calculus coursera

calculus coursera is an excellent gateway for learners seeking to master the fundamentals of calculus through an accessible online platform. With the increasing demand for mathematical proficiency in various fields such as engineering, physics, economics, and data science, understanding calculus has never been more crucial. Coursera offers a diverse range of calculus courses from top universities and institutions, providing learners with flexibility and quality education. This article will explore the offerings of calculus courses on Coursera, the benefits of online learning, tips for success, and insights into the curriculum structure.

The following sections will guide you through everything you need to know about calculus on Coursera, including course options, learning outcomes, and frequently asked questions.

- Overview of Calculus on Coursera
- Benefits of Learning Calculus Online
- Popular Calculus Courses on Coursera
- Course Structure and Curriculum
- Tips for Success in Online Calculus Courses
- Future of Calculus Education on Online Platforms

Overview of Calculus on Coursera

Coursera is a leading online learning platform that partners with top universities and organizations worldwide to deliver high-quality courses. The calculus courses available on Coursera are designed to cater to a wide audience, from beginners to advanced learners.

The platform offers a structured way to learn calculus concepts, including limits, derivatives, integrals, and the fundamental theorem of calculus. Courses typically include video lectures, quizzes, peer-reviewed assignments, and interactive content that enhances the learning experience.

Learners can choose from courses that focus on theoretical aspects, practical applications, or both. This flexibility allows individuals to tailor their learning experience based on their goals, whether they are preparing for exams, enhancing their career skills, or simply exploring a new subject.

Benefits of Learning Calculus Online

Learning calculus online through platforms like Coursera presents several advantages that traditional classroom settings may not offer.

Flexibility and Accessibility

One of the primary benefits of online learning is flexibility. Learners can access course materials anytime and anywhere, allowing them to study at their own pace. This is particularly beneficial for those balancing work, studies, or personal commitments.

Diverse Learning Resources

Coursera courses often include a variety of learning resources, such as interactive exercises, videos, and discussion forums. This multi-faceted approach caters to different learning styles, making it easier for students to grasp complex calculus concepts.

Expert Instruction

Courses on Coursera are typically taught by experienced educators and industry professionals. This means learners receive instruction from experts who are knowledgeable in their field, ensuring a high-quality educational experience.

Popular Calculus Courses on Coursera

Coursera hosts several well-regarded calculus courses that cater to different levels of expertise. Here are some of the most popular options:

- Calculus: Single Variable Offered by the University of Pennsylvania, this course covers topics such as limits, derivatives, and integrals in a single-variable context.
- Calculus: Multivariable This course, also from the University of Pennsylvania, dives into functions of multiple variables and explores concepts like partial derivatives and multiple integrals.
- Introduction to Calculus A beginner-friendly course from Stanford University that focuses on foundational calculus concepts, ideal for those new to the subject.
- Mathematics for Machine Learning: Multivariable Calculus This course emphasizes calculus applications within machine learning, appealing to tech and data science enthusiasts.

Each of these courses provides unique insights and applications of calculus, allowing learners to choose based on their interests and career goals.

Course Structure and Curriculum

Understanding the course structure is crucial for prospective learners. Most calculus courses on Coursera are divided into modules, each focusing on specific topics.

Typical Course Components

Courses generally include the following components:

- **Video Lectures:** Short, engaging videos that explain concepts and provide examples.
- **Quizzes:** Assessments at the end of each module to reinforce learning and gauge understanding.
- **Assignments:** Problem sets and projects designed to apply learned concepts to practical situations.
- **Discussion Forums:** Platforms for students to ask questions, share insights, and collaborate with peers.

Learning Outcomes

Upon completing a calculus course on Coursera, learners can expect to:

- Understand and apply fundamental concepts of calculus.
- Analyze and solve mathematical problems using calculus techniques.
- Develop critical thinking and analytical skills applicable in various fields.

Tips for Success in Online Calculus Courses

To succeed in calculus courses on Coursera, learners should consider the following strategies:

Stay Organized

Create a study schedule that allocates regular time blocks for learning. Keeping track of deadlines for assignments and quizzes is essential.

Engage with Materials

Actively participate in discussions, complete all assignments, and take advantage of additional resources provided in the courses.

Utilize Supplementary Resources

If certain concepts are challenging, supplement your learning with external resources such as textbooks, online tutorials, or study groups.

Future of Calculus Education on Online Platforms

As online education continues to evolve, calculus courses on platforms like Coursera are likely to become even more sophisticated.

Innovations such as adaptive learning technologies, enhanced interactive simulations, and AI-driven tutoring could revolutionize how calculus is taught online. This progression will enable a more personalized learning experience, catering to the unique needs of each student.

