

MOORPARK COLLEGE

NEW COURSES

ANTH M18	Culture, Health, and Healing	3 units
CHIN M110	Elementary Chinese: Mandarin II	4 units
CS M10R	Introduction to R Programming	3 units
MATH M19	Math for Health Sciences	1 unit
MATH M37DS	Probability and Statistics for Data Science	3 units
MATH M42DS	Mathematics of Machine Learning for Data Science	3 units
NS M20	Pharmacology	3 units
PHIL M122	Independent Study – Philosophy	1 – 3 units

REVISED COURSE

CNSE M57	Scripting for and Security Management	3 2 units
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SAM CODE CHANGES

HS M15	Pharmacology	3 units	1201.00 - *Health Occupations, General 1230.10 - *Registered Nursing
NS M17	Healthcare Ethics	3 units	D C - Possibly Clearly Occupational
RADT M17	Healthcare Ethics	3 units	D C - Possibly Clearly Occupational

NEW NONCREDIT COURSES

MAKR M903	Introduction to Design Thinking	8 hours
MAKR M925	Laser Cutting and Engraving I	8 hours
MAKR M930	Screen Printing for Textiles I	12 hours

NEW PROGRAMS

Data Science		15 – 16 units
Electronics Engineering Technology		23 - 26 units

NEW COURSES

ANTH M18 Culture, Health, and Healing 3 units
Prerequisite: None
Hours: 3 lecture

Introduces medical anthropology and promotes cultural competency in healthcare as well as a culturally relative approach to global health problems, such as pandemics. Surveys health and healing systems across the globe, exploring both the roles of globalization and local cultural elements -including religion and spirituality, interactions with the environment, and sex and gender ideologies - in shaping each system. Also addresses ethical quandaries and health disparities related to political, economic, and racial inequalities, drawing on current real world examples, both local and global.

Applies to Associate Degree. Transfer Credit: CSU

Note: the course will be proposed for UC transfer in June 2021.

Notes: Many of our anthropology majors have expressed interest in taking an introductory course on medical anthropology over the years. In fact, medical anthropology is the largest (and growing) subfield of cultural anthropology for a number of reasons, including the application of the discipline to other health fields and resulting job opportunities in healthcare and public health. This course is also timely due to its coverage of what anthropology can offer to the prevention and resolution of epidemics and pandemics. In addition, comparable courses can be found at the following CCCs: Napa, Foothill, Rio Hondo, Saddleback and Palomar Colleges.

CHIN M110 Elementary Chinese: Mandarin II 4 units
Prerequisite: CHIN M01, two years of high school Chinese with a grade of C or better, or equivalent.
Hours: 4 lecture

Continues beginning Chinese language acquisition in a cultural context through listening, speaking, reading and writing at the second semester level. Reviews and expands upon grammatical structures and vocabulary. (Formerly CHIN M02.)

Provider approved by the California Board of Registered Nursing, provider number CEP2811 for 60 contact hours.
Applies to Associate Degree. Transfer Credit: CSU

Note: the course will be proposed for UC transfer in June 2021.

Notes: The course is being brought back for students that would like to take an additional Chinese course, this course expands grammatical structures and vocabulary.

NEW COURSES

CS M10R Introduction to R Programming 3 units
Prerequisite: None
Recommended Prep: MATH M15 or MATH M15H and CSM10P or CSM125 or CSM10J
Hours: 3 lecture

Introduces computer programming and algorithm design using the R programming language. Covers an introduction to R, from installation to most of the statistical concepts, and machine learning. Includes the fundamentals of computer programming concepts: basic data types, variables, if-else, loops, functions, vectors, objects, matrices, arrays, data frames, lists, factors, basic input, data visualization, and output with files. Explains some principles of algorithm design and analysis as well as techniques for testing programs.

Applies to Associate Degree. Transfer Credit: CSU

Note: the course will be proposed for UC transfer in June 2021.

Notes: This course will be part of the latest Data Science cross-curricular program. It would be particularly useful for those who are pursuing the Certificate of Achievement in Data Science in Computer Science through the Intro to Data Science, Python Programming, Database Management Systems, and Statistics focus, as well as those who are interested in the material covered in this course, whether or not they are enrolled in the program.

We also want to include this course in a Data Science Associate Degree that we'll be building. UCLA, UCI, UCSD, UCR, and UCSB are among the California universities and community colleges that have recently developed Data Science programs.

This course is based on those, so students need to know R programming in addition to Python. R is a popular programming language used for statistical computing and graphical presentation which Python has some limitations. This class has the purpose of teaching students the programming, statistical analysis, and data visualizations' concepts they will need to succeed in Data Science, particularly within the Data Science sub-discipline of machine learning.

MATH M19 Math for Health Sciences 1 units
Prerequisite: MATH M03 or two years of high school algebra or placement as determined by the college's multiple measures assessment process.
Hours: 1 lecture

Covers ratios, fractions, decimals and percents. Includes unit conversions, metric and household abbreviations, use of formulas, proportion and unit simplification. Coaches how to perform mental estimations and mental calculations.

