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Family caregiving affects millions of Americans every day, in all walks of life. At least 17.7 million individuals in the United States are caregivers of an older adult with a health or functional limitation. The nation's family caregivers provide the lion's share of long-term care for our older adult population. They are also central to older adults' access to and receipt of health care and community-based social services. Yet the need to recognize and support caregivers is among the least appreciated challenges facing the aging U.S. population. Families Caring for an Aging America examines the prevalence and nature of family caregiving of older adults and the available evidence on the effectiveness of programs, supports, and other interventions designed to support family caregivers. This report also assesses and recommends policies to address the needs of family caregivers and to minimize the barriers that they encounter in trying to meet the needs of older adults.

This manual gives a complete, detailed and up-to-date description of the Eurostat-OECD PPP Programme, including its organisation, the various surveys carried out by participating countries and the ways PPPs are calculated and disseminated. It also provides guidance on the use of PPPs.

The WHO World report on ageing and health is not for the book shelf it is a living breathing testament to all older people who have fought for their voice to be heard at all levels of government across disciplines and sectors. - Mr Bjarne Hastrup President International Federation on Ageing and CEO DaneAge This report outlines a framework for action to foster Healthy Ageing built around the new concept of functional ability. This will require a transformation of health systems away from disease based curative models and towards the provision of older-person-centred and integrated care. It will require the development sometimes from nothing of comprehensive systems of long term care. It will require a coordinated response from many other sectors and multiple levels of government. And it will need to draw on better ways of measuring and monitoring the health and functioning of older populations. These actions are likely to be a sound investment in society's future. A future that gives older people the freedom to live lives that previous generations might never have imagined. The World report on ageing and health responds to these challenges by recommending equally profound changes in the way health policies for ageing populations are formulated and services are provided. As the foundation for its recommendations the report looks at what the latest evidence has to say about the ageing process noting that many common perceptions and assumptions about older people are based on outdated stereotypes. The report's recommendations are anchored in the evidence comprehensive and forward-looking yet eminently practical. Throughout examples of experiences from different countries are used to illustrate how specific problems can be addressed through innovation solutions. Topics explored range from strategies to deliver comprehensive and person-centred services to older populations to policies that enable older people to live in comfort and safety to ways to correct the problems and injustices inherent in current systems for long-term care.

The Skeptical Environmentalist challenges widely held beliefs that the environmental situation is getting worse and worse. The author, himself a former member of Greenpeace, is critical of the way in which many environmental organisations make selective and misleading use of the scientific evidence. Using the best available statistical information from internationally recognised research institutes, Bjørn Lomborg systematically examines a range of major environmental problems that feature prominently in headline news across the world. His arguments

are presented in non-technical, accessible language and are carefully backed up by over 2500 footnotes allowing readers to check sources for themselves. Concluding that there are more reasons for optimism than pessimism, Bjørn Lomborg stresses the need for clear-headed prioritisation of resources to tackle real, not imagined problems. The Skeptical Environmentalist offers readers a non-partisan stocktaking exercise that serves as a useful corrective to the more alarmist accounts favoured by campaign groups and the media.

Human Anatomy, Media Update, Sixth Edition builds upon the clear and concise explanations of the best-selling Fifth Edition with a dramatically improved art and photo program, clearer explanations and readability, and more integrated clinical coverage. Recognized for helping students establish the framework needed for understanding how anatomical structure relates to function, the text's engaging descriptions now benefit from a brand-new art program that features vibrant, saturated colors as well as new side-by-side cadaver photos. New Focus figures have been added to help students grasp the most difficult topics in anatomy. This is the standalone book. If you want the package order this ISBN: 0321753267 / 9780321753267 Human Anatomy with MasteringA&P(TM), Media Update Package consists of: 0321753275 / 9780321753274 Human Anatomy, Media Update 0321754182 / 9780321754189 Practice Anatomy Lab 3. 0321765079 / 9780321765079 MasteringA&P with Pearson eText Student Access Code Card for Human Anatomy, Media Update 0321765648 / 9780321765642 Wrap Card for Human Anatomy with Practice Anatomy Lab 3.0, Media Update 080537373X / 9780805373738 Brief Atlas of the Human Body, A

Organizations today have access to vast stores of data that come in a wide variety of forms and may be stored in places ranging from file cabinets to databases, and from library shelves to the Internet. The enormous growth in the quantity of data, however, has brought with it growing problems with the quality of information, further complicated by the struggles many organizations are experiencing as they try to improve their systems for knowledge management and organizational memory. Failure to manage information properly, or inaccurate data, costs businesses billions of dollars each year. This volume presents cutting-edge research on information quality. Part I seeks to understand how data can be measured and evaluated for quality. Part II deals with the problem of ensuring quality while processing data into information a company can use. Part III presents case studies, while Part IV explores organizational issues related to information quality. Part V addresses issues in information quality education.

