



# **Universal Learner™**

# **Course Catalog**

## **2021–2022**

# Course Offerings

ACC 231: Uses of Accounting Information I  
ASM 246: Human Origins  
AST 111: Introduction to Solar Systems Astronomy  
BIO 100: The Living World  
CEE 181: Technological, Social, and Sustainable Systems  
CHM 114: General Chemistry for Engineers  
CIS 105: Computer Applications and Information Technology  
CIS 194: Technical Support Fundamentals  
CIS 194: Computer Networking in Organizations  
CIS 194: Operating Systems Management for Business  
CIS 308: Advanced Excel in Business  
CIS 309: Business Process Management  
CIS 310: Business Data Visualization  
CIS 394: Location Analytics for Business  
CIS 405: Business Intelligence  
COM 100: Introduction to Human Communication  
CSE 110: Programming for Everyone: Introduction to Programming  
EA 11: Foundations for Earned Admission  
ECN 211: Macroeconomic Principles  
ECN 212: Microeconomic Principles: Decision Making Under Scarcity  
ENG 101: English Composition  
ENG 102: English Composition: Research and Writing  
FSE 100: Introduction to Engineering: Imagine. Design. Engineer!  
FSE 150: Perspectives on Grand Challenges for Engineering  
HEP 100: Introduction to Health and Wellness  
HST 102: Europe and the Mediterranean: Ancient and Medieval  
MAT 117: College Algebra and Problem Solving  
MAT 142: College Mathematics  
MAT 170: Precalculus  
MAT 210: Brief Calculus: Calculus for Business and Economics  
MAT 265: Calculus for Engineers I: Calculus with Analytic Geometry for Science  
and Engineering  
PAF 112: Identity, Service and American Democracy  
PSY 101: Introduction to Psychology  
REL 101: Religion, Culture and Public Life  
SES 106: Habitable Worlds  
SOC 101: Introduction to Sociology  
SST 220: Introduction to Social Transformation

# ACC 231: Uses of Accounting Information I



## Overview

Are you interested in business and its financial aspects? This course introduces the uses of accounting information throughout the business cycle and how accounting information is used for internal and external purposes. Topics include Generally Accepted Accounting Principles or 'GAAP' and the preparation and analysis of financial statements. Opportunities to apply concepts with hands-on practice are integrated throughout the course. In addition, the course's content is adaptive, allowing you to achieve mastery of the concepts on a personalized learning path. Focused on decision-making and the role of accounting in the decision-making process, this course's topics are applicable not only to business but to any situation that utilizes financial information.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Explain the uses and limitations of accounting information
- Distinguish between types of business entities, internal controls, and regulatory bodies
- Complete the steps of the accounting cycle from transaction entry to preparation of financial statements
- Apply Generally Accepted Accounting Principles and Assumptions (GAAP) within the overall accounting framework
- Interpret and analyze financial statements using ratio analysis

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

20%

CogBooks  
Learning (12)

15%

Exam 1

10%

Quizzes (12)

15%

Exam 2

20%

Interactive  
Assignments (12)

20%

Final Exam

# Creators

## Veena Srinivasan

Senior Lecturer,  
W. P. Carey School of Accountancy

Veena Srinivasan has been teaching introductory financial and managerial accounting at Arizona State University since Spring 2013. She brings over 25 years of experience, both professional and academic, to her appointment as senior lecturer. She has worked for global accounting firms in both India and the United States and was director of accounting programs at the State University of New York at Albany.



## Audrey Cook

Lecturer,  
W. P. Carey School of Accountancy

Audrey Cook has been teaching financial accounting at Arizona State University since Spring 2017. Ms. Cook teaches a variety of accounting courses such as introduction to financial accounting, managerial accounting, intermediate financial accounting, and financial statement analysis. Ms. Cook has also taught at Grand Canyon University and various community colleges such as Chandler-Gilbert Community College and Central Arizona College. Her professional experience includes audit services with professional services firm Deloitte & Touche, LLP in their Phoenix office. Ms. Cook is also a Certified Public Accountant (CPA) in the state of Arizona and is a member of the American Institute of CPAs (AICPA).





# ASM 246: Human Origins



## Overview

The course will take you on a fascinating journey through the scientific evidence for human evolution. Dr. Donald Johanson, the paleoanthropologist who found the famous skeleton “Lucy,” will guide you through an overview of the hominin fossil record as well as introduce you to evolutionary theory. Take advantage of this unprecedented opportunity to dive deeper into the world of paleoanthropological field research from Dr. Johanson’s perspective.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You’ll Learn

- Outline the nature of science and explain how scientific research is conducted
- Identify humans’ place in the natural world from taxonomic/phylogenetic perspectives
- Define the role of paleoanthropologists in human origins research
- Identify how paleoanthropologists use the scientific method to formulate hypotheses and strategically conduct research
- Articulate differences between scientific evidence for human evolution and non-scientific, non-testable, explanations for human origins

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU’s campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

**30%**

Quizzes (8)

**15%**

Midterm Exam

**30%**

Final Exam

**25%**

Content Mastery (7)

# Creators

## Donald C. Johanson

Founding Director, Institute of Human Origins Virginia M. Ullman  
Chair in Human Origins  
Professor, School of Human Evolution and Social Change

Donald C. Johanson is the Founding Director of the Institute of Human Origins now located at Arizona State University in the School of Human Evolution and Social Change. For the past 45 years he has conducted field and laboratory research in paleoanthropology. He is best known for his discovery of the 3.18 million year old hominid skeleton from Ethiopia, popularly known as “Lucy.”



Through grants from the National Science Foundation, the L.S.B Leakey Foundation and the National Geographic Society, Johanson has carried out field research in Ethiopia, Yemen, Saudi Arabia, Egypt, Jordan, and Tanzania. He is an Honorary Board Member of the Explorers Club, a Fellow of the Royal Geographical Society, a member of many other professional organizations and recipient of several international prizes and awards.

In addition to his scholarly contributions, he has co authored some 7 books including the widely read “Lucy: The Beginnings of Humankind” and most recently “Lucy’s Legacy: The Quest for Human Origins.” He hosted and narrated the three part NOVA television series In Search of Human Origins seen by more than 100 million people worldwide. Johanson is a frequent lecturer at university and other forums in the United States and abroad.

## Sara Marsteller

Lecturer,  
School of Human Evolution and Social Change

Sara Marsteller is a teaching postdoctoral scholar in the School of Human Evolution and Social Change at Arizona State University. She received her Ph.D. in Anthropology from the Arizona State University in 2015. A bioarchaeologist, Marsteller is broadly trained in methods and theory in biological anthropology, archaeology, and cultural anthropology and specializes in online anthropology course development and instruction. In her research, Marsteller uses biological and chemical data from archaeological human skeletal remains to reconstruct past human behavior and social relationships. Her current project in Lima, Peru, focuses on patterns of diet and residential mobility to investigate how the Wari and Inka Empires influenced local communities in this important regional hub in the Central Andes.



# AST 111: Introduction to Solar Systems Astronomy



## Overview

Have you ever looked up at the night sky and marveled at the vastness and complexity of space? You are invited to take a deeper dive into the mind-blowing world of astronomy. Throughout the course, you will also take a look at nearby stars and learn about the Lowell Observatory, the Challenger Space Center, the Discovery Channel Telescope, and Meteor Crater, the largest meteor impact site in the world. Additionally, you will take a virtual tour of the Lunar Exploration Museum and the home of the Mars Space Flight Facility where scientists are using spacecraft to explore the geology of Mars. This course is packed with information and will greatly expand your understanding of our vast universe.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. MAT 117 College Algebra is strongly recommended as a prerequisite for success in this course.

## What You'll Learn

- Describe the origins, structure, contents, and evolution of our solar system
- Use algebra and order-of-magnitude estimates to obtain quantitative, scientific results
- Give clear explanations of physical phenomena

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course includes a lab and satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

30%

Homework (14)

15%

Labs (7)

15%

Outdoor Activities (3)

20%

Quizzes (3)

5%

Design Project (1)

5%

Content Mastery (14)

10%

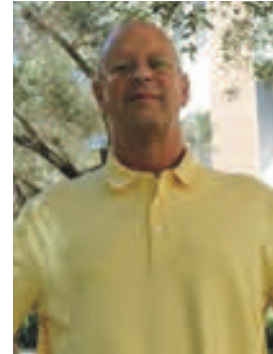
Final Exam

# Creator

## Frank Timmes

Astrophysicist

Frank Timmes is a theoretical astrophysicist who is interested in the universe's evolving composition and its implications for life in the universe. His current research focuses on stars, supernovae and explosions of all sorts, cosmic chemical evolution, and gamma-ray emission from radioactive isotopes.



This research involves analytical models, desktop calculations, large-scale parallel computations, comparison with existing observations or experiments, and creating testable predictions. He holds a B.S. in Physics from UC Santa Barbara, and a M.S. & Ph.D. in Astronomy & Astrophysics from UC Santa Cruz.

# BIO 100: The Living World



## Overview

Can we find life elsewhere in the Universe? This is one of the big questions at the forefront of scientific endeavor. It compels us to explore our celestial neighborhood, searching for signs of life in the Solar System and Earth-like planets beyond. In *The Living World*, you will learn about the search for life as you master concepts in general biology, including key aspects of biodiversity, evolution, cellular biology, molecular biology, ecology, and human anatomy and physiology.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- **Evolution:** The diversity of life changed and diversified over time by processes of mutation, selection, and isolation
- **Structure and Function:** Basic units of structure establish the function of all living things.
- **Information Flow, Exchange, and Storage:** The macro and microscopic features of organisms result from the expression of genetic information in context
- **Pathways of Energy and Matter:** Biological systems are built and maintained by chemical transformation pathways that are governed by the laws of thermodynamics
- **Biological Systems:** Living systems are interconnected and interacting
- **Nature of Science:** Science proceeds by developing and testing explanations for patterns observed in nature

## Transcript

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This course includes a lab and satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

**752 pts**

Biology Bootcamp

**1000 pts**

World Biodiversity Expedition

**850 pts**

Into the Cell

**1422 pts**

Blue Planet

**1055 pts**

Journey to the Galapagos

**484 pts**

Time Traveler's Guide to Life on Earth

**1483 pts**

Searching for Signatures

**954 pts**

A Mission Beyond

# Creators

## Christofer Bang

Senior Lecturer,  
School of Life Sciences

Christofer Bang is an ecologist, lecturer and photographer. His research spans from dragonfly and damselfly diversity in Norwegian freshwater systems affected by agriculture, to the effects of urbanization on arthropod communities in the metropolitan area of Phoenix. He teaches biology courses at Arizona State University, emphasizing critical-thinking skills using case studies from recent scientific research. His teaching approach spans from engaging lectures in large lecture halls to flipped-classroom active learning style in addition to online interactive learning. With a keen interest in all plants and animals, Bang is an avid photographer. His photographs have been featured on the cover of several scientific journals.