The future also points towards greater integration of real-world applications in calculus education, particularly in fields such as data science, engineering, and economics. As demand for these skills rises, so too will the emphasis on equipping learners with practical knowledge that can be applied in real-world scenarios.

FAQ Section

Q: What prerequisites do I need to take a calculus course on Coursera?

A: Most calculus courses on Coursera recommend a basic understanding of algebra and precalculus. Familiarity with functions, graphs, and mathematical reasoning will greatly enhance your learning experience.

Q: Can I earn a certificate after completing a calculus course?

A: Yes, upon successful completion of a calculus course, you can earn a certificate that can be shared on your resume or LinkedIn profile, demonstrating your knowledge and skills in calculus.

Q: How much time should I expect to dedicate to a calculus course?

A: The time commitment varies by course, but on average, learners should expect to spend 4-6 hours per week on video lectures, readings, and assignments.

Q: Are there any free calculus courses available on Coursera?

A: Yes, many calculus courses on Coursera offer the option to audit the course for free, allowing you to access course materials without a fee, though certificates may require payment.

Q: What if I struggle with calculus concepts during the course?

A: Most courses provide discussion forums where you can ask questions and seek help from instructors and peers. Additionally, utilizing external resources can aid in understanding challenging topics.

Q: How do I choose the right calculus course for me?

A: Consider your current level of understanding, your learning goals, and whether you prefer a course focused on theory, application, or a specific area like multivariable calculus.

Q: Can I interact with instructors in Coursera calculus courses?

A: While direct interaction may be limited, many courses include discussion forums where you can ask questions and receive feedback from instructors and fellow learners.

Q: Are the courses self-paced, or do they follow a set schedule?

A: Many calculus courses on Coursera are self-paced, allowing you to complete the material on your own schedule. However, some courses may have specific deadlines for assignments and exams.

Q: How can I apply calculus knowledge in my career?

A: Calculus is essential in various fields, including engineering, physics, economics, and data science. Understanding calculus can enhance problem-solving skills and analytical

thinking, making you more competitive in the job market.

Calculus Coursera

Find other PDF articles:

http://www.speargroupllc.com/business-suggest-008/pdf?docid=JXA84-8978&title=business-lead.pdf

calculus coursera: NumPy: Beginner's Guide Ivan Idris, 2015-06-24 In today's world of science and technology, it's all about speed and flexibility. When it comes to scientific computing, NumPy tops the list. NumPy will give you both speed and high productivity. This book will walk you through NumPy with clear, step-by-step examples and just the right amount of theory. The book focuses on the fundamentals of NumPy, including array objects, functions, and matrices, each of them explained with practical examples. You will then learn about different NumPy modules while performing mathematical operations such as calculating the Fourier transform, finding the inverse of a matrix, and determining eigenvalues, among many others. This book is a one-stop solution to knowing the ins and outs of the vast NumPy library, empowering you to use its wide range of mathematical features to build efficient, high-speed programs.

calculus coursera: MOOCs and Open Education Around the World Curtis J. Bonk, Mimi M. Lee, Thomas C. Reeves, Thomas H. Reynolds, 2015-06-12 As new digital forms of formal and informal learning proliferate, there is an increasing need to better understand how people in different regions of the world are implementing massive open online courses (MOOCs) and other forms of open educational resources (OERs). Educators, researchers, politicians, and numerous other stakeholders want to grasp what the outcomes of these initiatives are and how they can be improved. Ongoing e-learning developments related to both technology and pedagogy have pushed institutions and organizations to grapple with issues of accreditation, credentialing, quality standards, innovative assessment, and learner motivation and attrition, among other areas of concern. In response, MOOCs and Open Education Around the World explores and illuminates unique implementations of MOOCs and open education across regions and nations. The book also focuses on the various opportunities as well as the dilemmas presented in this rapidly evolving age of technology-enabled learning. What are the different delivery formats, interaction possibilities, assessment schemes, and business models? What are the key controversies or issues that must be discussed and addressed? This edited collection explains MOOCs and open education trends and issues in a variety of contexts, shares key research findings, and provides practical suggestions and recommendations for the near future.

calculus coursera: How Smart Machines Think Sean Gerrish, 2019-10-22 Everything you want to know about the breakthroughs in AI technology, machine learning, and deep learning—as seen in self-driving cars, Netflix recommendations, and more. The future is here: Self-driving cars are on the streets, an algorithm gives you movie and TV recommendations, IBM's Watson triumphed on Jeopardy over puny human brains, computer programs can be trained to play Atari games. But how do all these things work? In this book, Sean Gerrish offers an engaging and accessible overview of the breakthroughs in artificial intelligence and machine learning that have made today's machines so smart. Gerrish outlines some of the key ideas that enable intelligent machines to perceive and interact with the world. He describes the software architecture that allows self-driving cars to stay on the road and to navigate crowded urban environments; the million-dollar Netflix competition for a better recommendation engine (which had an unexpected ending); and how programmers trained computers to perform certain behaviors by offering them treats, as if they were training a dog. He