The 2018 edition of The State of World Fisheries and Aquaculture emphasizes the sector's role in achieving the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, and measurement of progress towards these goals. It notes the particular contributions of inland and small-scale fisheries, and highlights the importance of rights-based governance for equitable and inclusive development. As in past editions, the publication begins with a global analysis of trends in fisheries and aquaculture production, stocks, processing and use, trade and consumption, based on the latest official statistics, along with a review of the status of the world's fishing fleets and human engagement and governance in the sector. Topics explored in Parts 2 to 4 include aquatic biodiversity; the ecosystem approach to fisheries and to aquaculture; climate change impacts and responses; the sector's contribution to food security and human nutrition; and issues related to international trade, consumer protection and sustainable value chains. Global developments in combating illegal, unreported and unregulated fishing, selected ocean pollution concerns and FAO's efforts to improve capture fishery data are also discussed. The issue concludes with the outlook for the sector, including projections to 2030. As always, The State of World Fisheries and Aquaculture aims to provide objective, reliable and up-to-date information to a wide audience, including policy-makers, managers, scientists, stakeholders and indeed all those interested in the fisheries and aquaculture sector.

This concise guide provides all the content you need for the IB Diploma in Biology at both Standard and Higher Level.\* Follows the structure of the IB Programme exactly and include all the options\* Each topic is presented on its own page for clarity\* Standard and Higher Level material clearly indicated\* Plenty of practice questions\* Written with an awareness that English may not be the reader's first language  
This book discusses key issues concerning water, energy and food in the Middle East and North Africa (MENA) region. It provides an interdisciplinary account of current developments in the most water-scarce and conflict-torn region in the world. Key analysts on MENA water, agriculture and energy affairs have been drawn together to compile one of the first edited volumes dedicated to the crucial role of water, energy and food security in the 21st century MENA region. It will be of interest to decision-makers, analysts and students of the future of the Middle East from a broad range of disciplines including the physical and social sciences. This book was previously published as a special issue of the International Journal of Water Resources Development.

This revision of Bloom's taxonomy is designed to help teachers understand and implement standards-based curriculums. Cognitive psychologists, curriculum specialists, teacher educators, and researchers have developed a two-dimensional framework, focusing on knowledge and cognitive processes. In combination, these two define what students are expected to learn in school. It explores curriculums from three unique perspectives-cognitive psychologists (learning emphasis), curriculum specialists and teacher educators (C & I emphasis), and measurement and assessment experts (assessment emphasis). This revisited framework allows you to connect learning in all areas of curriculum. Educators, or others interested in educational psychology or educational methods for grades K-12.

According to estimates by the International Land Coalition based at the International Fund for Agricultural Development (IFAD), 57 million hectares of land have been leased to foreign investors since 2007. Current research has focused on human rights issues related to inward investment in land but has been ignorant of water resource issues and the challenges of managing scarce water. This handbook will be the first to address inward investment in land and its impact on water resources in Africa. The geographical scope of this book will be the African continent, where land has attracted the attention of risk-taking investors because much land is under-utilised marginalized land, with associated water resources and rapidly growing domestic food markets. The successful implementation of investment strategies in African agriculture could determine the future of more than one billion people. An important factor to note is that sub-Saharan Africa will, of all the continents, be hit hardest by climate change, population growth and food insecurity. Sensible investment in agriculture is therefore needed, however, at what costs and at whose expense? The book will also address the livelihoods theme and provide a holistic analysis of land and water grabbing in sub-Saharan Africa. Four other themes will be addressed: politics, economics, the environment and the history of land investments in sub-Saharan Africa.

