# LEARNING IN NEW MEDIA CLASSROOMS (SUMMER AND FALL)

The following program requirements apply only to Summer Session 2024 and Fall Quarter 2024. For current requirements, effective Winter Quarter 2025, refer to the Learning in New Media Classrooms listing. If you have any questions, please meet with a Foothill counselor.

### **Program Description**

The Learning in New Media Classrooms (LINC) program offers seven Certificates of Achievement.

#### The Certificate of Achievement in Education Technology Specialist

is designed for students working in or planning for a career in K-12 education, extracurricular programs, or technology training in forprofit and nonprofit organizations. The program provides 12 units of Instructional Design and Technology coursework to support the integration of technology throughout a specified educational program in a culturally responsive manner. Students will learn to apply educational best practices to developing instructional materials, creating multimedia resources, and facilitating projects and activities with current technology tools and applications. Upon completion of the program, students will be prepared to use technology to increase student achievement at all levels, as well as support technology initiatives within their organizations.

### The Certificate of Achievement in Educational Immersive Media is designed to provide educators and instructional designers with the knowledge and skills needed to design, develop, and implement immersive media experiences—such as augmented and virtual reality for learning. The program covers the principles and history of immersive media in education, software and hardware tools for creating immersive media, and how to integrate immersive media into curriculum and instruction. Students will learn how to evaluate and use existing immersive media resources, as well as how to use data and analytics to evaluate the impact of immersive media on student learning and engagement. Upon completion of the program, students will have gained a comprehensive understanding of immersive media in education and will have the skills to create and implement immersive media experiences that enhance student engagement and learning outcomes.

The Certificate of Achievement in Emerging Educational Technology Leadership is designed for students working in or planning for a leadership-focused career in K-12 education, extracurricular programs, or edtech development in for-profit and nonprofit organizations. Prerequisite skills in instructional design and use of common educational technologies are highly encouraged, but not required. Notably, this program is intended to assist educators and trainers in becoming leaders in their fields. Students will complete 18 units of coursework in Instructional Design and Technology, with coursework specifically focusing on emerging technology trends, integration of edtech into curricular activities, evaluation of instructional programs, and data analysis tools. Upon completion of the program, students will be prepared to develop and support new education technology initiatives in schools, districts, counties, and communities, as well as lead other educators in the implementation of these initiatives.

The Certificate of Achievement in Makerspace Coordinator is designed for people who are seeking employment in fabrication laboratories and makerspaces within community centers, libraries, and educational institutions. The program provides 18 units of instruction and support for building models and prototypes, strategies to spark innovation and invention, and creative problem-solving and collaboration. The program includes application and strategies with the foundational concepts and processes for fabrication and design, including the familiarization and use of makerspace and fabrication laboratory tools.

#### The Certificate of Achievement in Online and Blended Instruction is

designed for students working in or planning for a career in online human resource training and development or education; in-service and preservice teachers; educators at any level; and those working as trainers for any market sector. The program provides 15 units of instruction and support for developing online courses in learning management systems, designing and assessing meaningful learning objectives, monitoring student progress and engagement, building virtual communities that embrace diversity, developing learning materials that are accessible to diverse audiences, developing activities to promote engagement, and creating interactive multimedia to support learning. Upon completion of the program, students will be prepared to develop and successfully facilitate courses, workshops, and trainings in an online or blended environment.

#### The Certificate of Achievement in Research, Design and Development for Global Good is designed primarily for dual-enrollment high school students in research, design, and development cohorts. The program guides students through a yearlong inquiry process, culminating

guides students through a yearlong inquiry process, culminating in a means-tested project related to improving their local or global community. Students will conduct extensive research as they identify and define a specific problem and develop potential solutions. They will engage in an iterative design thinking process to ideate, prototype, and test ideas in authentic settings. The program culminates in a public exhibition where students present their projects and share their findings using multimedia.

#### The Certificate of Achievement in STEAM Instructional Leadership

is designed for students working in or planning for a career in K-12 education, extracurricular programs, or STEAM outreach in for-profit and non-profit organizations. The program provides 12 units of instruction and support for the integration of STEAM throughout curriculum in a culturally responsive manner. Courses will focus on technology integration into STEAM lessons, evaluating instructional programs, and data analysis tools. Upon completion of the program, students will be prepared to develop and support STEAM initiatives in their districts, schools, counties, and communities, as well as provide relevant workshops and courses in STEAM instruction.