## Justin St. Juliana

Instructional Professional

Justin R. St. Juliana received his bachelor's degree in animal ecology at Iowa State University, his master's degree in evolutionary ecology from Ben Gurion University of the Negev (Israel), and his Ph.D. in biology from Indiana State University. Justin's research lies at the interface of predator-prey interactions, optimal foraging, and stress hormones. His study organisms include rodents, foxes, fleas, owls, snakes, and feral cats. Justin has taught at multiple biological levels from microbiology to environmental science. Justin extensively utilizes technology to improve student learning outcomes. He has developed large-scale online non-majors biology courses, is the co-author of an environmental science textbook, and has developed online science activities that are used by tens of thousands of students every year. He is very interested in the latest teaching innovations and heavily incorporates active and community-based learning into his courses. Justin believes that scientific concepts can be taught as stories that relate to a student's life.



# CEE 181: Technological, Social, and Sustainable Systems



## Overview

Understand the impact of technology on sustainability and society, using relevant historical examples and current issues in the news, and gain insight on the cultural frameworks within which ideas such as sustainability and different technologies are understood and evolve. You'll also explore emerging technologies from the Industrial Revolution through present day, leading to a future that will be complex and challenging, and in many ways look like science fiction.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- The importance of technology and technological systems
- The social and environmental implications of design, construction, operation, and management of technology systems
- The critical principles of complexity and complex systems
- How art, cinema, literature, and other cultural products create the ground from which technological systems emerge, and affect the evolutionary paths of technological systems; and how they are in turn affected by those technological systems
- The economic, environmental, social, cultural, philosophic, and religious issues and impacts associated with technology systems and emerging technologies at a broad cultural and geographic level extending across urban, regional, national, and global scales

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Humanities, Arts and Design (HU) General Studies requirement for Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

20%

Quizzes (7)

10%

Content Mastery (7)

10%

Graded Discussions (7)

30%

Midterm Exam

30%

Final Exam



# Creators

## Brad Allenby

President's Professor,  
Civil, Environmental, and Sustainable Engineering,  
Professor of Law, Director, Center for Earth Systems  
Engineering and Management



Dr. Braden R. Allenby is currently Lincoln Professor of Engineering and Ethics, and President's Professor of civil, environmental and sustainable engineering and professor of law, at Arizona State University. He is the founding director of the Center for Earth Systems Engineering and Management, and the founding chair of the Consortium for Emerging Technologies, Military Operations, and National Security, at Arizona State University. He is also an American Association for the Advancement of Science (AAAS) fellow, a Batten Fellow in Residence at the University of Virginia's Darden Graduate School of Business Administration, and a fellow of the Royal Society for the Arts, Manufactures and Commerce. He was the U.S. Naval Academy Stockdale Fellow (2009-2010), a Templeton Fellow (2008-2010), and the J. Herbert Hollowman Fellow at the National Academy of Engineering (1991-1992). During 1995 and 1996, he served as director of energy and environmental systems at Lawrence Livermore National Laboratory. His areas of expertise include industrial ecology, sustainable engineering, earth systems engineering and management, and emerging technologies. His latest books are "Industrial Ecology and Sustainable Engineering" (co-authored with Tom Graedel, 2010), "The Theory and Practice of Sustainable Engineering" (Pearson/Prentice-Hall, 2011), and "The Techno-Human Condition" (with Dan Sarewitz, 2011).

# Creators

## Samuel Markolf

Assistant Research Professor,  
School of Sustainable Engineering and the Built Environment

Dr. Samuel Markolf is an Assistant Research Professor within the School for Sustainable Engineering and the Built Environment (SSEBE) at Arizona State University. His research broadly focuses on urban infrastructure resilience to extreme events. In particular, current projects include characterizing vulnerabilities that arise in transportation systems via interdependencies with other infrastructure systems (e.g. the electricity grid); critically assessing the role of risk analysis in infrastructure resilience and the exploration of alternative approaches; and modeling disruption and resilience in regional transportation networks. In addition to research, Dr. Markolf has helped instruct courses within SSEBE for three years. He earned his B.S. from the University of Texas-Austin and his Ph.D. in Civil & Environmental Engineering and Engineering & Public Policy from Carnegie Mellon University. When not working on ways to enhance the sustainability and resiliency of our cities, Dr. Markolf is most likely traveling, hiking, biking, or enjoying the company of his friends and family.



# CHM 114: General Chemistry for Engineers



## Overview

Have you ever wondered what's inside your mobile phone case? Why batteries aren't lighter and have to be recharged? How different colors can be shown on your computer screen? Or why glass shatters when you hit it with a hammer? These, along with other questions of how atoms and molecules combine to make macroscopic materials with desired properties, are at the heart of countless challenges addressed by chemists and engineers every day. This course is not a standard introductory chemistry course. In this course, you will learn by doing, and you will be helped along the way with instant visual and audio feedback. You will simultaneously learn the language of chemistry and how to think like a chemist. The course introduces general chemistry topics and explains directly how these concepts are related to engineering. You will develop the language and chemistry skills necessary to work as an engineer in a team with chemists.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. MAT 170 Precalculus is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Solve engineering challenges using tools from chemistry
- Apply molecular ideas to understanding the properties of materials and functionality of modern devices
- Predict chemical and physical properties from molecular or material structures
- Evaluate suitability of chemicals and materials for applications like batteries or fuel cells based on chemical and physical properties

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course includes a lab and satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

18%

Quizzes (7)

28%

Labs and Lab Questions

5%

ALICE Activities

10%

Midterm Exam

39%

Final Exam

# Creators

## Ian Gould

President's Professor and Associate Director of Outreach,  
Online and Communications, School of Molecular Sciences

Ian Gould is President's Professor and Associate Director of Outreach, Online and Communications in the School of Molecular Sciences at Arizona State University. He received his B.Sc., M.Sc., and Ph.D. Degrees in chemistry from the University of Manchester (UK). After a postdoctoral fellowship at Columbia University, he moved to the Eastman Kodak Company. In 1998, he joined the faculty of ASU where he teaches organic chemistry. Areas of expertise include organic geochemistry, chemical education, and organic mechanisms.



## Anne Katherine Jones

Associate Professor and Associate Director of Academic Affairs,  
School of Molecular Sciences

Anne Jones is Associate Professor and Associate Director for Academic Affairs in the School of Molecular Sciences at Arizona State University. She received her B.S. in chemistry and mathematics from the University of the South and her D. Phil in Inorganic Chemistry from the University of Oxford (UK). Following post-doctoral research at the Humboldt University in Berlin, Germany and the University of Pennsylvania, she joined the faculty in the School of Molecular Sciences in 2017 where she teaches undergraduate and graduate courses in inorganic and biological chemistry. Areas of expertise include electrocatalysis, biological inorganic chemistry, and bioenergy.



# Creators

## Pamela Marks

Principal Lecturer,  
School of Molecular Sciences

Pamela Marks is a Principal Lecturer in the School of Molecular Sciences at Arizona State University. She earned her B.A. in chemistry from St. Olaf College and her M.A. in inorganic chemistry from the University of Arizona. Since joining the ASU faculty in 1995, Pam has focused on teaching introductory chemistry in labs, traditional and non-traditional lecture courses, and online.



## Peter Williams

Professor of Chemistry,  
School of Molecular Sciences

Peter Williams is a Professor of Chemistry in the School of Molecular Sciences at Arizona State University. He obtained his BSc in Chemistry and a PhD in Physical Chemistry from the University of London, King's College (UK). Following a postdoctoral fellowship at Argonne National Laboratory and staff position at the Universities of Manitoba and Illinois, he joined the ASU faculty in 1981 where he teaches courses in introductory chemistry and bioanalytical chemistry. Areas of expertise include bioanalytical chemistry, mass spectrometry, and bioimaging.



# CIS 105: Computer Applications and Information Technology



## Overview

This course is an introductory course with a dual focus: one focus on organizations and another focus on the individuals who work for them. At the individual level, we will examine how business decision making can be improved when supporting technologies like spreadsheets are leveraged. From the organizational perspective, we will cover strategic analysis frameworks and business strategies that can be fine-tuned for competition in an increasingly digitally transformed world. Humans are inherently limited in how they might approach problem solving because of the cognitive biases we all bring to decision situations. Understanding these biases and how to confront them using the spreadsheet modeling knowledge gained in this class will change the way you face and solve problems. We will cover practical decisions you will deal with in many different personal and professional business settings. You will build models in spreadsheet software that serve to help you analyze problem situations in a completely new light.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. Knowledge of basic Excel functionality will be very helpful in setting you up for success in this course.

## What You'll Learn

- Use a dual focus approach to study information systems from both tactical and organizational viewpoints in order to advance a broad understanding of digital transformation's impact on people, business processes and organizational strategy
- Understand the limitations cognitive biases can inflict on individuals and learn how business decision making can be enhanced through judicious use of supporting technologies that enable leading-edge modeling and analysis
- Describe industry competition in an age of digital transformation using frameworks and constructs that enable a fundamental level of competitive strategy analysis
- Debate how well digitally transforming industry competitors are positioned for sustained advantage by applying concepts and contexts related to platforms and competition in two-(or more)-sided platform-based market spaces
- Leverage this first course in business to understand the exciting career paths available now – and those that may be created as digital transformation continues at break-neck pace

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Computer/Statistics/Quantitative Applications (CS) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

**30%**

Content Mastery  
Exercises (12)

**20%**

Quizzes (7)

**20%**

Midterm Exam

**30%**

Final Exam



# Creators

## Hina Arora

Clinical Assistant Professor and the MSBA director of experiential analytics,  
W. P. Carey School of Business

Hina Arora is a clinical associate professor at the W. P. Carey School of Business at Arizona State University. She teaches advanced data mining courses at the Graduate and Undergraduate level. She joined ASU in 2015. Before joining ASU, Professor Arora was with Microsoft as a group manager (2014-2015), a senior data science lead (2011-2014) and program manager (2008-2011). Prior positions include service as a software engineer with IBM from 2001 to 2004 and research scientist with the Center for Excellence in Document Analysis and Recognition (CEDAR) at the State University of New York Buffalo from 1998 to 2001.



# CIS 194: Business Technology Fundamentals



## Overview

Technology fuels the businesses of today, and businesses need competent technology professionals to support the infrastructure that drives their success. In this, you'll be introduced to this environment and will learn about critical business tech support functions, including managing an organization's hardware, networking technology, and software, as well as how to solve technical problems for business technology users.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- How the binary system works
- How to assemble a computer from scratch
- How to choose and install an operating system on a computer, understand what the internet is, how it works, and the impact it has in the modern world
- How applications are created and how they work under the hood of a computer
- How to utilize common problem-solving methodologies and soft skills in an information technology setting

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 1 credit hour at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

60%

Google Module Completion

36%

Module Quizzes

5%

Writing Assignment

# Creator

## Paul McCarthy

Lecturer,  
W. P. Carey School of Business

A seasoned technology and learning professional with twenty years of Information Technology and Instructional Design experience from the multinational conglomerate Honeywell. Paul brings the knowledge and ability to deliver compelling learning solutions for the intended audience. Intuitive and effective communicator with proven ability to deliver innovative and creative learning material that embraces a diversity of thought, economy of word, sound learning theory, and practical instructional methodology.



# CIS 194: Computer Networking in Organizations



## Overview

This course is designed to provide a full overview of computer networking.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

CIS 194 Business Technology Fundamentals is a required prerequisite for this course.