The editors have involved a highly diverse group of expert researchers, who will review the pro- and anti-investment arguments, geopolitics, the role of capitalist investors, the environmental contexts and the political implications of, and reasons for, leasing millions of hectares in sub-Saharan Africa. To date, there has been no attempt to review land investments through a suite of different lenses, thus this handbook will differ significantly from existing research and publication. The editors are Tony Allan, (Professor Emeritus, Department of Geography, School of Oriental and African Studies and King's College London); Jeroen Warner (Assistant Professor, Disaster Studies, University of Wageningen); Suvi Sojamo (PhD Researcher, Water and Development Research Group, Aalto University); and Martin Keulertz (PhD Researcher, Department of Geography, London Water Group, King's College London).

Organic fertiliser refers to materials used as fertiliser that occur regularly in nature, usually as a by product or end product of a naturally occurring process. Organic fertilisers such as manure have been used in agriculture for thousands of years; ancient farmers did not understand the chemistry involved, but they did recognise the benefit of providing their crops with organic material. Interest in organic farming is growing world-wide as sustainable agricultural practice nowadays. Organic fertilisers are sustained sources of nutrients due to slow release during decomposition. By increasing soil organic matter, organic farming can reinstate the natural fertility of the damaged soil, which will improve the crop productivity to feed the growing population. Organic fertilisers enhance the natural soil processes, which have long-term effects on soil fertility. The book is a very valuable compilation in this direction.

“What are you reading?” That’s the question Will Schwalbe asks his mother, Mary Anne, as they sit in the waiting room of the Memorial Sloan-Kettering Cancer Center. In 2007, Mary Anne returned from a humanitarian trip to Pakistan and Afghanistan suffering from what her doctors believed was a rare type of hepatitis. Months later she was diagnosed with a form of advanced pancreatic cancer, which is almost always fatal, often in six months or less. This is the inspiring true story of a son and his mother, who start a “book club” that brings them together as her life comes to a close. Over the next two years, Will and Mary Anne carry on conversations that are both wide-ranging and deeply personal, prompted by an eclectic array of books and a shared passion for reading. Their list jumps from classic to popular, from poetry to mysteries, from fantastic to spiritual. The issues they discuss include questions of faith and courage as well as everyday topics such as expressing gratitude and learning to listen. Throughout, they are constantly reminded of the power of books to comfort us, astonish us, teach us, and tell us what we need to do with our lives and in the world. Reading isn’t the opposite of doing; it’s the opposite of dying. Will and Mary Anne share their hopes and concerns with each other—and rediscover their lives—through their favorite books. When they read, they aren’t a sick person and a well person, but a mother and a son taking a journey together. The result is a profoundly moving tale of loss that is also a joyful, and often

humorous, celebration of life: Will's love letter to his mother, and theirs to the printed page. This eBook edition includes a Reading Group Guide.

Magnetism is important in environmental studies for several reasons, the two most fundamental being that most substances exhibit some form of magnetic behavior, and that iron is one of the most common elements in the Earth's crust. Once sequestered in a suitable material, magnetic particles constitute a natural archive of conditions existing in former times. Magnetism provides a tracer of paleo-climatic and paleo-environmental conditions and processes. Environmental Magnetism details the occurrence and uses of magnetic materials in the natural environment. The first half of the volume describes the basic principles. The second half discusses the applications of magnetic measurements in various environmental settings on land, in lakes, in the ocean, and even various biological organisms. \* Material is broadly applicable to environmental studies \* Case histories illustrate key points \* Extensive bibliography makes further research quick and easy

Taking into consideration the variety of information being created, produced, and published, the acquisition and archiving of e-resources by digital libraries is rapidly increasing. As such, managing the rights to these resources is imperative. The Handbook of Research on Managing Intellectual Property in Digital Libraries is a pivotal reference source for the latest scholarly research on strategies in which digital libraries engage in the management of increasing digital intellectual property to protect both the users and the creators of the resources. Featuring coverage on a broad range of topics such as copyright management, open access, and software programs, this book is ideally designed for academicians, researchers, and practitioners seeking material on property rights and e-resources.