Learn more about the program on the <u>Krause Center for Innovation</u> website.

### **Program Learning Outcomes**

Certificate of Achievement in Education Technology Specialist:

- Students will be able to identify effective education technology for schools and districts.
- Students will be able to develop instructional materials that incorporate education technology.
- Students will be able to apply education technology to project-based learning.
- Students will be able to create multimedia projects that integrate cloud-based publishing tools.

- Students will be able to use online collaboration tools to enhance instruction and communication.
- Students will be able to integrate technology into a standards-based curriculum.
- Students will be able to facilitate interactions and collaboration to build a community that fosters active learning.
- Students will be able to curate and create instructional materials, tools, strategies, and resources to engage all learners and ensure achievement of learning goals.
- Students will be able to use culturally responsive practices when integrating education technology into their lessons.

#### Certificate of Achievement in Educational Immersive Media:

- Students will be able to understand the principles and history of immersive media in education, including its role in fostering engagement and learning.
- Students will be able to design and create immersive media experiences for various learning contexts and audiences.
- Students will be able to use various software and hardware tools for creating immersive media.
- Students will be able to understand how to integrate immersive media into curriculum and instruction, and evaluate the effectiveness of these experiences in enhancing learning outcomes.
- Students will be able to evaluate and use existing immersive media resources in education, including VR/AR apps, games, and simulations.
- Students will be able to understand the ethical and legal considerations in creating and using immersive media in education, including issues related to privacy, accessibility, and intellectual property.
- Students will be able to collaborate and communicate effectively with other educators and experts in the field of immersive media in education.
- Students will be able to design and implement assessment and evaluation strategies for immersive media experiences.
- Students will be able to understand the current trends and future directions of immersive media in education, and identify opportunities for innovation and research in the field.

# Certificate of Achievement in Emerging Educational Technology Leadership:

- Students will be able to gain advanced proficiency in comprehensive digital productivity tools, with a special focus on leveraging data management and spreadsheet software for educational management and decision-making.
- Students will be able to develop expertise in collecting, analyzing, and reporting educational data to drive strategic decision-making and improve student outcomes and equity.
- Students will be able to craft and enhance a personal brand, build a professional network, and effectively communicate one's vision and achievements to employers, investors, and stakeholders through various platforms including social media and professional networking events.
- Students will be able to apply skills in digital and information design to create compelling, informative, and visually appealing communication materials that are accessible and relevant to a diverse audience.

- Students will be able to deliver compelling presentations and workshops that are responsive to adult learning needs and cater to a diverse range of professional backgrounds, emphasizing best practices in education technology.
- Students will be able to cultivate leadership and team management skills that foster an inclusive environment, promoting collaboration and respect for diverse viewpoints and approaches.
- Students will be able to understand and apply new and emerging technologies in educational settings, preparing leaders to drive innovation and adapt to future technological advancements, and ensuring that the integration of these technologies is strategically aligned with research-based pedagogies.
- Students will be able to embrace a forward-thinking approach to educational leadership, analyzing trends and predictions in educational technology to strategically position initiatives at the forefront of innovation and effectiveness, while championing adaptive and visionary strategies that promote diversity, inclusivity, and equitable learning opportunities.

#### Certificate of Achievement in Makerspace Coordinator.

- Students will be able to demonstrate appropriate critical thinking and problem-solving skills, creative skills, and collaborative and teamwork skills to provide assistance in a maker or fabrication environment.
- Students will be able to teach, model, and encourage maker mindsets and skills.
- Students will be able to apply a design thinking process to develop innovative solutions to problems.
- Students will be able to use both high and low tech tools in an iterative process to develop prototypes.
- Students will be able to design and produce products using industry standard maker software and equipment.
- Students will be able to organize and manage a makerspace/maker projects with attention to safe and responsible practices.
- Students will be able to curate and create instructional materials, tools, strategies, and resources that promote maker mindsets and skills.

