superfields. 7) Quantum $N = 1$ supergravity. 8) Breakdown.
<http://florida.theorange grove.org/og/items/5001f064-cb7c-04be-be7c-68c42353dc00/1/Superspace.pdf>
- 74. The Modern Revolution in Physics.** Physics. This is an introductory physics textbook designed for use in a typical one year survey course. Contents: 1) Relativity. 2) Rules of Randomness. 3) Light as a Particle. 4) Matter as a Wave. 5) The Atom. This is book 6 in the Light and Matter series of free introductory physics textbooks.
<http://florida.theorange grove.org/og/items/ae629fb6-ef7d-96d7-9c1f-4879f5dbaaf3/1/ModernPhysics.pdf>
- 75. Vibrations and Waves.** Physics. This is a text on vibrations and waves for an introductory college physics class. The treatment is algebra-based, with applications of calculus discussed in optional sections. Contents: 1) Vibrations. 2) Resonance. 3) Free Waves. 4) Bounded Waves. This is book 3 in the Light and Matter series of free introductory physics textbooks.
<http://florida.theorange grove.org/og/items/ae629fb6-ef7d-96d7-9c1f-4879f5dbaaf3/1/ModernPhysics.pdf>

Oceanography

- 76. Introduction to Physical Oceanography.** Meteorology, oceanography. This book is written for college juniors and seniors and new graduate students in meteorology, ocean engineering, and oceanography. It begins with a brief overview of what is known about the ocean. This is followed by a description of the ocean basins, for the shape of the seas influences the physical processes in the water. Next, students will study the external forces, wind and heat, acting on the ocean, and the ocean's response. It also includes the equations describing dynamic response of the ocean. For example, the equations of motion, the influence of earth's rotation, and viscosity. Finally, students consider some particular examples: the deep circulation, the equatorial ocean and El Nino, and the circulation of particular areas of the ocean. Contents: 1) A Voyage of Discovery. 2) The Historical Setting. 3) The Physical Setting. 4) Atmospheric Influences. 5) The Oceanic Heat Budget. 6) Temperature, Salinity and Density. 7) The Equations of Motion. 8) Equations of Motion with Viscosity. 9) Response of the Upper Ocean to Winds. 10) Geostrophic Currents. 11) Wind Driven Ocean Circulation. 12) Vorticity in the Ocean. 13) Deep Circulation in the Ocean. 14) Equatorial Processes. 15) Numerical Models. 16) Ocean Waves. 17) Coastal Processes and Tides.
<http://florida.theorange grove.org/og/items/f5a4004c-2094-7b6d-7134-2622aa9c9513/1/IntroToPhysicalOcean.pdf>

Psychology

Educational Psychology

- 77. Best Practices in Online Teaching.** Online education, web-based instruction, virtual classrooms. This text offers practical strategies and pedagogical advice for instructors teaching in an online environment. It includes advice about: (1) preparing to teach in an online environment, (2) managing the teaching of a course, and (3) addressing larger issues surrounding online teaching (e.g. workload, intellectual property, etc.) The text also includes interviews from a number of teachers who have taught in an online environment. It was developed from a course offered to faculty who teach at The World Campus at Penn State University.
<http://florida.theorange grove.org/og/items/489805c0-7346-6cb7-320a-5610cb10f9da/1/OnlineEdu.pdf>
- 78. Educational Psychology.** Educational psychology, education, instructional design. This text is an introduction to educational psychology. Contents: 1) The Changing Teaching Profession and You. 2) The Learning Process. 3) Student Development. 4) Student Diversity. 5) Students with Special Educational Needs. 6) Student Motivation. 7) Classroom Management and the Learning Environment. 8) Instructional Strategies. 9) Planning Instruction. 10) Teacher-Made Assessment Strategies. 11) Standardized and Other Formal Assessments. 12) The Nature of Classroom Communication. 13) The Reflective Practitioner.
<http://florida.theorange grove.org/og/items/d61e7ddf-4d0c-6da1-939c-a6f0675f1e3e/1/EducationalPsychology.pdf>

Social Sciences

American Government and Politics (United States)

- 79. USA Elections in Brief.** Social studies, United States government, elections, political campaigns. This book is a background guide to the entire U.S. electoral system, from federal, state, local, and primary elections to related topics such as polling and the role of the parties and the media. Contents: 1) Introduction. 2) Elections in the United States. 3) The Role of Political Parties. 4) Presidential Nominations. 5) Congressional Elections. 6) Polls and Pundits. 7) Financing Campaigns. 8) U.S. Elections Procedures.
<http://florida.theorange grove.org/og/items/fc445611-932e-7999-4416-579da38b2550/1/USelections.pdf>
- 80. Basic Political Concepts.** Civics, Social Studies, Political Science, Politics, Government. This short text introduces the basic ideas of political science. Contents: 1) Towards a Systematic Conceptualization of Politics. 2) Concepts of Decision-Making and Action. 3) Concepts of Human Association. 4) Developing Conceptual Acuity.
<http://florida.theorange grove.org/og/items/e326fa45-7254-d47a-5eb7-91fa9bc4be64/1/PoliticalConcepts.pdf>
- 81. Outline of the US Legal System.** Civics, United States law, American law, American legal system. This outline covers the history and organization of the federal and state judicial systems; the criminal and civil court processes; the background, qualifications, and selection of federal judges; the role of other participants (lawyers, defendants, interest groups) in the judicial process; and the implementation and impact of judicial policies.
<http://florida.theorange grove.org/og/items/322f5364-8d30-c888-9b4f-5b28442773ae/1/LegalSystem.pdf>

