

Exhibit B: Academic Program Descriptions

Business and Society Programs

Be an Influencer

Learn what it really takes to become a successful social media influencer or content creator. Topics will include finding a niche, building an audience, and maintaining consistency. Students will learn the ins and outs of various online platforms and experiment with content creation tools. This program is also great for students interested in becoming college athletes and exploring name, image, and likeness deals or for students who want to learn how to build their brand and manage their online presence. Students will also hear from successful content creators and influencers.

Sponsoring School: Eberhardt School of Business

Faculty Lead: Dr. Rebecca Achen

Becoming the Best Teacher Ever

What makes a great teacher or coach? It starts with passion. If you can bring the passion, we'll bring the rest. Join us for two weeks of interactive skill development that will combine your passion with real-world strategies to hone leadership, build motivation, and foster creativity to build an inclusive culture amongst students, athletes, and the community.

Sponsoring School: Benerd College

Faculty Lead: Dr. Kyle Harkness and Dr. Brittany Auernig-Roan

Business Skills Bootcamp

Learn the main skills you need to start a business. Students will be exposed to the basics of a market economy, entrepreneurship, marketing, finance and managing resources. Activities involve students in writing, investigating, problem-solving, demonstrating, and presenting in the context of starting a business.

Sponsoring School: Eberhardt School of Business

Faculty Lead: Dr. Lewis Gale

Competitive Debate

Learn to execute the skills and strategies of competitive debate from coaches and college students who lead Pacific's speech and debate team, which has finished in the Top 10 nationally for seven consecutive years.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Steven Farias

Engaging Democracy

Experience democracy across the ages with Pacific's Political Science Department. Immersive historical role-playing games explore the philosophical and political challenges democratic governments have faced at two key moments: the birth of democracy in ancient Greece and the 1970s Watergate Crisis in the United States. In this two-week program students will learn by competing in role-playing games set in these key historical moments.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Brian Klunk

Investing in Stocks

Discover how to make smart investment decisions. This program will take students from investment fundamentals to actual investment trades on the stock exchanges through the Eberhardt Student Investment Fund, a signature program of Pacific's Eberhardt School of Business.

Sponsoring School: Eberhardt School of Business

Faculty Lead: Dr. Ben Carlston

Leadership for Women

Explore how to be an effective leader through workshops and one-on-one sessions with top professors from the Eberhardt School of Business, alumni and community leaders to build leadership and communication skills. Participants will prepare business case projects and design and run a conference to share they have learned.

Sponsoring School: Eberhardt School of Business

Faculty Lead: Dr. Margaret Roberts

Police Cadet Academy

Learn about working in the Criminal Justice Field through this Police Academy course. Participants will learn about criminal laws, vehicle codes, radio codes, safe driving, and Procedural Justice while actively participating in self-defense and physical training (PT). Actual police officers and academy trainers will teach these learn-by-doing courses.

Sponsoring Unit: Department of Public Safety

Faculty Lead: Grant Bedford, Chief of Police

Mission Possible: Design Your Perfect School

Your mission, should you choose to accept it; design the perfect school. We'll unleash our creativity and use Design Thinking—just like the most innovative companies—to reimagine, innovate and design your perfect school.

Sponsoring School: Benerd College

Faculty Leads: Dr. Laura Hallberg and Dr. Karen Sarafian

Sports Analytics

Explore the fast-growing world of sports analytics. Learn how data is changing the landscape of athletics by learning about this \$300 billion industry. Topics include individual and team performance analytics, sports management and contract negotiations.

Sponsoring School: Eberhardt School of Business

Faculty Leads: Dr. Rebecca Achen and Dr. Meredith Wills

Taking Control of Your Financial Future

Budget your money, build your wealth, learn to invest, understand life insurance, navigate retirement savings and more. You will learn how to budget and plan your expenses and begin saving thousands of dollars every year by cutting out certain expenses. You will examine investment opportunities to help you start growing your wealth rather than spending it. You will also learn how to build your credit score and getting out of debt. Start taking control of your financial freedom!

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Manizha Sharifova

Trial Advocacy

In this unique, immersive two-week program, students will learn about case analysis, direct and cross examination, admitting and using exhibits, and delivering opening statements and closing arguments guided by Annie Deets, Director of Trial Advocacy, and aided by members of the nationally ranked McGeorge Mock Trial Team from the McGeorge School of Law.

Sponsoring School: Pacific McGeorge School of Law

Faculty Lead: Dr. Annie Deets

What Lawyers Do

In this unique, immersive two-week program, students will learn about the law, and legal careers guided by experienced faculty and aided by JD and other students from the McGeorge School of Law.