#### Certificate of Achievement in Online and Blended Instruction:

- Students will be able to demonstrate professional responsibilities in keeping with the best practices of online instruction.
- Students will be able to support learning and presence (teacher, social, and learner) with digital pedagogy.
- Students will be able to build a supportive online community that fosters active learning.
- Students will be able to promote learner success by facilitating meaningful learner engagement in learning activities.
- Students will be able to model, guide, and encourage legal, ethical, and safe behavior related to technology use.
- Students will be able to personalize instruction based on the learner's diverse academic, social, and emotional needs.
- Students will be able to create and/or implement authentic assessments in online learning environments.
- Students will be able to curate and create instructional materials, tools, strategies, and resources to engage all learners and ensure achievement of learning goals.

# Certificate of Achievement in Research, Design and Development for Global Good:

- Students will be able to know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.
- Students will be able to build knowledge by actively exploring realworld issues and problems, developing ideas and theories, and pursuing answers and solutions.
- Students will be able to explore local and global issues and use collaborative technologies to work with others to investigate solutions.
- Students will be able to plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
- Students will be able to curate information using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- Students will be able to use remote and asynchronous collaborative technologies to work with others, including peers, experts, or community members, to examine issues and problems from multiple viewpoints.
- Students will be able to evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.
- Students will be able to break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.
- Students will be able to select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- Students will be able to develop, test, and refine prototypes as part of a cyclical design process.
- Students will be able to exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.
- Students will be able to communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.

#### Certificate of Achievement in STEAM Instructional Leadership:

- Students will be able to integrate multiple STEAM disciplines into their curriculum.
- Students will be able to teach STEAM using culturally responsive practices that will support a diverse body of teachers and students.
- Students will be able to identify emerging STEAM fields that will influence instruction and workforce development.
- Students will be able to facilitate professional development for their peers/staff to incorporate STEAM into all subject areas.
- Students will be able to influence curriculum decisions around STEAM based on best practices and high content knowledge.
- Students will be able to facilitate interactions and collaboration to build a community that fosters active learning.
- Students will be able to identify technology that will facilitate the learning of STEAM in engaging and meaningful ways.
- Students will be able to curate and create STEAM instructional materials, tools, strategies, and resources to engage all learners and ensure achievement of academic goals.

# **Career Opportunities**

Certificate of Achievement in Makerspace Coordinator: Current libraries, community centers, and schools are in dire need of trained, qualified adults to supervise, maintain, and create makerspaces or fabrication laboratories to build 21st century skills of critical thinking, problem-solving, creativity and imagination, and collaboration and teamwork. This innovative program will allow schools to hire individuals as classified personnel to assist faculty with student learning and exploration in makerspaces. It also allows further training for teachers and non-traditional educators to build their skillset for giving students 21st century, future-ready skills.

# Award Type(s)

• CA = Certificate of Achievement

## **Units Required**

• Certificate(s): 12-18

# **Program Prerequisites**

Basic skills using standard computer systems and internet-based technologies. Prerequisite skills in instructional design and use of common educational technologies are highly encouraged, but not required.

### **Certificate Requirements**

### Certificate of Achievement in Education Technology Specialist

• Units: 12

Code	Title	Units
LINC 50	TECHNOLOGY IN THE K-12 CLASSROOM I	1
LINC 82B	DEVELOPING INSTRUCTIONAL MATERIALS	3
LINC 82C	CREATING INTERACTIVE MEDIA FOR INSTRUCTION	3
And five units from	m the following:	5
LINC 50F	INTEGRATING TECHNOLOGY INTO A STANDARD BASED CURRICULUM I	S-
LINC 57	DESIGNING LEARNER-CENTERED INSTRUCTION	
LINC 58	GLOBAL PROJECT-BASED LEARNING	
LINC 60C	EDUCATIONAL GAME DESIGN	
LINC 62	CLOUD-BASED WORD PROCESSING TOOLS	
LINC 66E	CLOUD-BASED PUBLISHING TOOLS	
LINC 68G	TEACHING & LEARNING WITH GOOGLE APPS FO EDUCATORS	R
LINC 70B	WEB PAGE DESIGN II	
LINC 75B	INSTRUCTIONAL TECHNOLOGY STRATEGIES	
LINC 80A	MULTIMEDIA IN THE CLASSROOM I	
LINC 80B	MULTIMEDIA IN THE CLASSROOM II	
LINC 81	USING DIGITAL IMAGES	
LINC 86A	VIDEO PODCASTING I	
LINC 90B	OPEN EDUCATION RESOURCES	
Total Units		12

