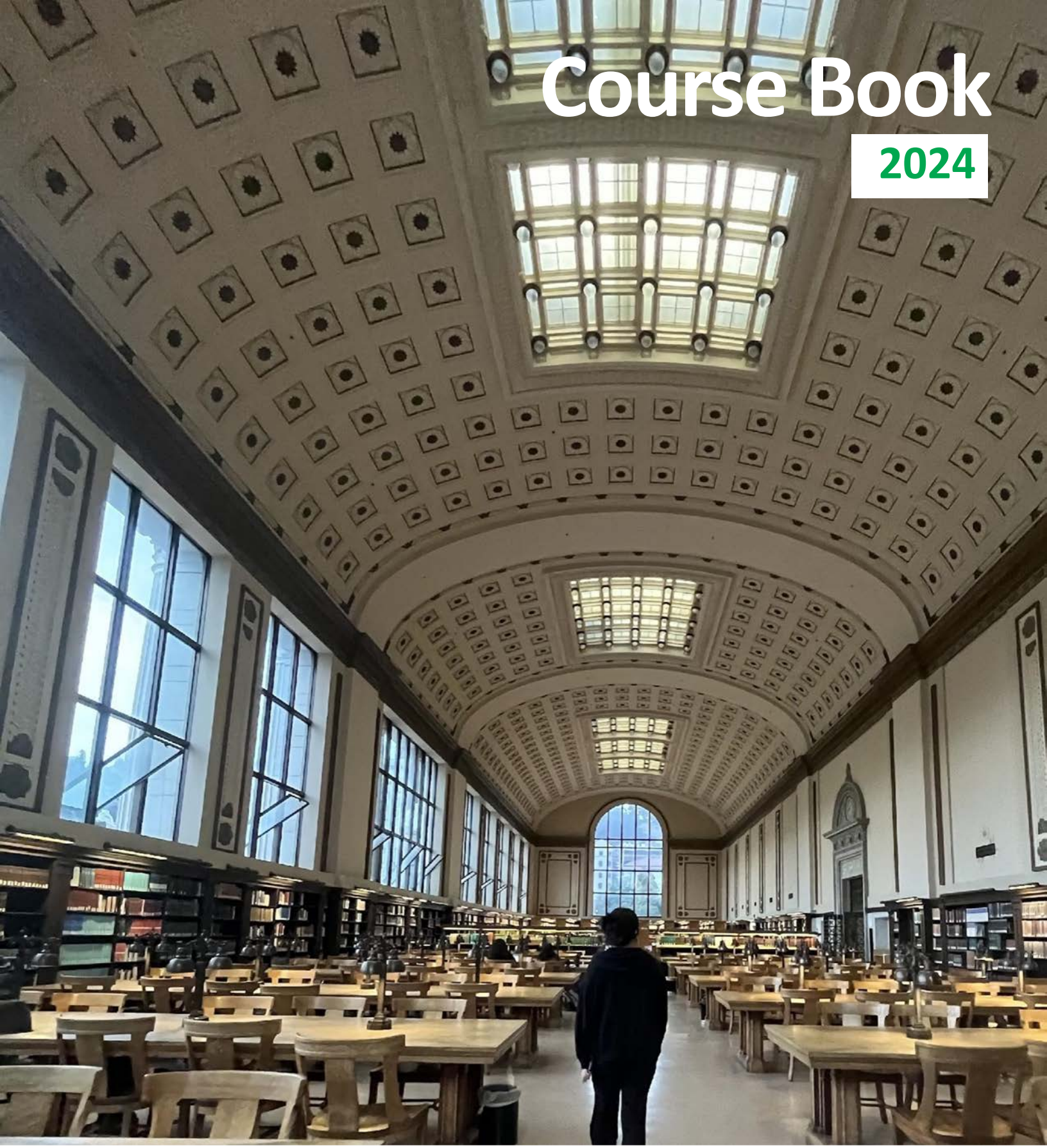

Course Book

2024

summer discovery

UC BERKELEY

HIGH SCHOOL PRE-COLLEGE ENRICHMENT

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summer discovery

COURSE OPTIONS AND DATES

2-WEEK ACADEMIES

DATES OFFERED

Session 1: **6/16/2024 - 7/3/2024 (Residential Dates)**
Session 2: 6/30/2024 - 7/12/2024 (Residential Dates)
Academies are full-day courses. Students select one academy during the application process.

Topic	Course Title	Course Time	Length	Dates
Business & Engineering	M.E.T Academy	All-Day Academy	3 weeks	6/16/2024 - 7/3/2024
Design & Technology	Designing Emerging Technologies Lab	All-Day Academy	4 weeks	6/16/2024 - 7/12/2024
Medicine	Emergency Medicine Academy	All-Day Academy	2 weeks	6/16/2024 - 6/28/2024
Medicine	Emergency Medicine Academy	All-Day Academy	2 weeks	6/30/2024 - 7/12/2024
Medicine	Psychiatry & Neuroscience Academy	All-Day Academy	2 weeks	6/16/2024 - 6/28/2024
Medicine	Psychiatry & Neuroscience Academy	All-Day Academy	2 weeks	6/30/2024 - 7/12/2024
Humanities & Life Skills	Berkeley Changemaker Summer Pre-College Program	All-Day Academy	2 weeks	6/16/2024 - 6/28/2024

COURSE TITLE

M.E.T. Innovation Academy

SUBJECT AREA

Business; Business & Engineering

COURSE DESCRIPTION

The Berkeley M.E.T. Innovation Academy is a hands-on summer program for rising high school juniors and seniors interested in being at the forefront of tech and entrepreneurship. Study at the #1 public university in the world and learn from top-ranked faculty at the Haas School of Business and College of Engineering. M.E.T. Summer program students will get real-world experience solving business and tech challenges and interface with world-renowned corporates and organizations. Network with successful entrepreneurs from the heart of Silicon Valley and Berkeley M.E.T. student entrepreneurs.