explains how artificial neural networks enable computers to perceive the world—and to play Atari video games better than humans. He explains Watson's famous victory on Jeopardy, and he looks at how computers play games, describing AlphaGo and Deep Blue, which beat reigning world champions at the strategy games of Go and chess. Computers have not yet mastered everything, however; Gerrish outlines the difficulties in creating intelligent agents that can successfully play video games like StarCraft that have evaded solution—at least for now. Gerrish weaves the stories behind these breakthroughs into the narrative, introducing readers to many of the researchers involved, and keeping technical details to a minimum. Science and technology buffs will find this book an essential guide to a future in which machines can outsmart people.

calculus coursera: A textbook of Engineering Mathematics Part 2 Prof (Dr) Basant Kumar Singh, Dr Sushil Kumar jamariar, Dr Dinesh Singh, 2025-03-31 Master the fundamental concepts of Ordinary Differential Equations, Partial Differential Equations, Fourier Series, Complex Variables, and Vector Calculus with this well-structured and student-friendly textbook. Designed specifically for B.Tech first-year students, this book provides clear explanations, step-by-step derivations, and practical applications to strengthen mathematical problem-solving skills. Key Features:
Detailed Coverage - Covers essential topics like Second-Order Linear Differential Equations, Legendre Polynomials, Fourier Transforms, and Residue Theorem.
Conceptual Clarity - Simplifies complex mathematical concepts with easy-to-follow explanations and examples.
Real-World Applications - Demonstrates the practical relevance of mathematical theories in engineering.
Problem-Solving Approach - Includes previous years' exam questions to help students prepare effectively.
Comprehensive Exercises - Offers a variety of solved and unsolved problems for practice. Perfect for engineering students, competitive exam aspirants, and mathematics enthusiasts, this book serves as an essential resource for mastering the mathematical foundations required for technical studies. Enhance your mathematical proficiency and excel in your exams with this indispensable quide!

calculus coursera: Learning Online Barbara Means, Marianne Bakia, Robert Murphy, 2014-04-03 At a time when more and more of what people learn both in formal courses and in everyday life is mediated by technology, Learning Online provides a much-needed guide to different forms and applications of online learning. This book describes how online learning is being used in both K-12 and higher education settings as well as in learning outside of school. Particular online learning technologies, such as MOOCs (massive open online courses), multi-player games, learning analytics, and adaptive online practice environments, are described in terms of design principles, implementation, and contexts of use. Learning Online synthesizes research findings on the effectiveness of different types of online learning, but a major message of the book is that student outcomes arise from the joint influence of implementation, context, and learner characteristics interacting with technology-not from technology alone. The book describes available research about how best to implement different forms of online learning for specific kinds of students, subject areas, and contexts. Building on available evidence regarding practices that make online and blended learning more effective in different contexts, Learning Online draws implications for institutional and state policies that would promote judicious uses of online learning and effective implementation models. This in-depth research work concludes with a call for an online learning implementation research agenda, combining education institutions and research partners in a collaborative effort to generate and share evidence on effective practices.

calculus coursera: Math for Deep Learning Ronald T. Kneusel, 2021-11-23 Math for Deep Learning provides the essential math you need to understand deep learning discussions, explore more complex implementations, and better use the deep learning toolkits. With Math for Deep Learning, you'll learn the essential mathematics used by and as a background for deep learning. You'll work through Python examples to learn key deep learning related topics in probability, statistics, linear algebra, differential calculus, and matrix calculus as well as how to implement data flow in a neural network, backpropagation, and gradient descent. You'll also use Python to work through the mathematics that underlies those algorithms and even build a fully-functional neural network. In addition you'll find coverage of gradient descent including variations commonly used by

the deep learning community: SGD, Adam, RMSprop, and Adagrad/Adadelta.