Sponsoring School: Pacific McGeorge School of Law

Faculty Lead: Dr. Mary-Beth Moylan

Engineering and Technology Programs

Advanced Coding

Learn to write advanced computer code in the C++ programming language, building on your previous coding experience or the Coding program of the Summer High School Institute. Topics include functions and parameter passing, arrays and object-oriented programming.

Sponsoring School: School of Engineering and Computer Science

Faculty Lead: Dr. Houman Kamran Habibkhani

Coding

Learn to write computer code in the C++ programming language. Topics include variables and expressions, branches, and loops. Students develop algorithmic and computational thinking and the skills to design a solution to a proposed problem and write a code to solve that problem.

Sponsoring School: School of Engineering and Computer Science

Faculty Lead: Dr. Houman Kamran Habibkhani

Cyberethics

Learn specific tricks on how to determine what is right and wrong and then use them in engaging debates – traveling through recent history to see atrocities such as the Kansas City Hyatt Regency collapse, the conflict in society of whether Snowden was a hero or a traitor, and how so many people lost millions of dollars to Theranos. And what are we to make of our life in a “surveillance state,” being watched by ubiquitous cameras? Is gene editing for eye color, height, and intelligence right around the bend? Is that okay?

Sponsoring School: School of Engineering and Computer Science

Faculty Lead: Dr. Gary Martin

Data Science

With the vast amount of data created every millisecond in our digital world, we are now able to build computers that can do things we once thought only humans could do, like recognize friends in pictures, drive our cars, and speak to us in our natural spoken languages. Explore the Artificial Intelligence revolution and learn the foundations of this incredible technology. Students will learn programming skills in Python and create computer systems that can recognize complex patterns in different types of data.

Sponsoring School: School of Engineering and Computer Science

Faculty Lead: Dr. James Hetrick

Drone Pilot

Drones have exploded in popularity in the past few years, as they are rapidly becoming a valuable tool in a variety of industries such as journalism, agriculture, entertainment, construction, mapping, delivery, security and surveillance. In this course, students will learn how to build and fly a drone. Students will learn about Federal Aviation Authority regulations and take The Recreation UAS Safety Test.

Sponsoring School: School of Engineering and Computer Science and University Library

Faculty Leads: Dr. Elizabeth Basha and Niraj Chaudhary

Entrepreneurship & Technology Design

Learn practical techniques for conceptualizing, articulating and assessing innovative and entrepreneurial solutions and apply these techniques to your own ideas to create the pitch and business plan.

Sponsoring Schools: School of Engineering and Computer Science and the Eberhardt School of Business

Faculty Lead: Dr. Mehdi Khazaeli

eSports

Follow your passion for competitive gaming to learn more about the \$160 billion eSport industry. Participants will improve gameplay by focusing on individual and teamwork skills, while also learning about various careers and business models in this exciting field.

Sponsoring School: Eberhardt School of Business

Faculty Leads: Dr. Amit Lal and Dr. Lewis Gale

Game Design and Development

Students in this two-week program will explore the core concepts of game design with Media X faculty by create a demo video game using Unreal Engine 4, an open-source gaming engine. This fast-paced “learn-by-doing” game design camp will teach students how to think about game mechanics and player behavior as they create a game that will be played at the end of the course. Along the way, we will discuss the nature of the video game industry, roles within game design teams and the life of a game designer.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Josh Salyers

Innovating with Purpose

Integrate digital and physical innovation by using new technologies. Learn the basics of 3D printing, virtual reality, graphic design, drone piloting, animation with AI and motion capture suits, media content creation, and product development.

Sponsoring School: University Library
Faculty Lead: Niraj Chaudhary, Dean

Smartphone and Web Interface Design

In this course, students will learn about how to use a user-centered design process to conduct user research (to identify what to build) and to effectively design interfaces (for example through low-fidelity prototypes). They will also be exposed to different techniques to assess usability and have the opportunity to design their own interfaces.

Sponsoring School: School of Engineering and Computer Science
Faculty Leads: Dr. Sebastian Dziallas

Wearable Technology and Bio-signals

Wearable devices are very popular and recently they were used widely to continuously collect bio-signals. Explore the technology behind this exploding field, which can potentially provide advanced diagnostic and therapeutic capabilities such as cardiovascular disease detection and fitness monitoring. You will learn about bio-signals and bio sensors and how wearable technology utilize them for health monitoring, which is crucially important for next generation autonomous diagnostic, therapeutic, and assistive health tools.