## What You'll Learn

- Describe computer networks in terms of a five-layer model
- Understand all of the standard protocols involved with TCP/IP communications
- Grasp powerful network troubleshooting tools and techniques
- Learn network services like DNS and DHCP that help make computer networks run
- Understand cloud computing, everything as a service, and cloud storage

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 2 credit hours toward the at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

58%

Google Module Completion

34%

Module Quizzes

8%

Writing Assignment

# Creator

## Paul McCarthy

Lecturer,  
W. P. Carey School of Business

A seasoned technology and learning professional with twenty years of Information Technology and Instructional Design experience from the multinational conglomerate Honeywell. Paul brings the knowledge and ability to deliver compelling learning solutions for the intended audience. Intuitive and effective communicator with proven ability to deliver innovative and creative learning material that embraces a diversity of thought, economy of word, sound learning theory, and practical instructional methodology.



# CIS 194: Operating Systems Management for Business



## Overview

This course will focus on the practical aspects of the operating system. You will learn how to use the windows and linux OS and how to interact with these operating systems through the command line, which inputs text commands instead of relying on a graphical user interface or GUI. You'll also learn how file systems work and you'll be able to assign different user permissions and roles; you'll be able to understand how to use package managers and consider the trade-offs between different package managers for windows and linux; you'll also learn about process management so you understand the nuances of running programs that could save you valuable time when troubleshooting in the workplace. Finally, we'll take a deeper dive into remote connection tools and teach you about OS deployment and how to install on a lot of machines at once.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. CIS 194 Business Technology Fundamentals and CIS 194 Computer Networking in Organizations are required as prerequisites for this course.

## What You'll Learn

- Navigate the Windows and Linux file systems using a graphical user interface and command line interpreter
- Set up users, groups, and permissions for account access
- Install, configure, and remove software on the Windows and Linux operating systems
- Configure disk partitions and file systems
- Understand how system processes work and how to manage them
- Work with system logs and remote connection tools
- Utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses. This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

40%

Google Module Completion

25%

Quizzes

25%

Module Case Study Activities

10%

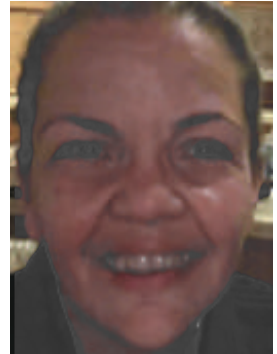
Case Study

# Creator

## Linda Prince

Senior Lecturer,  
W. P. Carey School of Business

Linda Prince is a Lecturer, Senior in the Information Systems department of the W.P. Carey School of Business at Arizona State University. Her current focus involves database concepts and advanced excel, including application integration, analytics and data visualization. Ms. Prince holds a masters in business administration and a bachelor's degree in computer information systems, both from Arizona State University. She has been teaching at ASU since 2012 and prior to teaching worked as a financial analyst for many years. In addition to database and Excel application courses, she has taught systems design and enterprise analytics. Ms. Prince specializes in visual basic and C# coding languages.





# CIS 308: Advanced Excel in Business



## Overview

This course covers advanced Excel skills using an applied focus on different types of decisions one may analyze using spreadsheet capabilities; graphs and charts to communicate complex analytics; pivot tables to slice and dice data for reporting; what-if analysis for forecasting and predictive analysis. Students will learn to use advanced functions of Excel to improve productivity, enhance spreadsheets with templates, charts, graphics, and formulas and streamline their operational work. They will apply visual elements and advanced formulas to a worksheet to display data in various formats. Students will also learn how to automate common tasks, apply advanced analysis techniques to more complex data sets and leverage Excel's advanced functionalities.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. Knowledge of basic mathematical & problem-solving skills is also recommended. We encourage you to make sure your laptop or desktop computer meets the technical requirements. This course uses the Windows Excel application which may not work on tablets, Chromebooks, or two-in-one devices. A Mac or Windows computer is highly suggested. CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course. Microsoft Excel is required for this course and not provided by ASU.

## What You'll Learn

- Calculate with advanced functions and formulas
- Organize worksheet, workbook and table data using a variety of techniques
- Create and modify charts and graphs
- Customize and enhance workbooks using graphic objects and data tools
- Understand how businesses can utilize advanced spreadsheet analytical techniques using pivot tables, v-lookups, amortization and graphical data to better understand their business and customers
- Manipulate and analyze data to make appropriate recommendations for managerial decision making
- Deploy advanced techniques to increase productivity and improve efficiency by stream lining workflow

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This is a 3 credit hour course at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

13%

Quizzes

58%

Interactive Assignments

29%

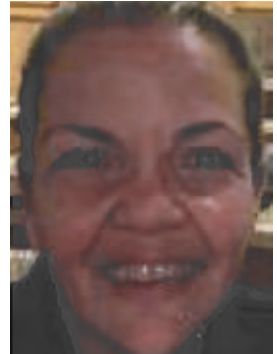
Exams

# Creator

## Linda Prince

Senior Lecturer,  
W. P. Carey School of Business

Linda Prince is a Lecturer, Senior in the Information Systems department of the W.P. Carey School of Business at Arizona State University. Her current focus involves database concepts and advanced excel, including application integration, analytics and data visualization. Ms. Prince holds a masters in business administration and a bachelor's degree in computer information systems, both from Arizona State University. She has been teaching at ASU since 2012 and prior to teaching worked as a financial analyst for many years. In addition to database and Excel application courses, she has taught systems design and enterprise analytics. Ms. Prince specializes in visual basic and C# coding languages.



# CIS 309: Business Process Management



## Overview

Analysis and evaluation of business processes in the context of improving operational efficiency. This course examines organizational processes, evaluates & analyzes business process metrics in the context of improving operational efficiency thereby creating business value.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. Knowledge of basic mathematical & problem-solving skills is also recommended. We encourage you to make sure your laptop or desktop computer meets the technical requirements.

CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Explain the basic concepts of business process and management strategy
- Use key process measures, their interrelationship and managerial levers to manage and control the business process
- Plan for and control the variability of the business process to enhance the process performance

## Transcript

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This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

### Exams and Grading

35%

Homework Activities

15%

Quizzes

25%

Midterm Exam

25%

Final Exam

# Creators

## Kavous Roumina

Clinical Assistant Professor,  
Department of Information Systems,  
W. P. Carey School of Business

Kavous Roumina is a Clinical Assistant Professor at ASU. Prior to ASU, Kavous spent more than 20 years as an IT Manager, Lead Systems Analyst, and Systems Analyst at a large healthcare system. His primary research interest is in healthcare information technology.



## Srinivasan Radhakrishnan

Lecturer,  
Department of Information Systems,  
W. P. Carey School of Business

Srinivasan Radhakrishnan is a Lecturer at ASU. Srin has 25+ years of global IT & academic experience. He has managed Enterprise Systems & Analytics programs & Information Technology teams across India, USA, Costa Rica, Israel, Ireland & Malaysia. He holds M.S. in Engineering and multiple professional certifications (PgMP®, PMI-ACP®, PMP®, CSCP®, CSM®, LSSYB, SAP® BW®, AWS-CCP & SAA). Srin is a bilingual author and has published four books so far.



# CIS 310: Business Data Visualization



## Overview

This course teaches the fundamentals of data visualization with practical applications on Tableau and Excel.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. Knowledge of basic mathematical & problem-solving skills is also recommended. We encourage you to make sure your laptop or desktop computer meets the technical requirements. CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course. Microsoft Excel is required for this course and not provided by ASU.

## What You'll Learn

- Identify when and what visual communication is appropriate to convey a message
- Identify enhancer and obstructer elements of good visualizations
- Recognize the fundamental characteristics of data for visual analysis
- Recognize different techniques for visually exploring and explaining data-based observations
- Build effective data visualizations in Excel and Tableau
- Use data visualizations to facilitate and enable decision making

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

### Exams and Grading

29%

Homework  
Assignments

18%

Reflective  
Questions

14%

Knowledge Quizzes

39%

Application Tests

# Creator

## Andrés Díaz López

Clinical Assistant Professor,  
W. P. Carey School of Business

Andrés is a Professor with teaching experience in several universities in the U.S., China, and Colombia. His professional experience includes marketing, project management, and international negotiations. His research interests revolve around data analysis and visualization, innovation, cyber security, and systems optimization.



# CIS 394: Location Analytics for Business



## Overview

Introduction and conceptual overview of location intelligence via visualization and analyses of geo-spatial data to enhance business insights and decision making. Learn how location analytics can offer better insights and decision-making support for business by analyzing geo-referenced data with GIS application software such as ArcGIS Online. Explore and geo-enrich the location component of business data to perform market analysis, visualize demographic, customer, and competition data and share analysis insights using engaging maps. Learn how spatial analysis helps organization decrease cost, increase revenue, and reduce risks.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. Familiarity with geographic information systems (GIS) concepts will be helpful but is not required. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Understand the basic principles of Geographic Information Systems (GIS) including coordinate systems, projections, and maps
- Use industry standard ESRI's GIS software tools such as ArcGIS Online to question, analyze, interpret, and visualize spatial data
- Apply geospatial analysis to various business functions, including market planning, site analysis, and market research
- Examine case studies and present how location information can be leveraged in specific industry to solve underlying business problems

## Transcript

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This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.



# Creators

## Asish Satpathy

Lecturer,  
Department of Information Systems  
W. P. Carey School of Business

Asish Satpathy has years of experience in teaching, academic research, and product consulting for technology startups. He is a former founder and CEO of a technology start up that evangelized customer privacy in target marketing by using innovative geo-spatial technology. Prior to his current position at ASU, he has worked as faculty or research scholar at various teaching and research institutions such as University of California, Riverside, Chapman University, University of Texas at Austin and Stanford Linear Accelerator Research Center, USA, CERN, Switzerland, High Energy Accelerator Research Organization (KEK), Japan. Asish holds a Ph.D. in experimental particle physics and MBA in Information Systems & Strategy. He currently serves as a board member for two US-based non-profit organizations dedicated to empowering underprivileged people in local communities to achieve their dreams. Asish is an avid percussionist who loves Indian and Western classical music.



# CIS 405: Business Intelligence



## Overview

Business Intelligence (BI) is a critical discipline that includes the technologies and practices used for the collection, integration, analysis, and presentation of information to support a wide variety of business decision-making capabilities.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. A basic understanding of computing principles is recommended. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. CIS 105 Computer Applications and Information Technology is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Key concepts, principles, and applications of business intelligence
- How to make use of hands-on experience with a business intelligence software tool
- The respective roles of business intelligence, data warehousing, business performance management, and data mining as parts of an overall solution to deliver data-driven insights

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

# Creator

## Alan Simon

Principal Lecturer,  
Department of Information Systems,  
W. P. Carey School of Business

Alan Simon is a Principal Lecturer at Arizona State University in the Information Systems Department at WP Carey. He has been teaching at ASU since 2013, and was an undergraduate in the CIS program at ASU back in the mid- and late 1970s when that program was first beginning. He also has a master's degree in Management Information Systems from the University of Arizona. He has also been an adjunct instructor at Carnegie-Mellon, Drexel University, and the University of Denver. Before joining the ASU faculty, Alan led global, national, and regional business intelligence and data warehousing practices at leading consulting firms and software companies, and is also the Managing Principal of his boutique consulting firm, Thinking Helmet, Inc. that he founded in 2006. He is a long-time thought leader and authority on aligning data and analytics with business process improvement initiatives, and is the author of 32 business and technology books dating back to the mid-1980s.