calculus coursera: STEM Education for the 21st Century Bryan Edward Penprase, 2020-04-07 This book chronicles the revolution in STEM teaching and learning that has arisen from a convergence of educational research, emerging technologies, and innovative ways of structuring both the physical space and classroom activities in STEM higher education. Beginning with a historical overview of US higher education and an overview of diversity in STEM in the US, the book sets a context in which our present-day innovation in science and technology urgently needs to provide more diversity and inclusion within STEM fields. Research-validated pedagogies using active learning and new types of research-based curriculum is transforming how physics, biology and other fields are taught in leading universities, and the book gives profiles of leading innovators in science education and examples of exciting new research-based courses taking root in US institutions. The book includes interviews with leading scientists and educators, case studies of new courses and new institutions, and descriptions of site visits where new trends in 21st STEM education are being developed. The book also takes the reader into innovative learning environments in engineering where students are empowered by emerging technologies to develop new creative capacity in their STEM education, through new centers for design thinking and liberal arts-based engineering. Equally innovative are new conceptual frameworks for course design and learning, and the book explores the concepts of Scientific Teaching, Backward Course Design, Threshold Concepts and Learning Taxonomies in a systematic way with examples from diverse scientific fields. Finally, the book takes the reader inside the leading centers for online education, including Udacity, Coursera and EdX, interviews the leaders and founders of MOOC technology, and gives a sense of how online education is evolving and what this means for STEM education. This book provides a broad and deep exploration into the historical context of science education and into some of the cutting-edge innovations that are reshaping how leading universities teach science and engineering. The emergence of exponentially advancing technologies such as synthetic biology, artificial intelligence and materials sciences has been described as the Fourth Industrial Revolution, and the book explores how these technologies will shape our future will bring a transformation of STEM curriculum that can help students solve many the most urgent problems facing our world and society.

calculus coursera: The Digital Revolution Inder Sidhu, 2015-11-28 The massive transformations driven by digital technology have begun. The Digital Revolution gives you a complete roadmap for navigating the breathtaking changes happening now and shows you how to succeed. Silicon Valley executive, thought leader, and New York Times best-selling author Inder Sidhu shows how cloud computing, social media, mobility, sensors, apps, big data analytics, and more can be brought together in virtually infinite combinations to create opportunities and pose risks previously unimaginable. You'll learn how digital pioneers are applying connected digital technologies, also known as the Internet of Everything, to dramatically improve financial performance, customer experience, and workforce engagement in fields ranging from healthcare to education, from retail to government. Sidhu combines the practical perspective of practitioners with the extensive experience of experts to show you how to win in the new digital age. He takes you behind the scenes, engaging with business leaders from Apple, Google, Facebook, Cisco, Intel, Amazon, Walmart, Starbucks, RSA, Kaiser, Cleveland Clinic, Intermountain Healthcare, and so on and with academic leaders from Stanford, Yale, Wharton, MIT, Coursera, Khan Academy, and more and reveals their winning strategies and execution tactics for your benefit. Sidhu also discusses the key challenges of privacy, security, regulation, and governance in depth and offers powerful insights on managing crucial ethical, social, cultural, legal, and economic issues that digitization creates. He shows what the digital revolution will mean for you, both personally and professionally--and how you can win. Learn how you can leverage the digital revolution to Deliver superior customer experiences Improve your organization's financial performance Drive employee productivity, creativity, and engagement Build smart, efficient cities brimming with opportunity Make education more effective and relevant Achieve better health outcomes Make retail compelling, convenient, and profitable

Balance privacy with security Protect yourself before, during, and after a cyberattack Accelerate your career and live a better life

calculus coursera: The Downsizing of Economics Professors Steven Payson, 2017-10-24 The number of economics professors now teaching at universities will decline substantially over the next couple of decades. This will happen for one main reason—the advent of distance learning, especially in the form of Massive Open Online Courses (MOOCs), which enable a single professor to lecture to tens of thousands of students. Other academic fields will undoubtedly encounter similar reductions in their numbers of professors. However, as this book argues at several levels, academic economics is the one profession that is most qualified to study and address the topic. In this sense it is the one profession that should best recognize the economic benefits of this transition, which this book describes, and take responsibility for leading the transition among all academic fields. Unfortunately, the position espoused by several academic economists has been against this inevitable transition—a position that politically upholds their employment and the status of their institutions. They have asserted that MOOCs lower the quality of education and threaten the financial viability of traditional universities. Based on extensive evidence and analysis, however, this book argues that their position untenable. Their position is hypocritical as well, given the fact that economics professors, more than anyone else, have upheld the idea that jobs should be lost, and new ones should be gained, in response to technological changes that promote economic efficiency. There is also irony in the fact that the high tuitions required to maintain traditional classrooms effectively deny a college education to those who cannot afford it. Thus, unsound arguments that traditional lectures are needed to preserve the quality of education actually do not improve the quality of education but have the only real effect of denying education to many people who would otherwise be able to receive it. To address this topic comprehensively, the book goes deep into fundamental questions about what economics professors really do with their time and energy, and what they should be doing in the best interests of their students and of society. These are areas that the profession has needed to address for a long time, but has failed to do so.