Sponsoring School: School of Engineering and Computer Science
Faculty Lead: Dr. Seyedeh Fatemeh Khatami Firoozabadi

Health and Science Programs

Experiments in Urban Ecology

Conduct science in urban environments, which are expanding rapidly—nearly 5 billion people worldwide and over 80% of Americans now live in cities. Students will get hands-on experience designing experiments, collecting and analyzing data, and presenting their findings using the Stockton campus as a petri dish for urban ecology.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Zachary Stahlschmidt

Exploring the Human Body

Integrate the structure and mechanisms of the body to see how it works and how health problems arise. Conduct dissections, use digital 3D models, physical models and run physiological experiments to answer questions such as what happens when one kicks a ball or when one has a heart attack.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Marcos Gridi Papp

Finding a Cure for Cancer

Join our biochemists in their labs as you work alongside them to find a cure for cancer. Learn how to design and perform experiments that will create new drugs and delivery systems to combat disease.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Georgios Pantouris

Frontiers in Modern Astronomy

Join the Pacific Department of Physics to experience exciting frontiers in modern astronomy. Learn how world-class telescopes like the James Webb Space Telescope are being used to investigate the most distant galaxies in the Universe and discover exoplanets that might harbor alien life. With interactive activities and nighttime stargazing with our faculty, it's sure to be an excellent experience for all.

Sponsoring School: College of the Pacific

Faculty Leads: Dr. Daniel Jontof-Hunter, Dr. Elisa Toloba, Dr. Guillermo Barro Calvo, and Dr. Dustin Madison, Physics

Future Dentists

Gain insight and explore a rewarding career in dentistry. Learn from dentists, alumni, and staff from the world-renowned Arthur A. Dugoni School of Dentistry. During your Stockton residency and excursions to the Dugoni School on the San Francisco Campus, you'll participate in team-

building exercises, clinical shadowing experiences, hands-on clinical simulations, presentations about oral health and overall health, and interactive non-academic workshops to gain confidence and tools to prepare for college and applying to dental school.

Sponsoring School: Arthur A. Dugoni School of Dentistry

Faculty Leads: Dr. Elisa Chavez

Future Pharmacists

Work side-by-side with research scientists, professors and pharmacists from the Thomas J. Long School of Pharmacy to design research experiments, learn vaccination techniques, participate in a pharmacy-themed escape room and respond to a simulated cardiac code blue.

Sponsoring School: Thomas J. Long School of Pharmacy

Faculty Leads: Dr. Kate O'Dell and Dr. Melanie Felmlee

Health Care Professions

The health care industry is the fastest growing employment sector. Explore the many options available in this dynamic field through hands-on experiences that will introduce students to careers in Audiology, Athletic Training, Clinical Nutrition, Nursing, Occupational Therapy, Physician Assistant, Physical Therapy, Speech-Language Therapy, and Social Work.

Sponsoring School: School of Health Sciences

Program Lead: Dr. Derek Isetti

Medical Microbiology Experience

Look to the soil around us for antibiotic producing microbes. Get your hands dirty with sterile technique, growth inhibition, and understand where our most important medicines come from.

Sponsoring School: College of the Pacific

Faculty Lead: Dr. Skylar Carlson

Performing and Visual Arts Programs

2D Art Studio

Work with faculty from the Department of Art, Media, Performance, and Design to learn how to create artwork using across multiple mediums such as painting, illustration, and printmaking. Partake in a hands-on tactile creative studio experience in the most inspirational art facility in the region. The projects will be showcased in the Reynolds Gallery at the end of the institute.

Sponsoring School: College of the Pacific

Faculty Lead: Jill Vasileff

Band

Come join other woodwind, brass, and percussion students on the beautiful Pacific campus for an immersive program that includes concert band, instrument specific masterclasses, and possible electives such as chamber music, composition, improvisation, and conducting.

Sponsoring School: Conservatory of Music

Faculty Lead: Dr. Vu Nguyen

Ceramics Studio

Students in this two-week program will explore basic concepts of sculpture. Two hands-on projects will include character development with clay modeling and installation with the figure using plastic wrap and mixed media techniques. Students will gain insight into the creative process and a general knowledge of exemplary works from history and the present.

Faculty Lead: Dr. Jessica Fong

Choir

We invite singing high school students to cultivate your musicianship and ensemble skills through daily choral rehearsals and workshops. Friends and family are invited to join us for a final performance at the end of the two-week session.