# COM 100: Introduction to Human Communication



## Overview

This course is designed to introduce you to the basic concepts of human communication, processes, and environments. This course surveys communication topics related to culture, identity, organizations, and relationships. By the end of this course, you should have a fuller understanding of appropriate and effective communication based on your knowledge of theoretical concepts and their application.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Define and describe the complex nature of communication
- Identify and describe the various contexts of communication study, including interpersonal, small group, organizations, public, and mass communication
- Explain the features of communication common to all contexts, including verbal and nonverbal
- Connect theoretical concepts of communication to everyday experiences
- Define key terms used by communication researchers and practitioners
- Describe the relationships between the discipline of communication and other academic areas of study

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

35%

Exit Quizzes (7)

15%

Reaction-Response (3)

15%

Situational Analysis (4)

35%

Final Exam

# Creators

## Frederick C. Corey

Vice Provost for Undergraduate Education,  
Office of University Provost

Frederick C. Corey is Vice Provost for Undergraduate Education at Arizona State University. Professor Corey focuses on undergraduate student success through academic advising, degree planning, and major and career exploration. His research and instruction interests focus on communication and culture with an emphasis on ethnographic writing, cultural performance, and narrative. Professor Corey has published widely in journals and edited collections in communication studies. His articles have appeared in *Text and Performance Quarterly*, *Canadian Journal of Political and Social Theory*, *Western Journal of Communication*, *Journal of Homosexuality*, *Communication Studies*, and *Communication and the Disenfranchised*.



## Alexis Valianos

Instructor,  
Hugh Downs School of Human Communication

Alexis Valianos is an instructor in the Hugh Downs School of Human Communication at Arizona State University. Her areas of specialization are cross-cultural communication and conflict management.



## Terrie Wong

Lecturer,  
College of Integrative Sciences and Arts

Terrie Wong is a lecturer at the College of Integrative Sciences and Arts, Arizona State University. Her areas of specialization are intercultural communication and ethnography.



# Creators

## J. Macgregor Wise

Professor,  
School of Social and Behavioral Sciences

Greg Wise is professor of communication studies and social technologies at Arizona State University. He received his Ph.D. from the University of Illinois in 1995. Professor Wise's areas of expertise include media studies, culture and technology, globalization, and surveillance. His major works include *Surveillance and Film*, *Culture and Technology: A Primer*, and *Cultural Globalization: A User's Guide*.



## Manuel G. Avilés-Santiago

Associate Professor,  
College of Integrative Sciences and Arts

Manu Avilés-Santiago is associate professor of communication and culture at Arizona State University. He received his Ph.D. from the University of Texas at Austin. Professor Avilés-Santiago's areas of expertise include media studies, culture and technology, Latina/o studies, and intercultural communication.



# CSE 110: Programming for Everyone: Introduction to Programming



## Overview

Every day, computers and algorithms touch the lives of everyone around us in both mundane and profound ways. These algorithms are in the plants and distribution systems that bring you clean water and electricity, sensors that moderate the flow of traffic, in the tractors and combines that sow and harvest our food, and in the satellites that measure and predict the weather trends. If you are curious about what computers can do and how we instruct them to do those things - this course is for you. No prior programming experience is needed for this course. In addition to exposure to programming, you will gain a powerful set of thinking and problem-solving skills that you can use in your daily life. Start taking advantage of the power of computers around us to make our world a better place.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Demonstrate problem solving techniques for programming
- Develop algorithms to solve problems; demonstrate effective troubleshooting, testing, and debugging of programs
- Describe and apply variables, basic and composite data types, and collections to the development of programs
- Develop programs using fundamental structures of sequence, selection, and iteration.
- Write functions that accept parameters and return results
- Implement object-oriented programs
- Describe the importance and relevance of computing and programming skills in our lives and careers

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Computer/Statistics/Quantitative Applications (CS) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

10%

Skill Challenges (5)

40%

Project Challenges (13)

20%

Midterm Exam

30%

Final Exam

# Creators

## Ryan Meuth

Lecturer,  
Fulton Schools of Engineering

Ryan Meuth has published widely in journals and edited collections in communication studies. His articles have appeared in *Text and Performance Quarterly*, *Canadian Journal of Political and Social Theory*, *Western Journal of Communication*, *Journal of Homosexuality*, *Communication Studies*, and *Communication and the Disenfranchised*.



## Phill Miller

Lecturer,  
Fulton Schools of Engineering

Phill Miller is a Lecturer at Arizona State University in the Fulton Schools of Engineering. Phill joined ASU in 2014 after teaching computer science and software engineering courses for 14 years at the University of Advancing Technology in Tempe, AZ. His areas of expertise include programming languages, business application development, and software engineering.



## Steven Osburne

Lecturer,  
Fulton Schools of Engineering

Steven Osburn is a lecturer at Arizona State University in the Fulton Schools of Engineering. A California native, he grew up traveling the US, from Oregon and Washington State, to Montana and Arkansas, before landing in Phoenix. Steven spent several years in the military, and subsequently returned to Arizona for a job in industry, where he stayed for 18 years while teaching part-time at a local community college for 13 of those years. During that time, he completed his bachelor's and master's in systems engineering at ASU. He ultimately took the opportunity to teach full time at ASU, and has loved it ever since! His areas of expertise include software and hardware design, specifically control system.





# EA 11: Foundations for Earned Admission



## Overview

This non-credit, self paced orientation is designed to help you succeed as an online student in your Universal Learner Courses. We recommend completing this orientation prior to beginning your first Earned Admission course.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Recognize the ASU Charter and how it relates to the development of Earned Admission
- Navigate the Universal Learner platform and course features
- Defend the need for academic integrity
- Find resources to aid in course success
- Recognize key mindsets for successful online learning
- Use common digital learning tools used throughout Universal Learner Courses

## Transcript

This is a non-credit course that does not appear on your transcript.

# ECN 211: Macroeconomic Principles



## Overview

Macroeconomics is the study of the sum of all spending, income, and productive efforts. The economic outcomes that we experience are the result of our intricate dealings with other governments, businesses, and people, both locally and globally. This course will give you insight into how economists approach and measure these big issues and questions. The first part of this course takes a look at the common household with a specific focus on how the members of a household choose their workloads and spending habits. You will also study how businesses, both large and small, make important economic decisions. The second part of this course dives into policymaking and how these policies can either distort or enhance market outcomes. You will focus on five specific areas of economic policy: free trade, research & development & innovation, fiscal & tax, inflation & monetary and unemployment & labor market policies.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. Knowledge of basic Excel functionality will be very helpful in setting you up for success in this course

## What You'll Learn

- Apply marginal analysis to common economic decision problems
- Describe economic decisions households and businesses make
- Understand economic efficiency and sources of deviations from it
- Interpret main macroeconomic indicators commonly analyzed to follow economy in real time
- Understand the main policy discussions related to fiscal and monetary policy

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

### Exams and Grading

10%

Practice problems

30%

Quizzes (13)

30%

Midterm Exam

30%

Final Exam

# Creator

## Bart Hobijn

Professor of Economics,  
W. P. Carey School of Business

Bart Hobijn is a macroeconomist in the Economics Department at the W.P. Carey School of Business at Arizona State University. He joined ASU in the summer of 2015, after having been a research economist at the Federal Reserve Banks of New York and San Francisco. Bart's current research focuses on what drives wage growth of U.S. workers and whether it is being held back by the Great Recession, by a slowdown in the growth of productivity of workers, or by increased globalization and competition from workers abroad. In addition, he has investigated why people and businesses in poor countries do not adopt more modern technologies, how firms' price setting decisions drive inflation, and how the Great Recession has affected the U.S. labor market. Bart's research has been published in top-tier academic journals and his findings have been reported on in many media outlets including Bloomberg, Businessweek, CNN, the Economist Magazine, New York Times, Wall Street Journal, Washington Post, and, of course, the Onion. He has his PhD in Economics from New York University and MSc in Econometrics from Erasmus University Rotterdam in the Netherlands.



# ECN 212: Microeconomic Principles: Decision Making Under Scarcity



## Overview

This course will help you understand decisions that are made in the face of constraints, such as the everyday transactions you make in the marketplace. As a consumer, you must consider your overall income when making a purchase, but business managers must take into account the presence of competitors in the marketplace when deciding on the price to charge you for a product.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. Knowledge of basic Excel functionality will be very helpful in setting you up for success in this course

## What You'll Learn

- Explain how consumers decide what products to purchase and how much to purchase
- Explain how producers decide how much to produce, how many inputs to use and what price to charge for their products
- Describe how the interaction of consumers and producers in competitive markets generates the market price and the quantity consumed and produced
- Explain the concept of efficiency and describe how markets often lead to efficient outcomes
- Explain how market distortions occur and their impact on the welfare of producers and consumers

## Transcript

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This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

15%

Homework (13)

20%

Quizzes (7)

5%

Content Mastery (13)

25%

Midterm Exam

35%

Final Exam

# Creators

## Cara McDaniel

Faculty,  
Economics Department



## Fernando Leiva Bertran

Faculty,  
Economics Department



## Jose Mendez

Faculty,  
Economics Department



Each of your instructors for this course is a faculty member within the Department of Economics at Arizona State University. They bring a combined 61 years of experience teaching economics at various collegiate levels and universities, including Carlos III of Madrid, ITAM, Kenyon College, University of Georgia, and Georgetown University. Each has recently taught microeconomics at the undergraduate level. Their research interests span the areas of Macroeconomics (McDaniel), Industrial Organization (Levia Bertran), and International Economics (Mendez).

# ENG 101: English Composition



## Overview

This introductory composition course will help you develop and express ideas effectively for a variety of personal and professional purposes, audiences, and occasions. During the course, you will complete five major written projects, maintain a writer's journal, learn and apply a variety of concepts in the field of rhetoric and composition, and create an ePortfolio where you will showcase your work and your evolving identity as a writer.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- **Rhetorical Knowledge:** how to craft your writing to meet the needs of specific audiences for specific purposes
- **Critical Thinking:** how to make decisions about what to include and not include in your writing
- **Writing Processes:** how to use invention, research, drafting, revising, and editing in your writing
- **Knowledge of Conventions:** how to use various formats and stylistic choices, including genre conventions
- **Digital Technology:** how to use diverse technologies to write more effectively and efficiently
- **Habits of Mind:** how to benefit from and cultivate curiosity, openness, engagement, creativity, persistence, responsibility, flexibility, and reflection

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the First-year Composition requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

10%

Writer's Journals (20)

5%

Participation  
Assignments (9)

24%

Writing Projects (5)

6%

ePortfolio

15%

Content Mastery (7)

40%

Quizzes (7)

# Creator

## Adam Pacton

College of Integrative Sciences and Arts

Adam Pacton teaches English 101 and 102 for Universal Learner Courses. He earned his Ph.D. in Rhetoric and Composition at the University of Wisconsin-Milwaukee. His research has focused on composition theory, pedagogy, and assessment; online and hybrid composition; disability studies; and writing program administration.