calculus coursera: Future proofing Engineering Education for Global Responsibility Michael E. Auer, Tiia Rüütmann, 2025-03-20 This book contains papers in the fields of: Collaborative learning. Digital transition in education. AI and learning analytics in engineering education. Diversity in engineering education. The authors are currently witnessing a significant transformation in the development of education on all levels and especially in post-secondary and higher education. To face these challenges, higher education must find innovative and effective ways to respond in a proper way. Changes have been made in the way we teach and learn, including the massive use of new means of communication, such as videoconferencing and other technological tools. Moreover, the current explosion of artificial intelligence tools is challenging teaching practices maintained for centuries. Scientifically based statements as well as excellent best practice examples are necessary for effective teaching and learning engineering. The 27th International Conference on Interactive Collaborative Learning (ICL2024) and 53rd Conference of International Society for Engineering Pedagogy (IGIP), which took place in Tallinn, Estonia, between 24 and 27 September 2024, was the perfect place where current trends in higher education were presented and discussed. IGIP conferences have been held since 1972 on research results and best practices in teaching and learning from the point of view of engineering pedagogy science. ICL conferences have been held since 1998 being devoted to new approaches in learning with a focus on collaborative learning in Higher Education. Nowadays, the ICL conferences are a forum of the exchange of relevant trends and research results as well as the presentation of practical experiences in learning and Engineering Pedagogy. In this way, the authors try to bridge the gap between 'pure' scientific research and the everyday work of educators. Interested readership includes policymakers, academics, educators, researchers in pedagogy and learning theory, schoolteachers, learning industry, further and continuing education lecturers, etc.

calculus coursera: <u>Introduction to Engineering Mathematics</u> Cybellium Ltd, 2024-10-26 Designed for professionals, students, and enthusiasts alike, our comprehensive books empower you

to stay ahead in a rapidly evolving digital world. * Expert Insights: Our books provide deep, actionable insights that bridge the gap between theory and practical application. * Up-to-Date Content: Stay current with the latest advancements, trends, and best practices in IT, Al, Cybersecurity, Business, Economics and Science. Each guide is regularly updated to reflect the newest developments and challenges. * Comprehensive Coverage: Whether you're a beginner or an advanced learner, Cybellium books cover a wide range of topics, from foundational principles to specialized knowledge, tailored to your level of expertise. Become part of a global network of learners and professionals who trust Cybellium to guide their educational journey. www.cybellium.com

calculus coursera: *Understanding Behaviour of Distributed Systems Using mCRL2* Muhammad Atif, Jan Friso Groote, 2023-02-25 This book helps readers easily learn basic model checking by presenting examples, exercises and case studies. The toolset mCRL2 provides a language to specify the behaviour of distributed systems, in particular where there is concurrency with inter-process communication. This language allows us to analyse a distributed system with respect to its functional requirements. For example, biological cells, supply chain management systems, patient support platforms, and communication protocols. The underlying technique is based on verifying requirements through model checking. The book explains the syntax of mCRL2 and offers modelling tips and tricks.

calculus coursera: Gaming Probability Laws Kira Halloway, AI, 2025-03-31 Gaming Probability Laws explores the science behind games, revealing how probability and randomness impact outcomes. The book argues that understanding probability laws and statistical strategies can transform games from mere chance to arenas of calculated risk. Did you know that analyzing game data can empirically validate theories of strategic gameplay? Or that the principles of game theory extend beyond entertainment, influencing fields like finance and scientific research? The book begins with fundamental probability concepts, then applies them to dice and card games, puzzle-solving, and strategy games. Each section showcases how statistical reasoning and game theory inform optimal decision-making. For instance, understanding expected value can drastically improve your choices in complex scenarios. This book stands out by blending theoretical explanations with practical applications, making it accessible to a broad audience. It connects to mathematics, psychology, and economics, demonstrating the interdisciplinary nature of strategic decision-making. By the end, readers gain the knowledge to approach games and life with a more informed and strategic perspective.

calculus coursera: Artificial Intelligence in Surgery: Understanding the Role of AI in Surgical Practice Daniel A. Hashimoto, Guy Rosman, Ozanan R. Meireles, 2021-03-08 Build a solid foundation in surgical AI with this engaging, comprehensive guide for AI novices Machine learning, neural networks, and computer vision in surgical education, practice, and research will soon be de rigueur. Written for surgeons without a background in math or computer science, Artificial Intelligence in Surgery provides everything you need to evaluate new technologies and make the right decisions about bringing AI into your practice. Comprehensive and easy to understand, this first-of-its-kind resource illustrates the use of AI in surgery through real-life examples. It covers the issues most relevant to your practice, including: Neural Networks and Deep Learning Natural Language Processing Computer Vision Surgical Education and Simulation Preoperative Risk Stratification Intraoperative Video Analysis OR Black Box and Tracking of Intraoperative Events Artificial Intelligence and Robotic Surgery Natural Language Processing for Clinical Documentation Leveraging Artificial Intelligence in the EMR Ethical Implications of Artificial Intelligence in Surgery Artificial Intelligence and Health Policy Assessing Strengths and Weaknesses of Artificial Intelligence Research Finally, the appendix includes a detailed glossary of terms and important learning resources and techniques—all of which helps you interpret claims made by studies or companies using AI.