"... an important intervention in the conversation around social and ecological sustainability that draws on both micromarketing and macromarketing scholarship to help the reader understand the challenges with illustrations from insightful cases both from emerging and developed economies. This compilation should be essential reading for the discerning student of sustainable consumption and production." -- Professor Pierre McDonagh, Associate Editor, Journal of Macromarketing (USA); Professor of Critical Marketing & Society, University of Bath, UK Experts in the field of economics, management science, and particularly in the marketing domain have always been interested in and acknowledged the importance of sustaining profitable businesses while incorporating societal and environmental concerns; however, the level of existing literature and availability of teaching cases reflect a dearth of real case studies, especially those focused on marketing for social good. This book of actual case studies will address that need. In addition, this book is important and timely in providing a case book for instructors (those in both industry and academia) to help them in teaching and training the next generation of leaders through corporate training and universities. Currently,

marketing for social good is increasingly becoming a part of most curriculums under the umbrella of different titles, such as social marketing, green marketing, and sustainability marketing. The relevance of these studies is increasing across the globe. This book is composed of long and short real cases with varying complexity in different sectors. This case book will also cover some review articles for an overview of the recent developments in the study area. With these case studies, collections of questions, teaching materials, and real-life marketing scenarios, this book offers a unique source of knowledge to marketing professionals, students, and educators across the world. The main objective of this case book is to understand the applicability of marketing science (marketing for social good context, such as social marketing and sustainability marketing) in internet marketing related to e-buying behavior and e-WOM. In addition, it illustrates the various types of existing marketing practices that are relevant from both theoretical and practical points of view in this electronic era, as well as discussing other non-electronic marketing practices and focusing on consumer buying behavior. As a result, marketing managers can treat their customers according to their desired value. This book particularly explores the possibilities and advantages created by social marketing and sustainability marketing through the presentation of thorough review articles and case studies. This case book helps corporate training centers and universities with compact teaching reference materials in their relevant courses.

Service-Oriented Computing - ICSOC Workshops 2012 ICSOC 2012, International Workshops ASC, DISA, PAASC, SCEB, SeMaPS, and WESOA, and Satellite Events, Shanghai, China, November 12-15, 2012, Revised Selected Papers Springer

These little books are specially designed for children to practise blending sounds together to make words. Each book provides a series of words and short phrases (following the Letters and Sounds Phases and Sets) for children to practise sounding and blending. This pack contains 1 copy of all 14 titles, covering Phases 2 to 4.

Ties between the United States (US) and the European Union (EU) rival those between any other pair of international actors. After all, no other regions of the world are as closely connected in economics, security and politics as Europe and the US. This comprehensive volume makes conceptual progress and empirical contributions in accounting for how EU-US relations have been impacted by a context of multiple EU crises alongside a parallel change in US policies. The authors find strong evidence to suggest that the transatlantic relationship is weakening. This is partly a consequence of the EU's internal policies, as it becomes more unified and autonomous of the US in some areas, while fragmenting in others. Most importantly, it is a consequence of the two actors' increasingly diverging perspectives and positions on international issues, institutions, norms and indeed the value of the transatlantic relationship. Although the long-term effects remain to be seen, it is likely that the cracks in the foundation of transatlantic relations will continue into the present and foreseeable future. This book was originally published as a special issue of the Journal of European Integration.

Following the 1979 Islamic Revolution, there was a dramatic reversal of women's rights, and the state revived many premodern social conventions through modern means and institutions. Customs such as the enforced veiling of women, easy divorce for men, child marriage, and polygamy were robustly reintroduced and those who did not conform to societal strictures were severely punished. At the same time, new

social and economic programs benefited the urban and rural poor, especially women, which had a direct impact on gender relations and the institution of marriage. Edited by Janet Afary and Jesilyn Faust, this interdisciplinary volume responds to the growing interest and need for literature on gender, marriage and family relations in the Islamic context. The book examines how the institution of marriage transformed in Iran, paying close attention to the country's culture and politics. Part One examines marital changes in the rural and tribal sectors of society through the works of anthropologists Erika Friedl and Mary Hegland. Part Two turns its eye to look at changes in urban marriages to new forms of cohabitation. In Part Three, the contributors explore the way technology and social media has impacted and altered the institution of family. Based on the work of new and established scholars, the collection provides an up-to-date study of an important and intensely politicized subject.