Economics

- 82. An Introduction to Economic Reasoning.** Economics, free enterprise system, supply and demand. This high-school text is aimed at teaching learners how to think about economic problems in a manner consistent with the Austrian School tradition. Its chapters on action, preference, demand and supply, value theory, money, and price controls emphasize deductive logic, the market process, and the consequences of government intervention.
<http://florida.theorange grove.org/og/items/c3ce524b-ec34-a38c-57ab-dfb97ffbe228/1/EconReasoning.pdf>
- 83. Econometrics.** Econometrics, economics, Statistics, economic data, data analysis. This free PDF textbook is an introduction to Econometrics - the study of estimation and inference for economic models using economic data. Econometric theory concerns the study and development of tools and methods for applied econometric applications. Applied econometrics concerns the application of these tools to economic data.
<http://florida.theorange grove.org/og/items/aa27c349-942c-377e-820f-0a5c7f4a50b2/1/Econometrics.pdf>
- 84. Introduction to Economic Analysis.** Economics, microeconomics, supply and demand. This book presents introductory economics material using standard mathematical tools, including calculus. It is designed for a relatively sophisticated undergraduate who has not taken a basic university course in economics. The book can also serve as an intermediate microeconomics text. The focus of this book is on conceptual tools. Contents: 1) What is Economics? 2) Supply and Demand. 3) The US Economy. 4) Producer Theory. 5) Consumer Theory. 6) Market Imperfections. 7) Strategic Behavior and Games. This open textbook has been used in classes at Harvard, NYU and many other schools. It can be used and downloaded online and is available in printed format online through printer Lulu for \$11.10.
<http://florida.theorange grove.org/og/items/2a066782-9f49-54bb-8452-6d9a943f713c/1/MCAiea200.pdf>
- 85. U. S. Monetary Policy: An Introduction.** Banking, economics, financial policy, monetary systems, public policy. This booklet provides an introduction to U.S. monetary policy as it is currently conducted by answering a series of questions: 1) How is the Federal Reserve structured? 2) What are the goals of U.S. monetary policy? 3) What are the tools of U.S. monetary policy? 4) How does monetary policy affect the U.S. economy? 5) How does the Fed decide the appropriate setting for the policy instrument? Also contains comprehensive bibliography and glossary.
<http://florida.theorange grove.org/og/items/68511851-0ca9-2dab-a199-e0046450b816/1/MonetaryPolicy.pdf>

Visual and Performing Arts

General

- 86. Pathway To Dreams.** Artists, musicians, creative development, talent. A self paced and question oriented text to help artists determine goals, direction and your voice. Many artists find it hard knowing how to make their dreams come true. This workbook is a step by step process to help artists articulate their dreams and find paths to make them happen.
<http://florida.theorange grove.org/og/items/8181dbc0-8c8d-fd0d-86a9-f7f39ccdcdb59/1/Dreams.pdf>

Music

- 87. A Parent's Guide to Band.** Music, Band, Music Lessons. _For the families of students involved in a school band program, information about typical programs, band instruments, lessons, and practice. Contents: 1) Band Programs. 2) Lessons and Practice. 3) The Instruments.
<http://florida.theorange grove.org/og/items/e9596276-9694-5719-8979-53586ea2bb72/1/GuideToBand.pdf>

88. The Basic Elements of Music. Music, Music Activities, Meter in Music, Rhythm. Explanations (suitable for any age) of the basic elements of music, with suggested activities for introducing the each concept to children at early elementary school level. The course may be used by instructors not trained in music; all necessary definitions and explanations are included. Contents: 1) Time Elements. 2) Pitch Elements. 3) Combining Time and Pitch.

<http://florida.theorange grove.org/og/items/65ef05ea-3a3f-15c2-f75b-57cab0d3c427/1/Music.pdf>

89. Reading Music: Common Notation. Music, Music Activities, Clef, Music Staff. This course may be used to introduce or reinforce music-reading skills for someone just learning to play an instrument, or the individual lessons can be used to expand on basic music-reading knowledge or to look up any music-notation terms that are still unfamiliar. Contents: 1) Pitch. 2) Time. 3) Style.

<http://florida.theorange grove.org/og/items/15fbf8bd-74a1-af38-e43d-5a6313b687f5/1/ReadingMusic.pdf>