Total Units

### **Certificate of Achievement in Educational Immersive** Media

### • Units: 18

Code	Title	Units
LINC 75A	INTRODUCTION TO INSTRUCTIONAL DESIGN & TECHNOLOGY	3
LINC 75C	DESIGNING ONLINE INSTRUCTION	3
LINC 79A	INTRODUCTION TO IMMERSIVE MEDIA IN EDUCATION	2
LINC 79B	SOCIO-EMOTIONAL LEARNING THROUGH IMMERSIVE MEDIA	2
LINC 79C	EDUCATIONAL EXPLORATION THROUGH IMMERSIVE MEDIA	2
LINC 79D	COLLABORATION IN VIRTUAL EDUCATIONAL ENVIRONMENTS	2
And four units fro	om the following:	4
LINC 57A	WELCOMING & ENGAGING STUDENTS IN THE ONLINE ENVIRONMENT	
LINC 57B	CREATING COMMUNITY IN THE ONLINE ENVIRONMENT	
LINC 58	GLOBAL PROJECT-BASED LEARNING	
LINC 67	DESIGNING WEB-BASED LEARNING PROJECTS	
LINC 90C	ONLINE COLLABORATION TOOLS	
LINC 93B	ASSISTIVE TECHNOLOGY & UNIVERSAL ACCESS	
LINC 95B	TECHNOLOGY ETHICS & EDUCATIONAL LAW	
LINC 98	TEACHING & LEARNING IN THE DIGITAL AGE	
Total Units		18

### **Certificate of Achievement in Emerging Educational Technology Leadership**

• Units: 18

Code	Title	Units
LINC 50	TECHNOLOGY IN THE K-12 CLASSROOM I	1
LINC 82B	DEVELOPING INSTRUCTIONAL MATERIALS	3
LINC 82C	CREATING INTERACTIVE MEDIA FOR INSTRUCTION	3
LINC 83F	INTRODUCTION TO DIGITAL VIDEO EDITING	1
LINC 87	SEMINAR IN TEACHING WITH EDUCATIONAL TECHNOLOGY	5
And five units from	m the following:	5
LINC 50F	INTEGRATING TECHNOLOGY INTO A STANDARD BASED CURRICULUM I	S-
LINC 57	DESIGNING LEARNER-CENTERED INSTRUCTION	
LINC 58	GLOBAL PROJECT-BASED LEARNING	
LINC 60E	EDUCATIONAL APPLICATIONS FOR AUGMENTED ALTERNATE & VIRTUAL REALITY	),
LINC 62	CLOUD-BASED WORD PROCESSING TOOLS	
LINC 66E	CLOUD-BASED PUBLISHING TOOLS	
LINC 68G	TEACHING & LEARNING WITH GOOGLE APPS FO EDUCATORS	R
LINC 70B	WEB PAGE DESIGN II	
LINC 75B	INSTRUCTIONAL TECHNOLOGY STRATEGIES	
LINC 80A	MULTIMEDIA IN THE CLASSROOM I	

1	Fotal Units		18
	LINC 90B	OPEN EDUCATION RESOURCES	
	LINC 86A	VIDEO PODCASTING I	
	LINC 82A	INTRODUCTION TO DESIGNING INSTRUCTIONAL TECHNOLOGY PROJECTS	
	LINC 81	USING DIGITAL IMAGES	
	LINC 80B	MULTIMEDIA IN THE CLASSROOM II	