A remarkable document of ancient Chinese history: “[An] indispensable addition to modern sinology.” —China Review International This volume of *The Grand Scribe's Records* includes the second segment of Han-dynasty memoirs and deals primarily with men who lived and served under Emperor Wu (r. 141–87 B.C.). The lead chapter presents a parallel biography of two ancient physicians, Pien Ch'üeh and Ts'ang Kung, providing a transition between the founding of the Han dynasty and its heyday under Wu. The account of Liu P'i is framed by the great rebellion he led in 154 B.C. and the remaining chapters trace the careers of court favorites, depict the tribulations of an ill-fated general, discuss the Han's greatest enemy, the Hsiung-nu, and provide accounts of two great generals who fought them. The final memoir is structured around memorials by two strategists who attempted to lead Emperor Wu into negotiations with the Hsiung-nu, a policy that Ssu-ma Ch'ien himself supported.

Equip your learners with the skills central to success. Enabling you to build, extend and perfect the skills crucial to achievement, this text strengthens performance in all areas of assessment. With a focus on practical work that accessibly connects material to real, global issues, it develops a thorough foundation of skills that drive performance.

*An Introduction to Solar Radiation* is an introductory text on solar radiation, with emphasis on the methods of calculation for determining the amount of solar radiation incident on a surface on the earth. Topics covered include the astronomical relationship between the sun and the earth; thermal radiation; the solar constant and its spectral distribution; and extraterrestrial solar irradiation. This book is comprised of 12 chapters and begins with an overview of the trigonometric relationships between the sun-earth line and the position of an inclined surface, followed by a discussion on the characteristics of blackbody radiation. The next chapter focuses on the solar constant and its spectral distribution, paying particular attention to extraterrestrial solar spectral irradiance and the sun's blackbody temperature. Subsequent chapters explore extraterrestrial radiation incident on inclined planes; the optics of a cloudless-sky atmosphere; solar spectral radiation and total (broadband) radiation under cloudless skies; and solar radiation arriving at horizontal surfaces on the earth through cloudy skies. The ground albedo and its spectral and angular variation are also described, along with insolation on inclined surfaces. The last chapter is devoted to instruments for measuring solar radiation, including pyrliometers and pyranometers. This monograph will serve as a useful guide for energy analysts, designers of thermal devices, architects and engineers, agronomists, and hydrologists as well as senior graduate students.

Alcohol use disorder (AUD) is a major public health problem in the United States. The estimated 12-month and lifetime prevalence values for AUD are 13.9% and 29.1%, respectively, with approximately half of individuals with lifetime AUD having a severe disorder. AUD and its sequelae also account for significant excess mortality and cost the United States more than \$200 billion annually. Despite its high prevalence and numerous negative consequences, AUD remains undertreated. In fact, fewer than 1 in 10 individuals in the United States with a

12-month diagnosis of AUD receive any treatment. Nevertheless, effective and evidence-based interventions are available, and treatment is associated with reductions in the risk of relapse and AUD-associated mortality. The American Psychiatric Association Practice Guideline for the Pharmacological Treatment of Patients With Alcohol Use Disorder seeks to reduce these substantial psychosocial and public health consequences of AUD for millions of affected individuals. The guideline focuses specifically on evidence-based pharmacological treatments for AUD in outpatient settings and includes additional information on assessment and treatment planning, which are an integral part of using pharmacotherapy to treat AUD. In addition to reviewing the available evidence on the use of AUD pharmacotherapy, the guideline offers clear, concise, and actionable recommendation statements, each of which is given a rating that reflects the level of confidence that potential benefits of an intervention outweigh potential harms. The guideline provides guidance on implementing these recommendations into clinical practice, with the goal of improving quality of care and treatment outcomes of AUD.

inch....this work is likely to become a standart work very quickly and is to be recommended to all schools where recorder studies are undertaken inch. (Oliver James, Contact Magazine) A novel and comprehensive approach to transferring from the C to F instrument. 430 music examples include folk and national songs (some in two parts), country dance tunes and excerpts from the standard treble repertoire of Bach, Barsanti, Corelli, Handel, Telemann, etc. An outstanding feature of the book has proved to be Brian Bonsor's brilliantly simple but highly effective practice circles and recognition squares designed to give, in only a few minutes, concentrated practice on the more usual leaps to and from each new note and instant recognition of random notes. Quickly emulating the outstanding success of the descant tutors, these books are very popular even with those who normally use tutors other than the Enjoy the Recorder series.