COURSE TITLE

Berkeley Changemaker Summer Pre-College Program

SUBJECT AREA

Interdisciplinary; Life Skills

COURSE DESCRIPTION

The Berkeley Changemaker Pre-College Program offers international and domestic high school students the opportunity to live on campus and enjoy the summer at Berkeley. Since its inception, UC Berkeley has always attracted changemakers whose vision challenges the status quo and whose contributions make our world a better, more equitable place. Our Pre-College Scholars Berkeley Changemaker track draws from, and builds on, elements that make Cal unique, including a singular history for leading inclusively and an agency for making society better. Our curriculum activates our students' passions and helps them to develop a sharper sense of who they want to be and how to make that happen. Regardless of whether your interests lie in entrepreneurship, social entrepreneurship or you'd simply like to think more entrepreneurially, there is a place for you here in our learning community.

By taking advantage of the Berkeley Changemaker track, you will sharpen your skills in three key areas -- critical thinking, communication, and collaboration -- while exploring what change-making looks like in a wide variety of disciplines across campus. You will also become part of the campuswide Berkeley Changemaker, which has already enrolled some 20% of Berkeley's undergraduates since its launch in summer 2022. Through daily lectures, compelling faculty interviews, and interactive team assignments with your fellow changemakers, you will develop your own change-making mindset and learn how to turn your ideas into action.

COURSE TITLE

Designing Emerging Technologies Lab

SUBJECT AREA

STEAM; Design & Technology

COURSE DESCRIPTION

"Designing Emerging Technologies" refers to the creative and strategic process involved in conceptualizing, developing, and implementing new and innovative technologies that are at the forefront of human knowledge and capability. Delve into this innovative field for a summer of education, innovation, engineering and creative fun at the Jacobs Institute for Design Innovation!

Students will have exclusive access to world class state-of-the-art facilities and tools that enable the prototyping and development of a wide range of technologies, including artificial intelligence, virtual and augmented reality, robotics, and interactive devices. The (DET Lab) is perfect for rising high school seniors and juniors who want to encounter social, scientific, and engineering problems, learn from world class scientists, industry leaders, and research experts, and design and fabricate functional solutions that improve the lives of people and the planet.

The Designing Emerging Technologies Lab program focuses on a set of revolving topic areas where students work in teams of 5-6 on focused design projects. They will engage with domain experts, receiving hands-on design and engineering and fabrication training, and work in teams to fabricate function designs that are showcased in a final graduation exhibition at the conclusion of the program. Designing emerging technologies is about envisioning and creating the future of how we live, work, and interact. It requires a visionary approach that goes beyond the current state of the art, aiming to solve tomorrow's problems today with thoughtful, innovative solutions that prioritize human well-being and the planet.

COURSE TITLE

Emergency Medicine & Health Sciences Academy

SUBJECT AREA

STEAM; Medicine

COURSE DESCRIPTION

The exploration of the field of healthcare will encourage deep learning and practical application of the technical and personal skills necessary to succeed in any health professional school. Action-based simulations led by experts will expose students to the daily work life of a healthcare professional, including suturing, dissection, and trauma response, clinical diagnostic simulations, case studies, and lively class discussions. This interactive approach to learning encourages teamwork, teaches leadership, and targets skill development that students can apply to a future career in any health profession and beyond into their personal lives. A critical role of this course is to provide students with insight into the various paths required for undergrad, graduate, and postgraduate coursework necessary in their field of interest. Students will explore the diversity of health-related professions and begin to hone the skills, understanding, and determination required to succeed in healthcare. Features may include visits to simulation labs, healthcare settings, and panelists in various stages of healthcare careers.

COURSE TITLE

Psychiatry & Neuroscience Academy

SUBJECT AREA

STEAM; Medicine

COURSE DESCRIPTION

Psychiatry and neuroscience play an integral role in modern medicine and are at the forefront of research to find solutions to some of the world’s most vexing health problems today. In this interdisciplinary crash course, students gain a deeper understanding of the complex workings of the human brain and how the discipline is advancing the field of healthcare. The comprehensive curriculum addresses topics such as the biology of mental illness, psychopharmacology, and the ethical considerations involved in treating patients with mental health disorders. Through a hands-on and interactive learning approach, students participate in guided simulations to apply conceptual frameworks to real-world examples. Interactive learning techniques may involve role-playing exercises, case studies, and laboratory sessions that will help students refine skills in patient communication, critical thinking, and problem-solving. Whether you decide to pursue a career in psychiatry and neuroscience or decide another health science is more up your alley, you’ll hone durable skills that are essential for success in your professional future. By providing a well-rounded curriculum that balances theory with practical application, students will leave the course prepared for the path to a successful career in health science.