# ENG 102: English Composition: Research and Writing



## Overview

This online writing course will help you understand discourse and research writing with the goal of creating solutions to issues within your local community. What sets this course apart is that you won't be learning about subjects in an abstract sense; instead, you will identify local problems and research real solutions for these problems. This course is so much more than "just a writing course." It is a class that will simultaneously ignite your imagination for how you can improve the world around you and give you the tangible tools to see those improvements begin to take shape.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- **Rhetorical Knowledge:** how to craft your writing to meet the needs of specific audiences for specific purposes
- **Critical Thinking:** how to make decisions about what to include and not include in your writing
- **Writing Processes:** how to use invention, research, drafting, revising, and editing in your writing
- **Knowledge of Conventions:** how to use various formats and stylistic choices, including genre conventions
- **Digital Technology:** how to use diverse technologies to write more effectively and efficiently
- **Habits of Mind:** how to benefit from and cultivate curiosity, openness, engagement, creativity, persistence, responsibility, flexibility, and reflection

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the First-year Composition requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

10%

Writer's Journals (20)

5%

Participation  
Assignments (12)

24%

Writing Projects (5)

6%

ePortfolio

15%

Content Mastery (7)

40%

Quizzes (7)



# Creators

## Duane Roen

Vice Provost,  
Polytechnic Campus Dean,  
College of Integrative Sciences and Arts Dean

Throughout his career Duane Roen has been interested in how people learn to write. He has published nine books, with four more in progress. He has also authored more than 270 chapters, articles, and conference presentations focused on various aspects of writing instruction.



## Adam Pacton

College of Integrative Sciences and Arts

Adam Pacton teaches English 101 and 102 for Universal Learner Courses. He earned his Ph.D. in Rhetoric and Composition at the University of Wisconsin-Milwaukee. His research has focused on composition theory, pedagogy, and assessment; online and hybrid composition; disability studies; and writing program administration.



## Jamie Merriman-Pacton

College of Integrative Sciences and Arts

Jamie Merriman-Pacton completed her graduate work at East Tennessee State University, and she's been teaching college-level composition, literature, technical communication, film, and business writing for over a decade. In addition to being a teacher, Jamie's also a working professional and creative writer, and her writing has appeared in many publications.



# FSE 100: Introduction to Engineering: Imagine. Design. Engineer!



## Overview

Do you ever think: “There has to be a better way!” Then engineering is for you! Engineering is for anyone with a passion for problem solving. This course actively introduces you to skills and tools that engineers use to solve problems while teaching you to think like an engineer. You will learn to identify opportunities, imagine new solutions to problems, model your creations, make data-driven decisions, build prototypes, and showcase your ideas that will impact the world. Taught by engineering professors and highlighting industry engineers in action, this course will equip you, as an engineer-in-training, with the skills necessary to compete in today’s world of innovation.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You’ll Learn

- Evaluate the quality of your own work and the work of others through self and peer assessment
- Apply the steps of the engineering design process based on the analysis of customer needs to design, build, and test a physical prototype
- Apply customer focused design and the Entrepreneurial Mindset to create and evaluate design prototypes that will solve problems
- Use and select appropriate tools and technical skills to collect and analyze data from a variety of sources, to describe and predict the behavior of designs, and to justify design decisions based on appropriate models
- Write technical project reports and give oral/multimedia presentations about their designs, which includes addressing how the design adds value from multiple perspectives (technological, societal, financial, environmental, etc.)
- Apply project management skills to create and implement project plans and maintain and evaluate schedules and budgets for an engineering design
- Be able to identify your motivations, strengths, and contributions within the field of engineering and critique your own skills and understanding through self-reflection

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU’s campuses.

This course satisfies 2 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

**60%**

Projects (4)

**25%**

ePortfolio

**5%**

Content Mastery (14)

**10%**

Final Exam



# Creators

## Haolin Zhu

Senior Lecturer,  
Ira A. Fulton Schools of Engineering

Haolin Zhu earned her BSE in Engineering Mechanics from Shanghai Jiao Tong University and her Ph.D. in Theoretical and Applied Mechanics from Cornell University, with a focus on computational solid mechanics. After receiving her Ph.D., Dr. Zhu joined Arizona State University as a full time Lecturer and became part of the freshman engineering education team in the Ira A. Fulton Schools of Engineering. She currently holds the title of Senior Lecturer and focuses on designing the curriculum and teaching in the freshman engineering program. She is also involved in the NAE Grand Challenge Scholars Program, the ASU ProMod project, the Engineering Projects in Community Service program, and the Engineering Futures program. Dr. Zhu also designs and teaches courses in mechanical engineering at ASU, including Mechanics of Materials, Mechanical Design, Mechanism Analysis and Design, Finite Element Analysis, etc. She was part of a team that designed a largely team and activity based online Introduction to Engineering course. Her Ph.D. research focuses on multi-scale multiphase modeling and numerical analysis of coupled large viscoelastic deformation and fluid transport in swelling porous materials, but she is currently interested in various topics in the field of engineering education, such as innovative teaching pedagogies for increased retention and student motivation; innovations in non-traditional delivery methods, incorporation of the Entrepreneurial Mindset in the engineering curriculum and its impact.



# Creators

## Alicia Baumann

Lecturer,  
Ira A. Fulton Schools of Engineering

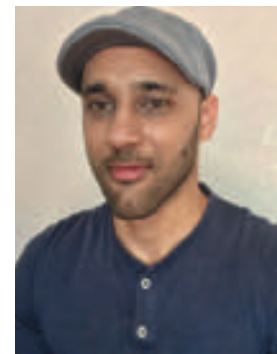
Ali Baumann received her master's degree in Electrical Engineering from the University of Wyoming before working as a senior systems engineer at General Dynamics C4 Systems. She is now part of the freshman engineering education team in the Ira A. Fulton Schools of Engineering at Arizona State University. Currently, she focuses on enhancing the curriculum for the freshman engineering program to incorporate industry standards into hands-on design projects. She is an instructor for the Introduction to Engineering program, Engineering Transfer Success program, Engineering Futures program, and the Electrical Engineering department at ASU. She is a winner of the Fulton Top 5% Teaching Award and was nominated for Badass Women of ASU. Her philosophy boasts incorporating large scale systems engineering techniques into collegiate engineering curriculum to better prepare upcoming professionals and develop a student's resume from day one.



## Anoop S. Grewal

Lecturer,  
Ira A. Fulton Schools of Engineering

Anoop Grewal received his doctorate in Mechanical and Aerospace engineering (in the field of Theoretical and Applied Mechanics) from Cornell University. His research background is in robotics but his passion lies in engineering education. Currently, he is working as a lecturer at ASU in the Ira A. Fulton Schools of engineering. He is part of the instructional team for "Introduction to Engineering", a multi-disciplinary project based course. He also teaches various mechanical engineering courses e.g. Engineering Mechanics, Control System Design, and System Dynamics and Controls. His teaching philosophy is to promote instinctive/inherent understanding of engineering concepts, and productive student-faculty interactions.



# Creators

## Amy Trowbridge

Senior Lecturer,  
Ira A. Fulton Schools of Engineering

Amy Trowbridge received her Master's degree in Biomedical Engineering from Arizona State University (ASU). She is a member of the freshmen engineering education lecturer team in the Ira A. Fulton Schools of Engineering at ASU, focused primarily on enhancing the first year students' experience through the Introduction to Engineering course curriculum. She is also Director of the National Academy of Engineering (NAE) Grand Challenge Scholars Program (GCSP) at ASU, which aims to prepare students to become globally and socially aware engineers who will lead future efforts to solve the world's biggest challenges. She is interested in curricular and co-curricular experiences that broaden students' perspectives and enhance student learning, and encouraging student reflection through the use of digital portfolios.



## Ben Mertz

Lecturer,  
Ira A. Fulton Schools of Engineering

Ben Mertz received his Ph.D. from the University of Notre Dame in Aerospace Engineering and his B.S. from Rose-Hulman Institute of Technology in Mechanical Engineering, where he is currently an assistant professor. While at ASU, he was a member of the Freshman Engineering Education lecturer team at Arizona State University and designed and taught classes including Introduction to Engineering, Advanced Math Methods for Engineers, Thermofluids, High Speed Aerodynamics, among others. His research background is in aerodynamic flow control, but his current interests are in the scholarship of teaching and learning. Specifically, his interests are in incorporating active learning into large classrooms, improving teamwork both in onsite and online classes, incorporating the entrepreneurial mindset into engineering curriculum, and promoting diversity within competition clubs.



# FSE 150: Perspectives on Grand Challenges for Engineering



## Overview

Are you excited about new technologies that impact every facet of our lives? Are you concerned about the many problems, big or small, faced by our communities on planet earth, and want to help? This course is for you! This course will provide you with opportunities to explore the global challenges facing society, and to learn about how engineers are making an effort to address these challenges. It will serve as a first step to prepare you to become a well rounded Engineer who is ready to tackle these challenges.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Develop an interdisciplinary understanding of the global engineering Grand Challenges that human societies face in the 21st century
- Describe the NAE Grand Challenges themes, and learn about ongoing research in all Grand Challenge theme areas
- Identify opportunities to create added value in the Grand Challenge areas, and apply customer focused design and an entrepreneurial mindset to conceptualize a potential future solution
- Interpret why (and in what ways) a technology or design solution adds value from multiple perspectives (technological, sociocultural, economic, environmental, global, etc.), and describe a design solution in terms of its societal value (as well as its technical features and function)
- Demonstrate an awareness of societal issues (e.g. sociocultural, political, economic, environmental) that influence and/or constrain engineering solutions

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses. This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. This course is also a required component of the National Academy of Engineering Grand Challenge Scholars Program at ASU. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

### Exams and Grading

40%

Projects (2)

20%

ePortfolio

25%

Activities (15)

15%

Graded Discussions

# Creators

## Haolin Zhu

Senior Lecturer,  
Ira A. Fulton Schools of Engineering

Haolin Zhu earned her BSE in Engineering Mechanics from Shanghai Jiao Tong University and her Ph.D. in Theoretical and Applied Mechanics from Cornell University, with a focus on computational solid mechanics. After receiving her Ph.D., Dr. Zhu joined Arizona State University as a full time Lecturer and became part of the freshman engineering education team in the Ira A. Fulton Schools of Engineering. She currently holds the title of Senior Lecturer and focuses on designing the curriculum and teaching in the freshman engineering program. She is also involved in the NAE Grand Challenge Scholars Program, the ASU ProMod project, the Engineering Projects in Community Service program, and the Engineering Futures program. Dr. Zhu also designs and teaches courses in mechanical engineering at ASU, including Mechanics of Materials, Mechanical Design, Mechanism Analysis and Design, Finite Element Analysis, etc. She was part of a team that designed a largely team and activity based online Introduction to Engineering course. Her Ph.D. research focuses on multi-scale multiphase modeling and numerical analysis of coupled large viscoelastic deformation and fluid transport in swelling porous materials, but she is currently interested in various topics in the field of engineering education, such as innovative teaching pedagogies for increased retention and student motivation; innovations in non-traditional delivery methods, incorporation of the Entrepreneurial Mindset in the engineering curriculum and its impact.



