



# Catalog Addendum 2017-2018





## Catalog Update

The current Chabot College catalog covers the period 2016-2018. Chabot College will not produce a new catalog this year but, rather, this addendum which reflects all changes or corrections through Spring 2018. It is anticipated that a fully revised college catalog will be produced in Fall 2018.

This catalog supplement should be used by students and staff along with the existing 2016-2018 catalog. Students are strongly encouraged to seek advice from the Counseling Division. Additional information and publications will be made available to students throughout the year as appropriate.



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# CHABOT COLLEGE PROGRAM LEARNING OUTCOMES (PLOS)

As part of its accreditation, Chabot College focuses on Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOS). SLOs and PLOS, are the results or evidence of student learning. They demonstrate the extent to which student performance meets expectations of learning.

These results, to be collected at the course, program and college levels, will be shared widely and used for the improvement of teaching and learning and for the improvement of the college as a whole.

These are the current Program Learning Outcomes (PLOS).

For more information, see the Student Learning Outcomes webpage at [www.chabotcollege.edu/sloac](http://www.chabotcollege.edu/sloac).

Chabot College Overview			
Division	Programs	Programs w/ PLOS Written	Discussed and Documented
Arts Humanities & Social Science	53	53 – 100%	53 – 100%
Applied Technology and Business	64	56 – 87.5%	47 – 73.4%
Counseling	9	9 – 100%	9 – 100%
Health Physical Education and Athletics	19	19 – 100%	10 – 52.6%
Language Arts	7	7 – 100%	7 – 100%
Library	1	1 – 100%	1 – 100%
Science and Math	13	13 – 100%	13 – 100%
<b>Chabot</b>	<b>166</b>	<b>158 – 95.2%</b>	<b>140 – 84.3%</b>



## CHABOT COLLEGE PROGRAM-LEVEL OUTCOMES (PLOs)

Program - Degree/ Certificate	Outcomes
<b>Accounting – AS</b>	<ol style="list-style-type: none"> <li>1. Understand and apply the generally accepted accounting principles to prepare financial statements.</li> <li>2. Identify the basics of information technology and apply software applications to accounting transactions.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Administration of Justice – AA</b>	<ol style="list-style-type: none"> <li>1. Evaluate and analyze criminal justice issues and topics using knowledge of criminal justice institutions, terminology, theory and ethical issues in crime and justice.</li> <li>2. Understand the interdisciplinary nature of criminal justice and the varying perspectives of the liberal arts and sciences as related to law enforcement, courts, and corrections.</li> </ol>
<b>Administration of Justice – AS-T</b>	<ol style="list-style-type: none"> <li>1. Evaluate and analyze criminal justice issues and topics using knowledge of criminal justice institutions, terminology, theory and ethical issues in crime and justice.</li> <li>2. Understand the interdisciplinary nature of criminal justice and the varying perspectives of the liberal arts and sciences as related to law enforcement, courts, and corrections.</li> </ol>
<b>Administrative Assistant – AS</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of office application software and be able to apply the appropriate software to solve problems.</li> <li>2. Organize, communicate and function in a business and office environment, using appropriate terminology and English skills.</li> <li>3. Demonstrate proficiency in Microsoft Office Applications and keyboarding skills.</li> </ol>
<b>Administrative Assistant – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of office application software and be able to apply the appropriate software to solve problems.</li> <li>2. Organize, communicate and function in a business and office environment, using appropriate terminology and English skills.</li> <li>3. Demonstrate proficiency in Microsoft Office Applications and keyboarding skills.</li> </ol>
<b>Administrative Assistant Entrepreneur – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of all core Microsoft Office programs.</li> <li>2. Demonstrate knowledge of preparing a basic business plan with a core value proposition for an entrepreneurial venture.</li> <li>3. Evaluate and solve the challenges faced by entrepreneurs.</li> </ol>
<b>Anthropology – AA</b>	<ol style="list-style-type: none"> <li>1. Analyze human biological and cultural adaptations. In this context, evaluate the different factors that have affected, and are affecting humans biologically and culturally.</li> <li>2. Analyze the factors that cause modern humans biological and cultural diversity, and demonstrate an appreciation for, and sensitivity to human biological and cultural diversity.</li> </ol>
<b>Anthropology – AA-T</b>	<ol style="list-style-type: none"> <li>1. Analyze human biological and cultural adaptations. In this context, evaluate the different factors that have affected, and are affecting humans biologically and culturally.</li> <li>2. Analyze the factors that cause modern humans biological and cultural diversity, and demonstrate an appreciation for, and sensitivity to human biological and cultural diversity.</li> </ol>