This book constitutes the thoroughly refereed proceedings of the 2012 ICSOC Workshops consisting of 6 scientific satellite events, organized in 3 main tracks including workshop track (ASC, DISA, PAASC, SCEB, SeMaPS and WESOA 2012), PhD symposium track, demonstration track; held in conjunction with the 10th International Conference on Service-Oriented Computing (ICSOC), in Shanghai, China, November 2012. The 53 revised papers presents a wide range of topics that fall into the general area of service computing such as business process management, distributed systems, computer networks, wireless and mobile computing, grid computing, networking, service science, management science, and software engineering.

Ecosystems provide a way of understanding our world, by exploring the systems that link living organisms to their environment. People are an important component of ecosystems at all scales, and human activity can affect them in both constructive and destructive ways. To manage them effectively, we need to understand the way they work and how they change.

Twenty five years ago the first Human Development Report in 1990 began with a simple notion: that development is about enlarging people's choices—focusing broadly on the richness of human lives rather than narrowly on the richness of economies. This Report starts with a fundamental question—how can work enhance human development? The Report takes a broad view of work, going beyond jobs and taking into account such activities as unpaid care work, voluntary work and creative work—all of which contribute to the richness of human lives. The Report highlights impressive progress on human development over the past quarter century.

Dealing with earth science and biology, this volume covers such topics as the origins of life, the role of water, and the impact of civilization on the environment

Global Change and Future Earth is derived from the work of several programs of the International Union of Geodesy and Geophysics (IUGG). It demonstrates how multi- and inter-disciplinary research outputs from the geoscience community can be applied to tackle the physical and societal impacts of climate change and contribute to the Future Earth programme of the International Council for Science. The volume brings together an international team of eminent researchers to provide authoritative reviews on the wide-ranging ramifications of climate change spanning eight key themes: planetary issues; geodetic issues; the Earth's fluid environment; regions of the Earth; urban environments; food security; and risk, safety and security; and climate change and global change. Covering the challenges faced by urban and rural areas, and in both developed and developing countries, this volume provides an important resource for a global audience of graduate students and researchers from a broad range of disciplines, as well as policy advisors and practitioners.

A respected resource for decades, the Guide for the Care and Use of Laboratory Animals has been updated by a committee of experts, taking into consideration input from the scientific and laboratory animal communities and the public at large. The Guide incorporates new scientific information on common laboratory animals, including aquatic species, and includes extensive references. It is organized around major components of animal use: Key concepts of animal care and use. The Guide sets the framework for the humane care and use of laboratory animals. Animal care and use program. The Guide discusses the concept of a broad Program of Animal Care and Use, including roles and responsibilities of the Institutional Official, Attending Veterinarian and the Institutional Animal Care and Use Committee. Animal environment, husbandry, and management. A chapter on this topic is now divided into sections on terrestrial and aquatic animals and provides recommendations for housing and environment, husbandry, behavioral and population management, and more. Veterinary care. The Guide discusses veterinary care and the responsibilities of the Attending Veterinarian. It includes recommendations on animal procurement and transportation, preventive medicine (including animal biosecurity), and clinical care and management. The Guide addresses distress and pain recognition and relief, and issues surrounding euthanasia. Physical plant. The Guide identifies design issues, providing construction guidelines for functional areas; considerations such as drainage, vibration and noise control, and environmental monitoring; and specialized facilities for animal housing and research needs. The Guide for the Care and Use of Laboratory Animals provides a framework for the judgments required in the management of animal facilities. This updated and expanded resource of proven value will be important to scientists and researchers, veterinarians, animal care personnel, facilities managers, institutional administrators, policy makers involved in research issues, and animal welfare advocates.

The fourth edition of the Handbook of Human Factors and Ergonomics has been completely revised and updated. This includes all existing third edition chapters plus new chapters written to cover new areas. These include the following subjects: Managing low-back disorder risk in the workplace Online interactivity Neuroergonomics Office ergonomics Social networking HF&E in motor

vehicle transportation User requirements Human factors and ergonomics in aviation Human factors in ambient intelligent environments As with the earlier editions, the main purpose of this handbook is to serve the needs of the human factors and ergonomics researchers, practitioners, and graduate students. Each chapter has a strong theory and scientific base, but is heavily focused on realworld applications. As such, a significant number of case studies, examples, figures, and tables are included to aid in the understanding and application of the material covered.