## Amy Trowbridge

Senior Lecturer,  
Ira A. Fulton Schools of Engineering

Amy Trowbridge received her Master's degree in Biomedical Engineering from Arizona State University (ASU). She is a member of the freshmen engineering education lecturer team in the Ira A. Fulton Schools of Engineering at ASU, focused primarily on enhancing the first year students' experience through the Introduction to Engineering course curriculum. She is also Director of the National Academy of Engineering (NAE) Grand Challenge Scholars Program (GCSP) at ASU, which aims to prepare students to become globally and socially aware engineers who will lead future efforts to solve the world's biggest challenges. She is interested in curricular and co-curricular experiences that broaden students' perspectives and enhance student learning, and encouraging student reflection through the use of digital portfolios.





# HEP 100: Introduction to Health and Wellness



## Overview

In this course, you will learn current concepts in exercise, health, and wellness. You will also gain valuable insight into how to maintain a healthy lifestyle for yourself.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Describe the role of health, nutrition, and wellness in our daily lives
- Evaluate evidence that supports or disproves selected health claims
- Provide examples of how psychological, spiritual, and emotional health are connected to one's overall well-being and physical health
- Identify and manage personal health risks based on current lifestyle choices
- Identify and implement lifestyle changes that may enhance lifelong health

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

5%

Interactives (7)

10%

Case Studies (7)

5%

Content Mastery (7)

15%

Quizzes (7)

5%

Reflection Board

25%

Midterm Exam

35%

Final Exam

# Creators

## Nicole Vaudrin

Faculty Associate,  
College of Health Solutions

Nicole Vaudrin is a part-time nutrition instructor at Arizona State University (ASU). For her day job, she is a Registered Dietitian and works for Native Health's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program. WIC is a federal program nutrition assistance program that provides healthy foods and nutrition education to education to eligible families. Native Health targets urban American Indians living in the greater Phoenix area but serves all eligible clients.



## Punam Ohri-Vachaspati

Professor of Nutrition,  
College of Health Solutions

Punam Ohri-Vachaspati, Ph.D, RD, is a professor of nutrition at the College of Health Solutions at Arizona State University, where she leads the ASU Food Environment and Policy research group. Her research, funded by the National Institutes of Health, the United States Department of Agriculture, the Robert Wood Johnson Foundation, and local organizations, examines social determinants of health, specifically in low-income minority communities. She studies the impact of federal, state, and local policies in shaping food and physical activity environments in school settings and in communities. She teaches graduate-level courses and mentors students interested in exploring public health approaches for improving healthy food access, eating behaviors, and health outcomes. Dr. Ohri-Vachaspati received her Ph.D. degree from Tufts University School of Nutrition in Food Policy and Applied Nutrition. She completed her undergraduate education at University of Delhi, India.



# HST 102: Europe and the Mediterranean: Ancient and Medieval



## Overview

This first year online history course will take you on a fascinating journey through the history of Europe and the Mediterranean from ancient times through 1500 AD. You will learn about a number of cultures and periods, including: Egypt and Mesopotamia, Greece, Rome, Judaism, The Byzantine Empire, The Rise of Islam, and Medieval Europe.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Describe the civilizations of Egypt, Greece, Rome, and the Middle Ages
- Describe the historical relations between Europe and the larger world
- Analyze the transformation of human institutions and beliefs over time
- Evaluate the legacy of ancient and medieval cultures in our world today

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) and Historical Awareness (H) General Studies requirement for Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

5%

Design Project (1)

30%

Content Mastery (14)

30%

Quizzes (7)

15%

Midterm Exam

20%

Final Exam

# Creators

## Ian Frederick Moulton

Faculty Head of Interdisciplinary Humanities and Communication,  
College of Integrative Sciences and Arts

Ian Frederick Moulton is Professor of English in the College of Letters and Sciences at Arizona State University. He is a cultural historian and literary scholar who has published widely on the representation of gender and sexuality in early modern European literature. Professor Moulton was born in London, UK, raised in Winnipeg, Canada, and received his Ph.D. in English from Columbia University before joining ASU in 1995. He is the author of *Love in Print in the Sixteenth Century: The Popularization of Romance* (Palgrave, 2014), as well as the co-editor of *Teaching Early Modern English Literature from the Archives* (MLA, 2015). He regularly teaches Classical Literature in translation and English literature from the medieval period to 1800 for ASU Online. Professor Moulton is fluent in French and Italian and has a reading knowledge of Spanish, Latin, and Ancient Greek.



# MAT 117: College Algebra and Problem Solving



## Overview

This online college algebra course equips you with the skills to effectively solve problems using algebraic reasoning. What sets this course apart from a standard algebra course is its strong emphasis on the techniques that are used to solve problems. The goal is not to simply teach you mathematical forms but to help you understand the “whys” behind how you are solving problems. Throughout this course, you will be able to participate in discussions with other students and the professor to help build your conceptual understanding of algebra. In this course, you will learn about systems of linear equations, rational functions, quadratic functions, logarithmic functions, general polynomial functions, and exponential functions.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- How to apply algebraic reasoning to solve a range of problems
- How to identify functions, domains, ranges, intercepts and other critical algebraic concepts
- Skills required for success in future studies in calculus

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Mathematics (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

Instructor led

18%

ALEKS Topic Goals  
& Completion

12%

Active Learning  
Assignments

70%

Exams (4)

Self paced

100%

Final Exam

# Creator

## Sue McClure

Lecturer,  
School of Mathematical and Statistical Sciences

Sue McClure is a lecturer in the School of Mathematical and Statistical Sciences at Arizona State University. Educated at Ball State University, Purdue University, and Indiana University, Sue has acquired years of experience teaching courses ranging from high school mathematics to college calculus. Her efforts in the Mathematics Department at Angola High School helped rank the school as one of Indiana's finest high schools, and her interest in educational technologies has led Sue to explore and integrate personalized learning through adaptive mathematics and online education into her courses at Arizona State University.



# MAT 142: College Mathematics



## Overview

Applies basic college-level mathematics to real-life problems. Topics include numerical reasoning, sets, counting techniques, probability, basic statistics, and finance.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. This course contains five proctored exams.

## What You'll Learn

- Apply knowledge about set theory (sets, set notation, and set operations) to solve problems
- Apply basic counting techniques and probability theory to solve probability-based problems
- Apply a variety of statistical measures to solve problems
- Solve a variety of financial-based problems including, problems involving simple and compound interest, annuities, and amortized loans
- Apply geometric concepts (dimensional analysis, perimeter, area, surface area, volume, similarity, proportions, and trigonometric function) to solve geometry-based problems

## Transcript

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This course satisfies 3 credit hours toward the Mathematics (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

**30%**

Homework  
Assignments

**20%**

Written Problem  
Solving Assignments

**50%**

Exams (5)

# Creator

## Elizabeth (Beth) Jones

Principal Lecturer,  
School of Mathematical and Statistical Sciences

Beth Jones received a master's degree in mathematics from the University of Texas at Austin and a Ph.D. in learning and instructional technology from ASU, where she did research in cooperative learning. She has been teaching at ASU since 1990. Jones' teaching focus has been in First Year Mathematics courses with an emphasis on College Mathematics (the liberal studies mathematics course). She has been a coordinator of this course for the last several years. She has also been a member of the Grader/IA committee. Jones is also the recipient of the School of Mathematical and Statistical Sciences Award for Outstanding Instruction and Service.





# MAT 170: Precalculus



## Overview

In this college-level Precalculus course, you will prepare for calculus by focusing on quantitative reasoning and functions. You'll develop the skills to describe the behavior and properties of linear, exponential, logarithmic, polynomial, rational, and trigonometric functions. This course tailors content and personalizes the learning experience around your skill level, allowing you to achieve mastery in a certain concept before moving on to the next. Utilizing the ALEKS learning system, students in this personalized, self-paced course will be instructed on the topics they are most ready to learn. Individualized coaching is also provided as you move through each new topic.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. Before taking this course, you should already have a strong understanding of algebraic skills such as factoring, basic equation solving, and the rules of exponents and radicals. MAT 117 College Algebra is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Use basic algebraic operations on numbers, expressions, and equations
- Solve real-world application problems
- Apply algebraic reasoning to solve a range of problems
- Begin future studies in precalculus and calculus

## Transcript

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This course satisfies 3 credit hours toward the Mathematics (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

Instructor led

18%

ALEKS Topic Goals  
& Completion

12%

Active Learning  
Assignments

70%

Exams (4)

Self paced

100%

Final Exam

# Creator

## Fabio A. Milner

Director & Professor of Mathematics,  
Applied Mathematics and Mathematics Education

Fabio Milner studies structured population models, including demography, epidemics, ecology, and tumor growth. Populations are usually structured by age (demographic and/or age-of-disease), and may also be structured by sex, size, or other relevant variables. The team studies theoretical properties of the models, such as existence, uniqueness, preservation of non-negativity, and asymptotic behavior, as well as real-life applications. Professor Milner and his collaborators are also developing a family of epidemiological models structured by immunological variables in order to describe the multi-scale problem of disease propagation at the individual level ("small scale") and at the population level ("large scale") in a single model. They are studying the long-term population effect that chickenpox vaccination in childhood may have many decades later in increased incidence of the shingles by a combination of repeated exposure to the Varicella zoster virus and decreased immune response.



## Sue McClure

Lecturer,  
School of Mathematical and Statistical Sciences

Sue McClure is a lecturer in the School of Mathematical and Statistical Sciences at Arizona State University. Educated at Ball State University, Purdue University, and Indiana University, Sue has acquired years of experience teaching courses ranging from high school mathematics to college calculus. Her efforts in the Mathematics Department at Angola High School helped rank the school as one of Indiana's finest high schools, and her interest in educational technologies has led Sue to explore and integrate personalized learning through adaptive mathematics and online education into her courses at Arizona State University.



# MAT 210: Brief Calculus: Calculus for Business and Economics



## Overview

Topics covered in this course include limits and derivatives of algebraic, logarithmic, and exponential functions; the definite integral; analysis of graphs; optimization; applications of the derivative; and more. Content in this course is adaptive, allowing you to achieve mastery in a certain concept before moving on to the next. This course uses Gradarius, a calculus learning platform that personalizes your learning based on the topics you already know and the topics you still need to learn. You will also have access to individualized coaching as you move through each topic in this course.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. MAT 117 is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Meaning and computation of average rate of change, and applications
- Meaning and computation of instantaneous rate of change, and applications
- Marginal analysis
- Meaning and computation of accumulation, and applications
- Techniques to solve optimization problems, and applications

## Transcript

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This course satisfies 3 credit hours toward the Mathematics (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

### Instructor led

10%

Gradarius Topics (24)

20%

Gradarius Quizzes (5)

70%

Final Exam

### Self paced

20%

Quizzes (5)

80%

Final Exam

# Creators

## Fabio A. Milner

Director & Professor of Mathematics,  
Applied Mathematics and Mathematics Education

Fabio Milner studies structured population models, including demography, epidemics, ecology, and tumor growth. Populations are usually structured by age (demographic and/or age-of-disease), and may also be structured by sex, size, or other relevant variables. The team studies theoretical properties of the models, such as existence, uniqueness, preservation of non-negativity, and asymptotic behavior, as well as real-life applications. Professor Milner and his collaborators are also developing a family of epidemiological models structured by immunological variables in order to describe the multi-scale problem of disease propagation at the individual level ("small scale") and at the population level ("large scale") in a single model. They are studying the long-term population effect that chickenpox vaccination in childhood may have many decades later in increased incidence of the shingles by a combination of repeated exposure to the Varicella zoster virus and decreased immune response.