<b>Aquatics – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of using the equipment safely and effectively.</li> <li>2. Develop the ability to track heart rate effectively for resting heart rate (RHR) and during the performance of exercise.</li> <li>3. Demonstrate the biomechanics as they pertain to four competitive strokes; free style, backstroke, breaststroke, and butterflies.</li> </ol>
<b>Aquatics – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of using the equipment safely and effectively.</li> <li>2. Develop the ability to track heart rate effectively for resting heart rate (RHR) and during the performance of exercise.</li> <li>3. Demonstrate the biomechanics as they pertain to four competitive strokes; free style, backstroke, breaststroke, and butterflies.</li> </ol>
<b>Architecture – AA</b>	<ol style="list-style-type: none"> <li>1. Develop architectural and freehand skills.</li> <li>2. Identify and explain the behavior appearance and use building materials.</li> <li>3. Incorporate the basic Uniform Building Code requirements to construction drawings.</li> <li>4. Describe and apply knowledge of the structural systems using wood, steel, masonry, and concrete.</li> </ol>
<b>Architecture – AS</b>	<ol style="list-style-type: none"> <li>1. Develop computer drafting skills.</li> <li>2. Develop advanced presentation skills.</li> <li>3. Apply the basic Uniform Building Code requirements to residential and commercial drawings.</li> <li>4. Use wood, truss, steel, masonry, and concrete to apply to structural systems.</li> </ol>
<b>Architecture – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Develop computer Rendering and drafting skills.</li> <li>2. Develop advanced presentation skills in 3D forms and posters.</li> <li>3. Incorporate Uniform Building Code requirements and City regulations to residential.</li> <li>4. Use different materials such as wood, truss, steel, masonry, and concrete to apply to structural systems.</li> </ol>
<b>Art (General) – AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate visual literacy and explain it in terms of the elements and principles of design.</li> <li>2. Demonstrate an ability to work with the media (drawing, painting, clay, etc.) of the discipline.</li> </ol>
<b>Art History – AA</b>	<ol style="list-style-type: none"> <li>1. Develop the ability to interpret artistic content through the analysis of subject matter and form.</li> <li>2. Acquire a critical understanding of art in historical eras that accounts for changing cultural frameworks over time.</li> </ol>
<b>Art-Emphasis in Ceramics – AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate visual literacy and explain it in terms of the elements and principles of design.</li> <li>2. Demonstrate an ability to work with the media (drawing, painting, clay, etc.) of the discipline.</li> </ol>
<b>Art-Emphasis in Painting - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate visual literacy and explain it in terms of the elements and principles of design.</li> <li>2. Demonstrate an ability to work with the media (drawing, painting, clay, etc.) of the discipline.</li> </ol>
<b>Art-Emphasis in Sculpture – AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate visual literacy and explain it in terms of the elements and principles of design.</li> <li>2. Demonstrate an ability to work with the media (drawing, painting, clay, etc.) of the discipline.</li> </ol>
<b>Astronomy – Discipline</b>	<ol style="list-style-type: none"> <li>1. Understand and apply key principles of astronomy using applicable vocabulary; including employing the scientific method to organize, prioritize, and problem solve. Astronomy (10, 20).</li> <li>2. Demonstrate knowledge of explaining how and where the human species fits into the immense, complex and ever-changing universe. Astronomy (10, 20).</li> <li>3. Understand and apply key principles of observational and theoretical astronomy using applicable vocabulary and relating them to hands-on laboratory activities; including employing the scientific method to organize, prioritize, and problem solve.</li> </ol>