An introduction to a broad range of topics in deep learning, covering mathematical and conceptual background, deep learning techniques used in industry, and research perspectives. “Written by three experts in the field, Deep Learning is the only comprehensive book on the subject.” —Elon Musk, cochair of OpenAI; cofounder and CEO of Tesla and SpaceX Deep learning is a form of machine learning that enables computers to learn from experience and understand the world in terms of a hierarchy of concepts. Because the computer gathers knowledge from experience, there is no need for a human computer operator to formally specify all the knowledge that the computer needs. The hierarchy of concepts allows the computer to learn complicated concepts by building them out of simpler ones; a graph of these hierarchies would be many layers deep. This book introduces a broad range of topics in deep learning. The text offers mathematical and conceptual background, covering relevant concepts in linear algebra, probability theory and information theory, numerical computation, and machine learning. It describes deep learning techniques used by practitioners in industry, including deep feedforward networks, regularization, optimization algorithms, convolutional networks, sequence modeling, and practical methodology; and it surveys such applications as natural language processing, speech recognition, computer vision, online recommendation systems, bioinformatics, and videogames. Finally, the book offers research perspectives, covering such theoretical topics as linear factor models, autoencoders, representation learning, structured probabilistic models, Monte Carlo methods, the partition function, approximate inference, and deep generative models. Deep Learning can be used by undergraduate or graduate students planning careers in either industry or research, and by software engineers who want to begin using deep learning in their products or platforms. A website offers supplementary material for both readers and instructors.

This report takes a broad view of the link between work and human development. Work is a critical tool for economic growth and security, poverty reduction and gender equality. It enables full participation in society while affording people a sense of dignity and worth. Humans working together not only increase their material well-being, they also accumulate a wide body of knowledge that serves as the basis for cultures and civilizations. The report finds that work enhances human development when policies are taken to expand productive, remunerative and satisfying work opportunities. Workers' skills and potentials are enhanced, their well-being in terms of rights, safety and benefits are ensured with

targeted interventions, and an agenda incorporating decent work, a new Social Contract and a Global Deal is pursued. The development of new and social networking sites, as well as the growth of transnational Arab television, has triggered a debate about the rise in transnational political and religious identification, as individuals and groups negotiate this new triad of media, religion and culture. This book examines the implications of new media on the rise of political Islam and on Islamic religious identity in the Arab Middle East and North Africa, as well as among Muslim Arab Diasporas. Undoubtedly, the process of globalization, especially in the field of media and ICTs, challenges the cultural and religious systems, particularly in terms of identity formation. Across the world, Arab Muslims have embraced new media not only as a source of information but also as a source of guidance and fatwas, thereby transforming Muslim practices and rituals. This volume brings together chapters from a range of specialists working in the field, presenting a variety of case studies on new media, identity formation and political Islam in Muslim communities both within and beyond the MENA region. Offering new insight into the influence of media exposure on national, political, and cultural boundaries of the Islamic identity, this book is a valuable resource for students and scholars of Middle Eastern politics, specifically political Islam and political communication.

The Tongue and Quill has been a valued Air Force resource for decades and many Airmen from our Total Force of uniformed and civilian members have contributed their talents to various editions over the years. This revision is built upon the foundation of governing directives and user's inputs from the unit level all the way up to Headquarters Air Force. A small team of Total Force Airmen from the Air University, the United States Air Force Academy, Headquarters Air Education and Training Command (AETC), the Air Force Reserve Command (AFRC), Air National Guard (ANG), and Headquarters Air Force compiled inputs from the field and rebuilt The Tongue and Quill to meet the needs of today's Airmen. The team put many hours into this effort over a span of almost two years to improve the content, relevance, and organization of material throughout this handbook. As the final files go to press it is the desire of The Tongue and Quill team to say thank you to every Airman who assisted in making this edition better; you have our sincere appreciation! This book argues that Internet diffusion and use in the Middle East enables meaningful micro-changes in citizens' lives, even in states where no Arab Spring revolution occurred. Using ethnographic evidence and taking a comparative perspective, it presents a grass roots look at how new media use fits into the practice of everyday life. It explores why citizens use social media to digitally route around state and other forms of power at work in their lives. This increase in citizen civic engagement, supported by new media use, offers the possibility of a new order of things, from redefining patriarchal power relations at home, to reconfigurations of citizens' relationships with the state, broadly defined. The author argues that new media channels offer pathways to empowerment widely and cheaply in the Middle East.

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