May be taken before entrance to the Nursing Program or after acceptance to the Nursing Program. This is an optional course.

Applies to Associate Degree.

Notes: The purpose and need to create the math class Math M19 is to review mathematical computations to prepare students for the nursing program, to offer remediation where appropriate, and to reinforce math skills needed for students to be successful on med proficiency exam calculations. The review of mathematical computations will also prepare students for the curriculum of paramedic, nutrition, and possibly Registered Veterinary Technician programs.

REVISED COURSE

CNSE M57 Scripting ~~for and~~ Security Management 3 2 units
Prerequisite: None
Recommended Prep: CNSE M55
Hours: 2 4 lecture, and 3 laboratory weekly
Examines creating and modifying scripts for communications with **security and network based** ~~network-~~
~~based~~ applications. Covers scripting using **Python, BASH, and Powershell** Python for system administration,
web interaction, network and host security and penetration testing. **Provides knowledge and hands-on**
experience applying various programming concepts while using security tools.
Applies to Associate Degree. Transfer Credit: CSU

Notes: The Moorpark College CNSE Program is offering an A.S. Degree in Cyber Security and is preparing accreditation documentation to become a Cyber Security Center of Excellence. One of COE requirements is that the CNSE program provide evidence that students are learning programming concepts. This course meets that criteria but needs to be updated to reflect identified and written specific COE Student Learning Outcomes in programming. CNSE is also adding the use of other scripting languages, some minor updates to meet updated curriculum requirements, and updates to meet criteria for Distance Learning. The COE programming SLO requirements are attached.

TOP CODE CHANGE

HS M15 Pharmacology 3 units
Prerequisite: None
Hours: 3 lecture
C-ID: HIT 107X

Introduces mechanisms and uses of currently available drugs, establishing a foundation for understanding future developments in drug therapy and for administering drugs efficiently and safely. Applies drug information and mathematical calculations performed in clinical settings. (Same as NS M20.)

Provider approved by the California Board of Registered Nursing, provider number CEP 02811 for 45 contact hours.

Applies to Associate Degree. Transfer Credit: CSU

*TOP Code Change: 1201.00 - *Health Occupations, General 4230.10 — *Registered Nursing*

Notes: Correcting TOP code.

SAM CODE CHANGES

NS M17 Healthcare Ethics 3 units

Prerequisite: None

Hours: 3 lecture

Introduces theoretical and applied ethics as they relate to problems in medicine, healthcare, and the human life sciences. Examines foundational moral principles and the main moral theories. Provides an introduction to ethics in general, a foundation for understanding legal implications in healthcare and a framework for analyzing and resolving ethical problems through the application of ethical principles and critical thinking. (Formerly HS M17 and PHIL M17.) (Same as RADT M17.)

Applies to Associate Degree. Transfer Credit: CSU

SAM Code Change: ~~D C~~ Possibly ~~Clearly~~ Occupational

Notes: The date of GE approval disappeared with the conversion to CourseLeaf. Update is to correct this and to complete the transition from CurricUNET to CourseLeaf.

RADT M17 Healthcare Ethics 3 units

Prerequisite: None

Hours: 3 lecture

Introduces theoretical and applied ethics as they relate to problems in medicine, healthcare, and the human life sciences. Examines foundational moral principles and the main moral theories. Provides an introduction to ethics in general, a foundation for understanding legal implications in healthcare and a framework for analyzing and resolving ethical problems through the application of ethical principles and critical thinking. (Formerly HS M17 and PHIL M17.) (Same as NS M17.)

Applies to Associate Degree. Transfer Credit: CSU

SAM Code Change: ~~D C~~ Possibly ~~Clearly~~ Occupational

Notes: The date of GE approval disappeared with the conversion to CourseLeaf. Update is to correct this and to complete the transition from CurricUNET to CourseLeaf.

NEW NONCREDIT COURSES

MAKR M903 Introduction to Design Thinking 8 hours

Prerequisite: None

Hours: 8

Introduces students to the design thinking process. Includes problem solving methodology, evaluation, and critical thinking that allows students to arrive at solutions that challenge preconceived ideas. Facilitates a maker focused, hands-on approach to understanding and applying the design thinking process.

Does NOT apply to Associate Degree.

Notes: Introduction to Design Thinking will contextualize the making process by providing a framework for problem solving. This course will support students across disciplines because design thinking has applications beyond physical making. Additionally, this course can support the community at large. As libraries and K-12 schools build MakerSpaces and encourage different modes of thinking this course can help educate the community and foster relationships with area stakeholders.

MAKR M925 Laser Cutting and Engraving I 8 hours

Prerequisite: MAKR M910 or equivalent

Hours: 8

Introduces students to laser cutting and engraving. Offers practical experience in preparing designs for laser cutting and engraving. Instructs the proper, safe, and effective operation of this MakerSpace tool.