#### Total Units

### **Certificate of Achievement in Makerspace Coordinator**

• Units: 18

Code	Title	Units
LINC 77A	DESIGN THINKING PROCESS	2
LINC 77B	DESIGN THINKING & TINKERING	2
LINC 77D	DESIGN THINKING CHALLENGES	2
LINC 84	FUNDAMENTALS OF MAKERSPACE DESIGN & INSTRUCTION	3
LINC 84A	3-D DESIGN CONCEPTS	2
LINC 84D	VECTOR-BASED GRAPHIC DESIGN FOR MAKERSPACES	1
And six units fror	n the following:	6
LINC 59	INTEGRATING 21 ST CENTURY SKILLS INTO INSTRUCTION	
LINC 60C	EDUCATIONAL GAME DESIGN	
LINC 60K	GAME-BASED LEARNING	
LINC 73H	ADOBE ILLUSTRATOR OVERVIEW	
LINC 77C	DESIGN THINKING FOR TEACHERS	
LINC 78A	COMPUTATIONAL THINKING FOR EDUCATORS	
LINC 78B	BLOCK BASED CODING CONCEPTS	
LINC 78C	PROJECT-BASED TECHNOLOGY PROJECTS	
LINC 78D	PHYSICAL COMPUTING FUNDAMENTALS	
LINC 84B	3-D DESIGN & FABRICATION	
LINC 84E	LASER CUTTER FUNDAMENTALS	
LINC 84F	VINYL CUTTER FUNDAMENTALS	
Total Units		18

### **Certificate of Achievement in Online and Blended** Instruction

• Units: 15

Code	Title	Units
LINC 57A	WELCOMING & ENGAGING STUDENTS IN THE ONLINE ENVIRONMENT	3
LINC 75A	INTRODUCTION TO INSTRUCTIONAL DESIGN & TECHNOLOGY	3
LINC 75C	DESIGNING ONLINE INSTRUCTION	3
LINC 93B	ASSISTIVE TECHNOLOGY & UNIVERSAL ACCESS	6 1
LINC 95C	ASSESSMENT STRATEGIES FOR TECHNOLOGY INTEGRATION	1
And four units from the following:		4
LINC 57B	CREATING COMMUNITY IN THE ONLINE ENVIRONMENT	
LINC 58A	E-PORTFOLIOS	
LINC 66C	SEARCHING & RESEARCHING THE INTERNET	
LINC 67	DESIGNING WEB-BASED LEARNING PROJECTS	

Total Units		
LINC 98	TEACHING & LEARNING IN THE DIGITAL AGE	
LINC 95B	TECHNOLOGY ETHICS & EDUCATIONAL LAW	
LINC 90C	ONLINE COLLABORATION TOOLS	
LINC 80	MULTIMEDIA OVERVIEW	
LINC 70	WEB PAGE DESIGN OVERVIEW	

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# Certificate of Achievement in Research, Design and Development for Global Good

• Units: 12

Code	Title	Units
LINC 58	GLOBAL PROJECT-BASED LEARNING	2
LINC 66C	SEARCHING & RESEARCHING THE INTERNET	2
LINC 77	DESIGN THINKING OVERVIEW	2
And six units from	n the following:	6
LINC 63	CLOUD-BASED DATA ANALYSIS TOOLS	
LINC 64	SLIDE PRESENTATION DESIGN	
LINC 66E	CLOUD-BASED PUBLISHING TOOLS	
LINC 67	DESIGNING WEB-BASED LEARNING PROJECTS	
LINC 70	WEB PAGE DESIGN OVERVIEW	
LINC 77B	DESIGN THINKING & TINKERING	
LINC 79	MULTIMEDIA PROJECT PRODUCTION	
LINC 90C	ONLINE COLLABORATION TOOLS	
Total Units		12

### **Certificate of Achievement in STEAM Instructional** Leadership

• Units: 12

Code	Title L	Jnits
LINC 53	INTEGRATING TECHNOLOGY INTO MATHEMATICS	6 1
LINC 63	CLOUD-BASED DATA ANALYSIS TOOLS	1
LINC 91A	INTRODUCTION TO ASSESSING INSTRUCTIONAL TECHNOLOGY	3
LINC 91C	EVALUATING INSTRUCTIONAL PROGRAMS	3
And four units fro	om the following:	4
LINC 50A	TECHNOLOGY IN THE K-12 CLASSROOM II	
LINC 53B	INTEGRATING TECHNOLOGY INTO MATHEMATICS GRADES 6-8	8
LINC 78A	COMPUTATIONAL THINKING FOR EDUCATORS	
LINC 79	MULTIMEDIA PROJECT PRODUCTION	
LINC 88	INTRODUCTION TO COMPUTER OPERATING SYSTEMS	
LINC 91B	EVALUATING TECHNOLOGY-BASED LEARNING OUTCOMES	
LINC 96B	HANDHELD DIGITAL MEDIA DEVICES I	
LINC 98A	TEACHING & LEARNING IN THE DIGITAL AGE I	
Total Units		12