## Chandrani Banerjee

Senior Lecturer,  
School of Mathematical and Statistical Sciences

Chandrani Banerjee completed a master's of science in applied mathematics from Texas Tech University in 2007. Her research area was in mathematical modeling of biological systems. She has taught a variety of courses in Algebra, Trigonometry, Analytical Geometry, Calculus, Business Calculus and Statistics as a Faculty at Texas Tech University and at University of Arizona. She has been teaching at ASU since 2012 including both in-person and online classes over a wide variety of courses, such as Enhanced Freshman Math, College Algebra, Brief Calculus and Math for Business Application. She likes to teach a culturally diverse body of students and enjoys interacting with students from different countries and communities. Apart from teaching she is active as a course-coordinator and serves in course development committees.



# MAT 265: Calculus for Engineers I: Calculus with Analytic Geometry for Science and Engineering



## Overview

Topics covered in this course include limits (including those involving infinity); derivatives and rates of change; continuity; applications of the derivative; linear approximation; accumulation; antidifferentiation; definite integrals; and more. Content in this course is adaptive, allowing you to achieve mastery in a certain concept before moving on to the next. This course uses Gradarius, a calculus learning platform that personalizes your learning based on the topics you already know and the topics you still need to learn. You will also have access to individualized coaching as you move through each topic in this course.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. MAT 170 is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- The meaning and computation of limits
- The meaning and determination of continuity
- The meaning and computation of average rates of change and applications
- The meaning and computation of instantaneous rates of change and applications
- The meaning and computation of accumulation and applications
- The meaning and computation of Riemann Sums and applications
- Techniques to solve optimization problems and applications

## Transcript

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This course satisfies 3 credit hours toward the Mathematics (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

Instructor led

10%

Gradarius Topics (23)

20%

Gradarius Quizzes (5)

70%

Final Exam

Self paced

20%

Gradarius

80%

Final Exam

# Creators

## Fabio A. Milner

Director & Professor of Mathematics,  
Applied Mathematics and Mathematics Education

Fabio Milner studies structured population models, including demography, epidemics, ecology, and tumor growth. Populations are usually structured by age (demographic and/or age-of-disease), and may also be structured by sex, size, or other relevant variables. The team studies theoretical properties of the models, such as existence, uniqueness, preservation of non-negativity, and asymptotic behavior, as well as real-life applications. Professor Milner and his collaborators are also developing a family of epidemiological models structured by immunological variables in order to describe the multi-scale problem of disease propagation at the individual level ("small scale") and at the population level ("large scale") in a single model. They are studying the long-term population effect that chickenpox vaccination in childhood may have many decades later in increased incidence of the shingles by a combination of repeated exposure to the Varicella zoster virus and decreased immune response.



## Rochus Boerner

Principal Lecturer,  
School of Mathematical and Statistical Sciences

Rochus Boerner received a master of natural science (an interdisciplinary degree with major mathematics and minor computer science) from Arizona State University in 1999, and a doctorate in mathematics from Arizona State University in 2004. His doctoral research was in wavelets and harmonic analysis, the branch of mathematics that studies the frequency content of signals. He worked as a software engineer in the development of professional 3D design software from 2004 to 2007. Since 2007, he has been teaching mathematics at ASU and has taught most first and second-year mathematics courses. Lately, he has mostly been teaching the Calculus sequences, Discrete Math and Applied Linear Algebra. He developed and taught the mathematics portion of the engineering Jump Start and BioBridge programs, and MAT 275 and MAT 243 online. He is the 2016 recipient of the School's Award for Outstanding Instruction and Service.



# PAF 112: Identity, Service and American Democracy



## Overview

In this course, you will learn about civic engagement and how people like you shape the world. You will also gain insight into how you can become an active and engaged member of your own community. You will interview public service leaders, investigate local issues, and form the what, why, and how of civic engagement, which you will use to create a civic action portfolio. This course was designed through a unique partnership with Service Year Alliance and Arizona State University. This course is ideal for those looking to identify pathways to civic action, such as corps members working in their year of service, individuals who would like to get more involved in their neighborhoods and cities, or those interested in creating change in their community.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Examine the concepts of civic engagement, identity, political engagement, social engagement, democracy, government, social capital, federalism, voting processes, nonprofit organization, civil society, interest groups, mobilization, and lobbying
- Explain why American democracy is unique and the contribution of social capital in American society
- Examine cultural diversity in the US and contemporary concepts of multiculturalism, cultural relativism, and cultural subordination
- Demonstrate an understanding of current and historical social and political movements based on culture, including race, ethnicity, religion, disability, sexual identity, and generational culture
- Compare and contrast the types of political engagement and social engagement
- Describe how the tensions in American society related to identity (i.e., gender, race, class, sexuality, religion, (dis)ability, employment type) have influenced political action
- Explain the critical role that social service organizations play in American democracy
- Analyze the role of culture and cultural elements in identity formation and associations with others of similar identity and the social contributions of these associations
- Discuss how service work creates an identity and contributes to community building
- Evaluate your identity based on the categories discussed in this course and demonstrate how it influences your pathway to civic engagement
- Create an action plan of community service based on your identity using at least one of the six public service pathways
- Based on concepts such as identity, civic engagement, political engagement, social engagement, social capital, and mobilization, analyze a public service organization



## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral (SB) and Cultural Diversity in the United States (C) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

### Exams and Grading

50%  
ePortfolio

50%  
Quizzes (5)



# Creator

## Eileen Eisen-Cohen

MSW, Ph.D.

Senior Lecturer and Coordinator of Online Programs,  
School of Public Affairs

Dr. Eileen Eisen-Cohen has held leadership positions in many nonprofit and public organizations for over 20 years. She is currently employed as the Performance Improvement Manager with the Maricopa County Department of Public Health working with quality improvement and performance management systems. Eileen has experience leading work teams, community partners, and stakeholders in local and statewide initiatives, and serves on several executive boards of directors for grassroots and community organizations. She has worked in public administration and program evaluation for 30 years. As a Faculty Associate for the ASU School of Public Affairs, Dr. Eisen-Cohen teaches courses in Management, Public Policy, Program Evaluation, Leadership, and Women and Politics.



# PSY 101: Introduction to Psychology



## Overview

This introductory course is organized around modules that will cover the five pillars of psychology, which include the: biological pillar, cognitive pillar, developmental pillar, social and personality pillar, and mental and physical health pillar. As students progress through each learning Module, they will review up-to-date and relevant content, engage in meaningful active learning exercises, and complete a knowledge check or assessment. In addition, the course culminates with students completing a psychology-based milestone project that students will find applicable to their own life, such in the workforce or their academic journey.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- The historical roots of psychology
- The research methods used by psychologists
- The relationship between body and behavior and the mechanisms of sensation and perception and states of consciousness
- The terms, concepts, and processes of learning and conditioning, thinking and memory, and motivation and emotion
- The basic theories of human development and personality
- The issues in the area of intelligence and intelligence testing
- Stress and its effects on behavior
- Health psychology and factors to control stress
- The major categories of abnormal behavior
- The major therapeutic approaches used for the treatment of abnormal behavior
- The factors that influence group behavior and interpersonal relationships
- How psychology is applied in real-world situations

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

4%

Syllabus Quiz

41%

Quizzes

54%

Discussions and  
Applied Assignments

# Creators

## Liza Hita

Clinical Associate Professor, Psychology  
Director of Online Programming and Digital Immersion  
School of Social and Behavioral Sciences



Liza Hita is a Clinical Associate Professor of psychology and Director of Online Programming and Digital Immersion for the School of Social and Behavioral Sciences. Her administrative work focuses on the intersections of justice, transformation, and belonging. In her roles, she creates digitally-immersed learning tools and trainings, focuses on technology as means of empowerment and community-building, envisions new online programs, and explores deployment infrastructure. She is a community-based participatory researcher focused on the dissemination and implementation of preventive interventions for families experiencing major life transitions, including high conflict families, never married and divorcing parents, bereaved families, and families impacted by incarceration. She also studies multicultural and social justice praxis, decolonial methodologies, and counselor training. Her current research and practice are focused on the online administration of parenting interventions and creating sustainable community-embedded supervision models. Her community work focuses on bridging health disparities through culturally restorative, holistic practices. She is a full spectrum doula working with urban Indigenous families sharing traditional prenatal, birthing, and postpartum practices and providing loss support.

## **Natalie Gildar**

Associate Director, Psychology Digital Immersion Programs  
Licensed Psychologist  
School of Social and Behavioral Sciences/New College of  
Interdisciplinary Arts and Sciences



Dr. Natalie Gildar is a licensed psychologist who specializes in the assessment and evaluation of children and adults with neurodevelopmental disabilities, psychiatric conditions, and medical/neurological diagnoses. She currently teaches courses in the Psychology Department housed in the School of Social and Behavioral Sciences at Arizona State University. She received her doctorate in Counseling Psychology from ASU and previously had an instructional role in the School of Social and Family Dynamics at ASU. Additionally, Dr. Gildar completed her doctoral internship at Children's Hospital Los Angeles/Keck School of Medicine of USC with a specialty in Assessment, Evaluation, and Consultation. While at Keck School of Medicine of USC, she received her certificate in Leadership Education in Neurodevelopmental Disabilities (CA-LEND). She completed the Professional Program in Neuropsychological Assessment from UC, Berkeley, and received training at Phoenix Children's Hospital. She has additional clinical experience working in a university counseling center, a community mental health setting, and a school setting working with at-risk children. Dr. Gildar's research interests are focused on exploring topics of human resilience following trauma and have included: examining substance abuse particularly related to understanding the role of self-efficacy in relapse prevention; as well as examining post-traumatic growth among survivors of traumatic brain injuries. Dr. Gildar's work has been published in numerous academic journals and she co-authored a textbook chapter on the topic of substance abuse.