<p><b>Athletics – Discipline</b></p>	<ol style="list-style-type: none"> <li>1. Evaluate, plan and create success as a participant on an athletic team.</li> <li>2. Plan and implement an individual physical conditioning program prior to the sport season in order to be prepared to begin participation.</li> <li>3. Demonstrate the ability to relate to teammates, coaches and the competitive atmosphere in a manner that enhances sportsmanship as well as their participation as well as the team environment.</li> </ol>
<p><b>Automotive Chasis Technology - Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to perform vehicle maintenance, service, diagnosis, and repair of current vehicles.</li> <li>2. Demonstrate the ability to perform automotive operations in a timely and professional manner with limited supervision.</li> <li>3. Demonstrate an ethical code conforming to the highest standards of the automotive industry.</li> </ol>
<p><b>Automotive Drivetrain Technology – Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to perform vehicle maintenance, service, diagnosis, and repair of current vehicles.</li> <li>2. Demonstrate the ability to perform automotive operations in a timely and professional manner with limited supervision.</li> <li>3. Demonstrate an ethical code conforming to the highest standards of the automotive industry.</li> </ol>
<p><b>Automotive Engine Performance Technology – Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to perform vehicle maintenance, service, diagnosis, and repair of current vehicles.</li> <li>2. Demonstrate the ability to perform automotive operations in a timely and professional manner with limited supervision.</li> <li>3. Demonstrate an ethical code conforming to the highest standards of the automotive industry.</li> </ol>
<p><b>Automotive Maintenance Technology – Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to perform vehicle maintenance, service, diagnosis, and repair of current vehicles.</li> <li>2. Demonstrate the ability to perform automotive operations in a timely and professional manner with limited supervision.</li> <li>3. Demonstrate an ethical code conforming to the highest standards of the automotive industry.</li> </ol>
<p><b>Automotive Technology – AS</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to perform vehicle maintenance, service, diagnosis, and repair of current vehicles.</li> <li>2. Demonstrate the ability to perform automotive operations in a timely and professional manner with limited supervision.</li> <li>3. Demonstrate an ethical code conforming to the highest standards of the automotive industry.</li> </ol>
<p><b>Automotive Technology (Emphasis in BMW Manufacture Training) – AS</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to perform vehicle maintenance, service, diagnosis, and repair of current BMW vehicles, and the confidence to perform automotive operations in a timely and professional manner with limited supervision.</li> <li>2. Demonstrate an ethical code conforming to the highest standards of the automotive industry.</li> </ol>
<p><b>Automotive Technology Entrepreneur – Certificate of Proficiency</b></p>	<ol style="list-style-type: none"> <li>1. Understand the fundamentals of automotive technology.</li> <li>2. Articulate a core value proposition for an entrepreneurial venture.</li> <li>3. Demonstrate how to prepare a high quality business plan for a new venture.</li> <li>4. Evaluate and solve challenges faced by entrepreneurs.</li> </ol>
<p><b>Behavioral Science (General) – AA</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding of the major theoretical perspectives included the behavioral sciences.</li> <li>2. Demonstrate an understanding of research methods used in the behavioral sciences.</li> </ol>

<p align="center"><b>Biology – AA</b></p>	<ol style="list-style-type: none"> <li>1. Perform experiments; collect, analyze, and report data.</li> <li>2. Develop competency with standard equipment and techniques of biosciences.</li> <li>3. Communicate scientific concepts by verbal, written, and graphic/illustrative means.</li> <li>4. Collaborate with peers to perform experiments, maintain a safe laboratory environment, and discuss scientific concepts.</li> </ol>
<p align="center"><b>Biology-Emphasis in Allied Health – AA</b></p>	<ol style="list-style-type: none"> <li>1. Explain the interdependence of molecular through organismal structure and function in both health and disease.</li> <li>2. Acquire, conduct, analyze, and interpret data using scientific terminology, measurements, and protocols.</li> </ol>
<p align="center"><b>Bookkeeping – Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Understand and apply the generally accepted accounting principles to prepare financial statements.</li> <li>2. Identify the basics of information technology and apply software applications to accounting transactions.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<p align="center"><b>Business – AS</b></p>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<p align="center"><b>Business Administration – AS-T</b></p>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<p align="center"><b>Business Graphics – Certificate of Proficiency</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate skill and comprehension in respective subject areas as indicated by course outcomes.</li> <li>2. Demonstrate the ability to think critically and apply knowledge of business graphics skills.</li> <li>3. Develop knowledge of business graphics and web page design.</li> <li>4. Develop knowledge of technological changes and select a current solution for a given problem.</li> </ol>
<p align="center"><b>Business Skills – Certificate of Proficiency</b></p>	<ol style="list-style-type: none"> <li>1. Create effective oral and written business communications using modern communication technologies.</li> <li>2. Develop “soft” skills to succeed in the workplace.</li> </ol>
<p align="center"><b>Business-Emphasis, Management – AS</b></p>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>