calculus coursera: <u>Services Computing - SCC 2019</u> Joao Eduardo Ferreira, Aibek Musaev, Liang-Jie Zhang, 2019-06-19 This volume constitutes the proceedings of the 16th International

Conference on Services Computing 2019, held as Part of SCF 2019 in San Diego, CA, USA in June 2019. The 9 full papers presented in this volume were carefully reviewed and selected from 15 submissions. They cover topics such as: foundations of services computing; scientific workflows; business process integration and management; microservices; modeling of services systems; service security and privacy; SOA service applications; and service lifecycle management.

calculus coursera: The Higher Education Scene in America Abraham Gitlow, Howard Gitlow, 2014-10-06 Based on the authors' experiences in academe over seventy-five years, The Higher Education Scene in America: Some Observations discusses a number of issues that confront America's higher education scene today. Those issue embrace such problems as: (1) the missions(s) of our colleges and universities and the development of critical thinking and/or employability; (2) the role of for-profit academic institutions; (3) the impact of online technology; (4) diffusion of power and achievement of consensus between administrators and faculty; (5) the importance of financial matters, embracing budgets, fundraising, and endowments; (6) the insidious problem of conflicts of interest; (7) the scandalous impact of big-time, big-money Division 1 sports on academe; (8) the growth of non-academic functions; and (9) the importance of leadership in consensual institutions and how leaders are chosen.

calculus coursera: Furthering Higher Education Possibilities through Massive Open Online Courses Mesquita, Anabela, Peres, Paula, 2015-09-03 In recent years, technological advancements have enabled higher-learning institutions to offer millions of independent learners the opportunity to participate in open-access online courses. As this practice expands, drawing considerable media attention, questions continue to arise regarding pedagogical methodology and the long-term viability of open learning. Furthering Higher Education Possibilities through Massive Open Online Courses seeks to provide a space for discussion of MOOCs: what they mean for the learning process, how they are redefining the concept of a classroom, and what effects they may have on the role of teachers. Featuring emerging research on a variety of topics relating to distance education, informal learning, as well as educational costs and funding, this book is aimed at teachers, administrators, business professionals, and designers of both curricular resources and e-classroom technology.

calculus coursera: Education 2.0 Leonard J. Waks, 2015-11-17 Thirty years of spirited school reforms have failed to improve our schools and instead have left our public school systems in disarray. Meanwhile, employment prospects for high school and college graduates are fading, and the public is losing faith in its schools. The education paradigm inherited from the Industrial Era is in crisis. In the last decade, however, the Internet and new Web 2.0 technologies have placed the entirety of human knowledge in the hands of everyone. What will our educational institutions make of this unprecedented flood of Web-based learning resources? How can schools be transformed to accommodate the new possibilities for personal and social learning? Leonard Waks gathers all the pieces of our current educational puzzle together in this groundbreaking book. Drawing on new organizational models grounded in complexity theory, Waks maps out an inspiring new paradigm for education in the Internet age, and connects all the dots in constructing detailed models for new schools-now transformed into open learning centers. Finally, Waks details action steps readers can take to speed this transformative process along in their own locations.

calculus coursera: Higher Education in the Digital Age William G. Bowen, 2015-01-25 How online learning could help control the exploding cost of higher education Two of the most visible and important trends in higher education today are its exploding costs and the rapid expansion of online learning. Could the growth in online courses slow the rising cost of college and help solve the crisis

of affordability? In this short and incisive book, William G. Bowen, one of the foremost experts on the intersection of education and economics, explains why, despite his earlier skepticism, he now believes technology has the potential to help rein in costs without negatively affecting student learning. As a former president of Princeton University, an economist, and author of many books on education, including the acclaimed bestseller The Shape of the River, Bowen speaks with unique expertise on the subject. Surveying the dizzying array of new technology-based teaching and learning initiatives, including the highly publicized emergence of massive open online courses (MOOCs), Bowen argues that such technologies could transform traditional higher education—allowing it at last to curb rising costs by increasing productivity, while preserving quality and protecting core values. But the challenges, which are organizational and philosophical as much as technological, are daunting. They include providing hard evidence of whether online education is cost-effective in various settings, rethinking the governance and decision-making structures of higher education, and developing customizable technological platforms. Yet, Bowen remains optimistic that the potential payoff is great. Based on the 2012 Tanner Lectures on Human Values, delivered at Stanford University, the book includes responses from Stanford president John Hennessy, Harvard University psychologist Howard Gardner, Columbia University literature professor Andrew Delbanco, and Coursera cofounder Daphne Koller.