Sponsoring School: Conservatory of Music

Faculty Lead: Dr. Yejee Choir

Creating Media

Work with faculty from the Innovative Media X program to learn how to make movies, and podcasts and more in our studios and digital media labs. The projects will be showcased in the X-Space at the end of the Summer Institute.

Sponsoring School: College of the Pacific

Faculty Lead: Gabriel Teo

Jazz

The purpose of this program is to give high school musicians the opportunity to develop skills in the area of jazz through big band and small group performance as well instrument specific masterclasses. Friends and family are invited to join us for a final performance at the end of the two-week session.

Sponsoring School: Conservatory of Music

Faculty Lead: Patrick Langham, MM

Music Industry: Produce and Perform

Explore the world of sound design, recording, publishing, licensing and other dimensions that drive America's \$900 billion creative sector economy. The music industry program is based at Pacific's recording studios and taught by the University's renowned Conservatory of Music faculty. Under the guidance of Pacific alumni, faculty and established music industry professionals, students experience and are immersed in the process of creating, producing, releasing and performing a song in the public space.

Sponsoring School: Conservatory of Music

Faculty Lead: Benom Plumb, MM

Musical Theatre Workshop & Showcase

The Musical Theatre Workshop is an intensive program that focuses on training for the singer-actor. Participants will work with Pacific's Conservatory faculty, integrating musical, dramatic and dance techniques. The workshop will culminate with a showcase-style performance for friends, family and the entire institute community.

Sponsoring School: Conservatory of Music

Faculty Lead: James Haffner, AD, MFA

Orchestra

We invite high school violinists, violists, cellists and double bass players the opportunity to play as an ensemble, and to develop their individual skills through lessons and masterclasses with Pacific's Conservatory faculty.

Sponsoring School: Conservatory of Music

Faculty Lead: Dr. Nicolas Waldvogel

Piano

Intermediate and advanced pianists are invited to work in a master class setting with Pacific professors Sonia Leong and Natsuki Fukasawa. In working with each pianist, we'll cover musicianship, technique, healthy approaches to playing, practice habits, memorizing, nerves, and ensemble playing.

Sponsoring School: Conservatory of Music

Faculty Lead: Dr. Sonia Leong

Athletics Programs

What does it take to be an elite athlete? Engage with and learn from world class coaches on what it takes to compete at the highest level. Students will gain physical skills and improve tactics to elevate their game to the next level. The sports camps will have a strong academic component, where students will learn about injury prevention and practice, strength and conditioning principles, nutritional approaches, mental toughness training and visualization, the use of video analysis and data to gain an edge on your opponent, and insights into the recruiting process in order to achieve the dream of becoming a collegiate student-athlete.

Baseball

Lace up your spikes and learn elite baseball skills with nationally known baseball coaches. Take your game to the next level and learn about pitching, hitting, fielding and baserunning.

Basketball Skills Academy

Join our Pacific basketball coaches this summer to improve your fundamental skill set, and develop new skills to progress your game to the next level. In this program we offer position specific and general skill instruction, as well as developing the triple threat of performance mindset, leadership and understanding of the game.

Chess Strategy and Tactics

Playing chess enhances memory, numerical and problem-solving skills and improves logical thinking. Learn from international masters and the best chess coaches in Northern California about the hottest openings, must-know endgames and improve your strategic and tactics chess skills.

Golf Swing Analysis and Course Management

Come hit the links and learn how to put your golf game on par. Our expert coaches will focus on swing mechanics, short-game skills and course management.

Indoor/Beach Volleyball Skills and Tactics

Bump, Set, Spike! Hit the courts and the sand to develop and improve your indoor and beach volleyball skills. Join our highly decorated coaches and win the next point by focusing on serving, passing, and attacking.

Soccer Skills and Tactics

Join our nationally recognized soccer coaches to gain insights on how to maximize your skills on the pitch. Raise your game and learn about position-specific skills, tactical formations and strategies.

Swim Camp

Stroke technique and conditioning for competitive to elite swimmers looking to improve their stroke technique, starts and turns, and overall performance. Coached by passionate and educated staff to elevate your love for swimming in a supportive environment.

Tennis Skills and Tactics

Grab your racket and join our elite level tennis coaches at the beautiful Eve Zimmerman Tennis Center. Improve your forehand, backhand, serve and volley in this program.

Water Polo Skills and Tactics

Hop in the pool and learn from some of the most influential water polo coaches in the world. Improve your skills with a focus on shooting and passing, and increase your overall knowledge of water polo tactics.