# REL 101: Religion, Culture, and Public Life



## Overview

Religion continues to be a site of conflict, confusion and controversy. It maintains a space in the modern world that is either perceived as a source of peace and morality or as an unnecessary and obsolete source of conflict. In this course, students will discuss the many facets of religion in a globalizing world. We will examine why religion persists in its various forms across the globe. In addition, we will analyze the ways that religion interacts and engages within the public realm, in both positive and negative formats. Identity, politics, gender, technology, and media are just a few of the places where we will find religion and religious influence.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Summarize the nature and scope of religious studies
- Contextualize the study of “religion” throughout history
- Explain the historical development of the concept of religion
- Describe the key methodological approaches to studying religion
- Analyze cultural assumptions about what constitutes rituals and religions
- Identify the ways that religious authority is constructed
- Analyze how religion, gender, race, and power intersect
- Determine how loyalties to nation-state, global identity, and religious commitments intersect
- Describe how religious identity compels some individuals and groups to engage in or disengage from ecological issues
- Analyze how “indigenous religion or spirituality” (re)emerge as resources for environmentalism
- Analyze the emergence of artificial intelligence and its relationship with religion
- Explore the future of technology and religion

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Humanities (HU) and Global Awareness (G) General Studies requirements at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

# Creator

## Terry Shoemaker

Lecturer, Religious Studies

Terry Shoemaker is an Americanist scholar focusing on religious change in contemporary life, particularly as it pertains to evangelicalism, evangelicals, and evangelical adjacent groups. This includes the ways that religion and religious people adapt, convert, deconvert, reform, and abandon aspects of their religiosity or spirituality. Additionally, he is interested in studying sports in the United States through the lens of religious studies theories and methods. His work is featured at numerous sites like The Conversation, Zócalo Public Square, and Religion Dispatches. These interests lead Terry into various classes at ASU on the topics of Religion and Popular Culture, Religion and Sports, and Spirituality in America. His first edited volume, *The Prophetic Dimension of Sport*, was published in 2018 and he has a forthcoming edited volume regarding the future of progressive Christianity and the Millennial generation with Wipf & Stock Publishers. Terry currently serves as vice-president of the Society for the Future of Higher Education (SFHE).



## Jason Bruner

Associate Professor

Dr. Jason Bruner is an ethnographer, writer, and historian studying Christians and Christianity in Sub-Saharan Africa and the United States. He is especially interested in lived religion, health, violence, and globalization. His work also incorporates photography and creative nonfiction. He is currently working on a short book titled *How to Study World Christianity*, which will be completed in Spring 2022. He is also engaged in a multi-modal creative and documentary project on the metro-Phoenix area titled *Life in the Valley*. Dr. Bruner's most recent monograph, *Imagining Persecution: Why American Christians Believe There is a Global War Against Their Faith* (Rutgers University Press, 2021), provides a genealogy of American Christian discourses of global religious violence. It gives particular attention to the ways that religious persecution has come to frame American perceptions of Christianity worldwide. His first book, *Living Salvation in the East African Revival in Uganda* (University of Rochester Press, 2017), is a cultural history of a Christian revival movement in Uganda from the early 1930s to the mid 1950s. He is co-editing a book (with David C. Kirkpatrick) titled, *Global Visions of Violence: Agency and Persecution in World Christianity*. That book will be released with Rutgers University Press in 2022.



# Creator

## Leah Sarat

Associate Professor

Leah Sarat's work explores the intersection of religion and migration in the U.S.-Mexico borderlands, with attention to ways in which people draw upon religion to confront the challenges of the migration experience and navigate the boundaries of citizenship and belonging. Sarat received her PhD in religion in the Americas from the University of Florida and joined the Religious Studies faculty at Arizona State University in 2010. Her book, "Fire in the Canyon: Religion, Migration, and the Mexican Dream" (New York University Press, 2013) centers on the relationship between U.S. migration and Pentecostalism in an indigenous community in central Mexico that operates an innovative U.S.-Mexico border crossing simulation for tourists. Sarat's current work focuses on the relationship between immigration, coloniality, and incarceration in Arizona. With support from the Louisville Institute, she has interviewed chaplains, faith-based volunteers, and individuals formerly held at Arizona's Eloy Detention Center to highlight the religious narratives and practices that alternately explain, justify, and resist the realities of private, for-profit immigrant detention in the state. While these stories provide insight on immigrant policing in borderlands, they also offer a window onto the intersection of Christianity with broader debates about safety, fear, liberation, healing, and personhood within the U.S. carceral landscape.



# SES 106: Habitable Worlds



## Overview

Are we alone in the Universe? If so, why? If not, where are our cosmic cousins? Such questions, once the domain of science fiction, are on the verge of being answered with science facts. Astronomers are discovering planets around other stars. Planetary scientists are exploring the worlds in our solar system. Biologists are unlocking the secrets of metabolism and evolution. Geoscientists are determining how the Earth supports life. And as we struggle to build a sustainable future for ourselves, all of us are finding out how technologically advanced civilizations rise and how they might fall. Inspired by this ongoing scientific revolution, Habitable Worlds surveys key concepts from across the major areas of science that help us to understand what makes Earth - or any other planet - a habitable world.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. MAT 170 Precalculus is strongly suggested as a prerequisite for success in this course.

## What You'll Learn

- Explain the conditions that can make a planet habitable
- Identify and justify the steps necessary to determine if an exoplanet is habitable
- Describe the history of Earth as an inhabited world and how this knowledge informs the search for life on other worlds
- Describe and interpret observations using data analysis, foundational mathematics, and accessible computational methods
- Apply scientific reason, particularly using hypothesis-driven processes to create scientific models, test models using basic qualitative and quantitative reasoning, choose among competing ideas that have different levels of uncertainty
- Apply problem-solving skills including breaking complex problems into multiple steps, identify the knowledge needed to solve each step, and obtain and interpret that knowledge quantitatively and qualitatively

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses. This course includes a lab and satisfies 4 credit hours toward the Natural Science - Quantitative (SQ) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

75 pts

Introduction

145 pts

Stars

108 pts

Planets

152 pts

Habitability

48 pts

Life

84 pts

Survival

260 pts

Project Habitable  
Hunt



# Creators

## Ariel Anbar

President's Professor,  
School of Earth and Space Exploration and  
School of Molecular Sciences

Ariel Anbar is a scientist and educator interested in Earth's past and future as an inhabited world, and the prospects for life beyond. His group develops novel geochemical methods to study topics ranging from the chemical evolution of the atmosphere and oceans to human disease. Trained as a geologist and a chemist, Anbar is a President's Professor at and the School of Molecular Sciences, and a Distinguished Sustainability Scholar in ASU's Global Institute of Sustainability. Anbar directed ASU's Astrobiology Program from 2009 – 2015 and directs the Center for Education Through Exploration. A graduate of Harvard and Caltech, he was on the faculty of the University of Rochester before moving to ASU in 2004. An author of >180 refereed papers, Anbar is a Fellow of the American Geophysical Union, the Geological Society of America, the Geochemical Society and the European Association of Geochemistry, and is a Howard Hughes Medical Institute Professor. He is a recipient of the Donath Medal and the Arthur L. Day Medal of the Geological Society of America.



## Katie Berryhill

Instructional Professional

The facilitator for ASU's Universal Learner Course offerings of SES106, Habitable Worlds. Based in Northern California, she is an adjunct astronomy professor teaching general education astronomy at Los Medanos College, Solano Community College, and Chabot-Las Positas Community College District, as well as teaching Habitable Worlds at Southwestern Community College in North Carolina. Dr. Berryhill holds a bachelor's in astronomy from the University of Pennsylvania, a master's in space studies from the University of North Dakota, and an Ed.D. in science education from the University of Wyoming. She is the 2021 recipient of Solano Community College's Distinguished Part-Time Faculty Award. She is also a published narrator of astronomy and education audiobooks. Her research and course development interests are focused on teaching and engagement methods to improve student achievement in science and mathematics courses in both face-to-face and online learning environments and strategies that can help diverse groups of students learn to love astronomy.



# SOC 101: Introduction to Sociology



## Overview

In this online sociology class, you will learn how individuals both shape and are shaped by their communities. You will learn how individuals both actively impact and are shaped by their communities, and you will explore the formation and persistence of societies that consist of diverse groups of people. You will also gain valuable insight into the dynamics of group relationships, including how to effectively interact with others within a group. Finally, you will learn how the study of sociology applies to your daily life as well as the most pressing social events of our time.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Discuss basic sociological concepts and perspectives
- Discuss current events with others in an informed way
- Apply sociological ideas to everyday life and current events
- Think critically about social issues

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours toward the Social-Behavioral Sciences (SB) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

10%

Graded  
Discussions

20%

Content  
Mastery (7)

20%

Quizzes (7)

25%

Midterm Exam

25%

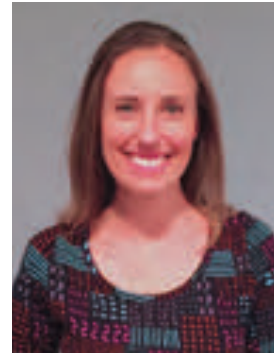
Final Exam

# Creators

## Jennifer Harrison

Lecturer,  
T. Denny Sanford School of Social and Family Dynamics

Jennifer Harrison earned her MA and Ph.D. in Sociology from Arizona State University with specializations in statistics and medical sociology. After starting out at community college as a first-generation college student, she earned her AA in Sociology from Fullerton College, her BA in Sociology from California State University, Long Beach. During several years in graduate school at ASU, Dr. Harrison taught classes on the Tempe campus and online before taking a 5-year hiatus from teaching when she accepted a position in academic publishing. She worked mainly in the educational technology field writing digital educational content, working as a course designer, and ultimately as the product manager of print and digital Sociology learning materials. But all that time, while interacting with students and instructors through research, conferences, and demos, she realized how much she missed teaching in her own classes and working directly with students. Dr. Harrison left the publishing industry for a faculty position in 2015 where she has been an instructional faculty member as a Lecturer in the Sanford School of Social and Family Dynamics at ASU.



# SST 220: Introduction to Social Transformation



## Overview

This is an introductory course designed to explore the core principles and frameworks of intersectionality and social transformation. The course content examines the social, political and cultural constructions of difference, the relationships and intersections between categories of difference - namely race, gender, sexuality, and disability - and the ways in which individuals and groups experience multiple categories of difference. The course takes a social justice approach to understanding how forces of difference and structures of power impact justice, and determine strategies for creating a just society.

## Course Prerequisites and Requirements

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements.

## What You'll Learn

- Define intersectionality and social transformation
- Recognize common historic and contemporary challenges faced by diverse groups of people
- Explain the difference between individual and systemic injustice

## Transcript

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student who has taken the course on one of ASU's campuses.

This course satisfies 3 credit hours at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring your credit.

## Exams and Grading

20%

Quizzes

5%

Content  
Mastery

10%

Graded Reflection Board

5%

Design Project

5%

Journal  
Self-Assessment

25%

Midterm Exam

30%

Final Exam

# Creators

## Mako Fitts Ward

Assistant Professor,  
School of Social Transformation

Dr. Mako Fitts Ward's research examines urban cultural production and placemaking efforts that impact community building and contemporary social movement organizing. She is the co-editor of *The Pandemic Reader: Exposing Social (In)justice in the Time of COVID-19* (DIO Press, 2021). Her writing has appeared in a wide range of journals, edited volumes and popular news blogs, including Huffington Post, The Conversation and Ms. She teaches courses on intersectionality, gender and hip-hop, ethnic studies, the African diaspora, social justice and women's social movements.



## Jessica Solyom

Assistant Research Professor,  
School of Social Transformation

Dr. Jessica Solyom's research and teaching focuses on diversity, equity, education, and belonging. Her publications and research have explored the struggles of Latino and Indigenous education rights activists, DEI challenges faced by Latino and Indigenous students in postsecondary education, and diversifying STEM for girls of color. She is co-creator/co-curator of the To Be Welcoming series.