Does NOT apply to Associate Degree.

Notes: This course will provide students with the skills to safely and effectively use a key piece of equipment in the MakerSpace. The laser cutter is one of the most versatile pieces of equipment in the MakerSpace and has a wide variety of applications from graphic design, marketing, engineering, business, etc. This course will support many disciplines and students on our campus while formalizing the learning that is already happening in the MakerSpace and giving students a tangible way to show employers they can use this piece of equipment.

MAKR M930 Screen Printing for Textiles I 12 hours

Prerequisite: None

Hours: 12

Introduces students to the process of screen printing on textiles. Offers practical experience for how to take a project from the design phase through the printing and curing process. Shows how to safely and effectively work in a screen printing shop.

Does NOT apply to Associate Degree.

Notes: This course will provide students with the skills to safely and effectively use the MakerSpace screen printing equipment. Screen printing has a wide variety of applications from graphic design, marketing, business, etc. Screen printing is a broad industry ranging from small garage shops to large businesses. This course will give student the skills they need to either start their own business or apply to work at an established screen printing shop. This course will support many disciplines on campus as well as the new MakerShop cross-disciplinary project.

Data Science Certificate of Achievement

Data Science, with its many applications, is a field of study that draws heavily from the foundational concepts in statistics and machine learning and uses programming to explain or predict outcomes from data. Data Science principles and achievements are omnipresent, dynamic, and ever-changing. The curriculum offered in the Certificate of Achievement in Data Science is designed both for those who are preparing to transfer to a four-year university to complete their Bachelor's in Data Science, Business Administration, Computer Science, Computer Network Systems Engineering, Hospitality Management, Mathematics, Political Science, Philosophy, or a related field as well those who are currently in the work force and would like to get the Certificate to validate skill building.

To earn the Certificate of Achievement in Data Science, students must complete between 15 - 16 specified units.

CORE COURSES: Complete the following courses (9 units)

		UNITS
CS M10DS	Introduction to Data Science	3
CS M10ML	Cloud Data Science and Machine Learning	2
MATH M15/M15H	Introductory Statistics/Honors	4

Choose one of the following Area of Emphases

Business Administration Emphasis (6 units)

BUS M30	Introduction to Business	3
BUS M140	Business Information Systems	3

Computer Science Emphasis (6-7 units)

CS M10DB	Database Management Systems and Applications	3
CS M10P	Introduction to Computer Programming using Python Language	4
OR		
CS M10R	Introduction to R Programming	3

Hospitality Management Emphasis (6 units)

HOSP M120	Hospitality Cost Control	3
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One course from below:

HOSP M130	Introduction to Food and Beverage Management	3
HOSP M140	Introduction to Hotel Management	3
HOSP M170	Hospitality Supervision and Guest Relations	3

Mathematical Theory Emphasis (6-7 units)

Select and complete one of the following Math courses:

MATH M37DS	Probability and Statistics for Data Science	3
MATH M42DS	Mathematics of Machine Learning for Data Science	3

Select and complete one of the following Computer Science courses:

CS M10P	Introduction to Computer Programming using Python Language	4
CS M10R	Introduction to R Programming	3

Social Sciences Emphasis (7 units)

PHIL M07	Introduction to Logic	3
POLS M09	Introduction to Political Science Research Methods	3
POLS M122	Independent Study - Political Science	1
OR		
PHIL M122	Independent Study - Philosophy	1

TOTAL		15.0 – 16.0
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Electronics Engineering Technology Certificate of Achievement

The Certificate of Achievement in Electronics Engineering Technology prepares students to work in an engineering industry to design, create, build, troubleshoot, repair, maintain, and enhance any products, machines, and sensory devices that use electronic and electrical components. Students completing this program will be well versed in the principles of operation of various electronic and electrical components and circuits, and their applications in a variety of settings and functions. This mastery will be accomplished by engaging the students in contextualized and experiential learning where the foundational principles in electronic and electrical engineering will be linked to concrete, real-world applications through practicums and industry internships.

To earn a Certificate of Achievement in Electronics Engineering Technology students must complete 23-26 specified units and will be encouraged to participate in a one semester paid or unpaid internship with a Moorpark College affiliated industry.

CORE COURSES:	UNITS
ENGR M04 Engineering Design/CAD	3
ENGT M02 Digital Circuits	3
ENGT M04 Basic Electronics	3
ENGT M06 Introduction to Microprocessors and Microcontrollers	3
ENGT M20 Electronic Devices	3
ENGT M28 Capstone Project in Electronics Engineering Technology	2
Select and complete one of the following math courses (3 to 6 units):	
MATH M06 Trigonometry	3
OR	
MATH M07 Precalculus and Trigonometry	6
Electives: Select and complete 3 units from the following courses	
ENGT M10 Introduction to Unmanned Aerial Vehicle Technology	3
OR	
ENGT M12 Radar Fundamentals	3
TOTAL	23.0 – 26.0