<b>Business-Emphasis, Marketing – AS</b>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Business-Transfer – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>California State University General Education Breadth (CSU/GE Breadth) – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Develop effective speaking and writing skills.</li> <li>2. Apply logic, reasoning and problem solving.</li> <li>3. Develop creative and innovative abilities</li> </ol>
<b>Case Management for Human Services – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate an effective work in a human services environment.</li> <li>2. Develop multicultural awareness and cultural competency needed to work in a social services setting along with computer literacy and medical terminology skills.</li> </ol>
<b>Chemistry – AS</b>	<ol style="list-style-type: none"> <li>1. Apply the scientific method to experimentation, college and analyze data and communicate findings in written and oral formats.</li> <li>2. Demonstrate ability to think, reason, and communicate critically, analytically and abstractly.</li> </ol>
<b>Coaching – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of planning and implementing individual and team training plan prior to the season of sport.</li> <li>2. Use sports training equipment in a specific and proper manner.</li> </ol>
<b>Coaching – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Plan and implement a team and individual training plan.</li> <li>2. Use sports training equipment in a specific and proper manner.</li> </ol>
<b>Communication Studies – AA-T</b>	<ol style="list-style-type: none"> <li>1. Pursue and evaluate knowledge through the skills of inquiry, research and critical thinking.</li> <li>2. Demonstrate effective skills in written and spoken communication.</li> </ol>
<b>Computer Science (Emphasis in Mathematics)– AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate fluency in programming.</li> <li>2. Demonstrate knowledge of at least one additional programming language besides C++.</li> </ol>
<b>Computer Science (Emphasis in Mathematics)– AS</b>	<ol style="list-style-type: none"> <li>1. Demonstrate fluency in programming.</li> <li>2. Demonstrate knowledge of at least one additional programming language besides C++.</li> </ol>
<b>Computer Science (General) – AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate fluency in programming.</li> <li>2. Demonstrate knowledge of at least one additional programming language besides C++.</li> </ol>
<b>Computer Science (General) – AS</b>	<ol style="list-style-type: none"> <li>1. Demonstrate fluency in programming.</li> <li>2. Demonstrate knowledge of at least one additional programming language besides C++.</li> </ol>

<b>Consumer Technology – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate how to install, configure and troubleshoot home technology systems.</li> <li>2. Demonstrate proficiency in configuring, troubleshooting, and updating personal computer systems.</li> <li>3. Prepare a basic business plan with a core value proposition for an entrepreneurial venture.</li> <li>4. Prepare high quality marketing plans for a new venture.</li> <li>5. Evaluate and solve the challenges faced by entrepreneurs.</li> </ol>
<b>Consumer Technology Entrepreneur – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate how to install, configure and troubleshoot home technology systems.</li> <li>2. Demonstrate proficiency in configuring, troubleshooting, and updating personal computer systems.</li> <li>3. Prepare a basic business plan with a core value proposition for an entrepreneurial venture.</li> <li>4. Prepare high quality marketing plans for a new venture.</li> <li>5. Evaluate and solve the challenges faced by entrepreneurs.</li> </ol>
<b>Creative Writing – Certificate</b>	<ol style="list-style-type: none"> <li>1. Demonstrate a body of quality creative work.</li> <li>2. Evaluate and analyze a critical response to the creative writings of others.</li> </ol>
<b>Dental Hygiene – AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the highest professional knowledge, judgment &amp; ability following the ADA Code of Ethics.</li> <li>2. Perform self-assessment for life-long learning &amp; professional growth.</li> <li>3. Demonstrate how to acquire &amp; synthesize information in a critical, scientific, &amp; effective manner.</li> </ol>
<b>Digital Design – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Create artistic concepts and themes in digital work.</li> <li>2. Demonstrate strong craftsmanship (using industry standard software and technology) in creating digital work.</li> </ol>
<b>Digital Media – Certificate</b>	<ol style="list-style-type: none"> <li>1. Create artistic concepts and themes in digital work.</li> <li>2. Demonstrate strong craftsmanship (using industry standard software and technology) in creating digital work.</li> </ol>
<b>Early Childhood Development – AA</b>	<ol style="list-style-type: none"> <li>1. Apply ethical standards and professional behaviors that demonstrate understanding of the needs, the characteristics and multiple influences on the development of children birth to age eight as related to high quality care and education of young children.</li> <li>2. Design, implement and evaluate environments and activities that support positive, developmental play and learning outcomes for all children.</li> </ol>
<b>Early Childhood Development – AS-T</b>	<ol style="list-style-type: none"> <li>1. Apply ethical standards and professional behaviors that demonstrate understanding of the needs, the characteristics and multiple influences on the development of children birth to age eight as related to high quality care and education of young children.</li> <li>2. Design, implement and evaluate environments and activities that support positive, developmental play and learning outcomes for all children.</li> </ol>
<b>Early Childhood Development (Associate Teacher) – Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Student will be able to use their understanding of young children’s characteristics and needs and multiple interacting influences on young children’s development and learning to create environments that are healthy, respectful, supportive and challenging for all children.</li> </ol>
<b>Early Childhood Development (Basic Teacher) – Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Student will be able to observe, reflect, develop and carry out an activity that is developmentally appropriate for a group of young children.</li> <li>2. Student will be able to demonstrate their understanding of children’s development through documentation of their skills.</li> </ol>