Related to calculus coursera

Ch. 1 Introduction - Calculus Volume 1 | OpenStax In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions

Calculus Volume 1 - OpenStax Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources

Calculus - OpenStax Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics

- **1.1 Review of Functions Calculus Volume 1 | OpenStax** Learning Objectives 1.1.1 Use functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3 Draw the graph of a function. 1.1.4 Find the zeros of a
- **Preface Calculus Volume 1 | OpenStax** Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students
- **Preface Calculus Volume 3 | OpenStax** OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo **Index Calculus Volume 3 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- **A Table of Integrals Calculus Volume 1 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- **2.4 Continuity Calculus Volume 1 | OpenStax** Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem
- **2.1 A Preview of Calculus Calculus Volume 1 | OpenStax** As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel
- **Ch. 1 Introduction Calculus Volume 1 | OpenStax** In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions

Calculus Volume 1 - OpenStax Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources

Calculus - OpenStax Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics

- **1.1 Review of Functions Calculus Volume 1 | OpenStax** Learning Objectives 1.1.1 Use functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3 Draw the graph of a function. 1.1.4 Find the zeros of a
- **Preface Calculus Volume 1 | OpenStax** Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students
- **Preface Calculus Volume 3 | OpenStax** OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo **Index Calculus Volume 3 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- A Table of Integrals Calculus Volume 1 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- **2.4 Continuity Calculus Volume 1 | OpenStax** Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem
- **2.1 A Preview of Calculus Calculus Volume 1 | OpenStax** As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel
- **Ch. 1 Introduction Calculus Volume 1 | OpenStax** In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions
- **Calculus Volume 1 OpenStax** Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources
- **Calculus OpenStax** Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics
- **1.1 Review of Functions Calculus Volume 1 | OpenStax** Learning Objectives 1.1.1 Use functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3 Draw the graph of a function. 1.1.4 Find the zeros of a
- **Preface Calculus Volume 1 | OpenStax** Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students
- **Preface Calculus Volume 3 | OpenStax** OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo **Index Calculus Volume 3 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- A Table of Integrals Calculus Volume 1 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- **2.4 Continuity Calculus Volume 1 | OpenStax** Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem
- **2.1 A Preview of Calculus Calculus Volume 1 | OpenStax** As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel
- **Ch. 1 Introduction Calculus Volume 1 | OpenStax** In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions
- **Calculus Volume 1 OpenStax** Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources
- **Calculus OpenStax** Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics
- 1.1 Review of Functions Calculus Volume 1 | OpenStax Learning Objectives 1.1.1 Use

- functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3 Draw the graph of a function. 1.1.4 Find the zeros of a
- **Preface Calculus Volume 1 | OpenStax** Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students
- **Preface Calculus Volume 3 | OpenStax** OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo **Index Calculus Volume 3 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- A Table of Integrals Calculus Volume 1 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- **2.4 Continuity Calculus Volume 1 | OpenStax** Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem
- **2.1 A Preview of Calculus Calculus Volume 1 | OpenStax** As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel
- **Ch. 1 Introduction Calculus Volume 1 | OpenStax** In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions
- **Calculus Volume 1 OpenStax** Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources
- **Calculus OpenStax** Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics
- **1.1 Review of Functions Calculus Volume 1 | OpenStax** Learning Objectives 1.1.1 Use functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3 Draw the graph of a function. 1.1.4 Find the zeros of a
- **Preface Calculus Volume 1 | OpenStax** Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students
- **Preface Calculus Volume 3 | OpenStax** OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo **Index Calculus Volume 3 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- A Table of Integrals Calculus Volume 1 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials
- **2.4 Continuity Calculus Volume 1 | OpenStax** Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem
- **2.1 A Preview of Calculus Calculus Volume 1 | OpenStax** As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel
- **Ch. 1 Introduction Calculus Volume 1 | OpenStax** In this chapter, we review all the functions necessary to study calculus. We define polynomial, rational, trigonometric, exponential, and logarithmic functions
- **Calculus Volume 1 OpenStax** Study calculus online free by downloading volume 1 of OpenStax's college Calculus textbook and using our accompanying online resources
- **Calculus OpenStax** Explore free calculus resources and textbooks from OpenStax to enhance your understanding and excel in mathematics
- **1.1 Review of Functions Calculus Volume 1 | OpenStax** Learning Objectives 1.1.1 Use functional notation to evaluate a function. 1.1.2 Determine the domain and range of a function. 1.1.3

Draw the graph of a function. 1.1.4 Find the zeros of a

Preface - Calculus Volume 1 | OpenStax Our Calculus Volume 1 textbook adheres to the scope and sequence of most general calculus courses nationwide. We have worked to make calculus interesting and accessible to students

Preface - Calculus Volume 3 | OpenStax OpenStax is a nonprofit based at Rice University, and it's our mission to improve student access to education. Our first openly licensed college textboo **Index - Calculus Volume 3 | OpenStax** This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials

A Table of Integrals - Calculus Volume 1 | OpenStax This free textbook is an OpenStax resource written to increase student access to high-quality, peer-reviewed learning materials

- **2.4 Continuity Calculus Volume 1 | OpenStax** Throughout our study of calculus, we will encounter many powerful theorems concerning such functions. The first of these theorems is the Intermediate Value Theorem
- **2.1 A Preview of Calculus Calculus Volume 1 | OpenStax** As we embark on our study of calculus, we shall see how its development arose from common solutions to practical problems in areas such as engineering physics—like the space travel

Related to calculus coursera

Penn Coursera course among first to be considered for credit (The Daily Pennsylvanian12y) Less than a year after Penn announced its partnership with Coursera, one of the University's online classes may soon become among the first in the nation that can be taken for credit. In an Penn Coursera course among first to be considered for credit (The Daily Pennsylvanian12y) Less than a year after Penn announced its partnership with Coursera, one of the University's online classes may soon become among the first in the nation that can be taken for credit. In an Ohio State online class emphasizes 'enthusiasm' for math for students worldwide (The Lantern11y) Students in one Ohio State calculus class don't have to sit in a lecture hall or pay tuition to learn. Calculus One — a MOOC, or massive open online course, created by OSU professors — is offered

Ohio State online class emphasizes 'enthusiasm' for math for students worldwide (The Lantern11y) Students in one Ohio State calculus class don't have to sit in a lecture hall or pay tuition to learn. Calculus One — a MOOC, or massive open online course, created by OSU professors — is offered

High schools to use Penn Coursera class (The Daily Pennsylvanian12y) Students at nine high schools will have access to a Penn professor and teaching assistants as part of a new Massive Open Online Course initiative which begins this school year. The initiative,

High schools to use Penn Coursera class (The Daily Pennsylvanian12y) Students at nine high schools will have access to a Penn professor and teaching assistants as part of a new Massive Open Online Course initiative which begins this school year. The initiative,

Ohio State offers 6 online courses to general public through Coursera (The Lantern12y) While Ohio State is planning to create more massive open online course offerings for no class credit, the handful already offered through one partnership have returned low completion rates. OSU is one Ohio State offers 6 online courses to general public through Coursera (The Lantern12y) While Ohio State is planning to create more massive open online course offerings for no class credit, the handful already offered through one partnership have returned low completion rates. OSU is one This Professor Can Teach Anyone Calculus Using These Simple, Beautiful Animations (Gizmodo10y) Calculus: A word that triggers involuntary fear spasms in the best of us. But the days of slogging through tedious textbook derivatives are over, if you want them to be. For the past few years, people

This Professor Can Teach Anyone Calculus Using These Simple, Beautiful Animations (Gizmodo10y) Calculus: A word that triggers involuntary fear spasms in the best of us. But the days of slogging through tedious textbook derivatives are over, if you want them to be. For the past few

years, people

Enhancing a MOOC With Adaptive Learning (Campus Technology11y) When Ohio State University math professor Jim Fowler and his colleague Thomas Evans, a senior instructional designer at the school, decided to create a calculus MOOC, they envisioned a course with an Enhancing a MOOC With Adaptive Learning (Campus Technology11y) When Ohio State University math professor Jim Fowler and his colleague Thomas Evans, a senior instructional designer at the school, decided to create a calculus MOOC, they envisioned a course with an Four Coursera online classes are deemed worthy of college credit (Los Angeles Times12y) The new industry of large-scale online education will garner an important measure of academic respectability Thursday when the American Council on Education announces that four courses of the Mountain

Four Coursera online classes are deemed worthy of college credit (Los Angeles Times12y) The new industry of large-scale online education will garner an important measure of academic respectability Thursday when the American Council on Education announces that four courses of the Mountain

Forget Cat Photos: This Prof Is Making Calculus Go Viral (Forbes10y) Two years ago, when the online-education craze got started, big-name professors began cranking out videos about hot topics such as cryptography or startup engineering. Left in the dust was the

Forget Cat Photos: This Prof Is Making Calculus Go Viral (Forbes10y) Two years ago, when the online-education craze got started, big-name professors began cranking out videos about hot topics such as cryptography or startup engineering. Left in the dust was the

College credit recommended for free online courses (USA Today12y) Council recommended 5 entry-level courses for credit Students will need to pay %24100 to %24190 to verify their identities Coursera offers more than 200 courses from 33 institutions SAN FRANCISCO (AP)

College credit recommended for free online courses (USA Today12y) Council recommended 5 entry-level courses for credit Students will need to pay %24100 to %24190 to verify their identities Coursera offers more than 200 courses from 33 institutions SAN FRANCISCO (AP)

Back to Home: http://www.speargroupllc.com