<b>Early Childhood Intervention – AA</b>	<ol style="list-style-type: none"> <li>1. Design, implement and evaluate environments and activities that support positive, developmental play and learning outcomes for children with special needs.</li> <li>2. Develop strategies that promote partnerships between programs, teachers, families and their communities to meet the needs of children with special needs and their families.</li> </ol>
<b>Early Childhood Intervention Assistant - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Student will demonstrate an understanding of atypical development in children birth through age 8 by designing an environment and planning curriculum that meets the diverse needs and learning styles of all children.</li> </ol>
<b>Economics – Discipline</b>	PLO development in process
<b>Electronic Systems Technology – AS</b>	<ol style="list-style-type: none"> <li>1. Understand how to specify, install, program, operate, troubleshoot, and modify electronics systems.</li> <li>2. Demonstrate effective skills in written and spoken communication.</li> </ol>
<b>Electronic Systems Technology - Certificate of Achievement in Consumer Electronics Technology</b>	<ol style="list-style-type: none"> <li>1. Understand how to specify, install, program, operate, troubleshoot, and modify electronics systems.</li> <li>2. Demonstrate effective skills in written and spoken communication.</li> </ol>
<b>Electronic Systems Technology - Certificate of Achievement in Industrial Electronics Technology</b>	<ol style="list-style-type: none"> <li>1. Understand how to specify, install, program, operate, troubleshoot, and modify electronics systems.</li> <li>2. Demonstrate effective skills in written and spoken communication.</li> </ol>
<b>Engineering – AS</b>	<ol style="list-style-type: none"> <li>1. Demonstrate an ability to apply knowledge of mathematics, science, and engineering.</li> <li>2. Demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.</li> </ol>
<b>English-Emphasis in Literature – AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate an ability to read and understand complex academic texts.</li> <li>2. Demonstrate a critical response to the ideas and information in academic texts.</li> </ol>
<b>Entrepreneurship - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Identify and evaluate new business opportunities.</li> <li>2. Prepare high quality marketing and business plans for a new venture.</li> <li>3. Demonstrate new business idea to potential investors and partners, both orally and in writing.</li> <li>4. Evaluate and solve the challenges faced by entrepreneurs.</li> </ol>
<b>Environmental Studies - AA</b>	PLO development in process
<b>Ethnic Studies - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of diverse racial/ethnic groups and their cultures.</li> <li>2. Understanding how major institutions, such as family, media, education, and government influence the experiences and opportunities of racial/ethnic groups.</li> </ol>
<b>Fitness Instructor - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding of heart rate.</li> <li>2. Demonstrate an ability to correctly perform a dead lift.</li> <li>3. Demonstrate an ability to correct, perform, and teach a clean.</li> </ol>
<b>Fitness Instructor - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate a knowledge of human development and its relationship fitness.</li> <li>2. Evaluate pre and post fitness level utilizing a variety of fitness testing methods.</li> </ol>

<b>French - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate proficiency in understanding and using, orally, the grammatical structures presented and vocabulary assigned.</li> <li>2. Demonstrate proficiency in understanding and using, in writing, the grammatical structures presented and vocabulary assigned.</li> </ol>
<b>Geographic Information Systems - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Identify significant spatial relationships and patterns in society including interactions between humans and their natural environment.</li> <li>2. Demonstrate competency in techniques of spatial overlay of themes, design and production of map layouts, graphical presentation of spatially distributed data, and analysis of geocoded database information.</li> </ol>
<b>Geography - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of global physical and environmental processes, locations and develop an appreciation of landscapes.</li> <li>2. Assemble and analyze spatial information (maps, data, surveys, qualitative observations, etc.), using traditional and modern mapping technology methods.</li> </ol>
<b>Geography - AA-T</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of global physical and environmental processes, locations and develop an appreciation of landscapes.</li> <li>2. Assemble and analyze spatial information (maps, data, surveys, qualitative observations, etc.), using traditional and modern mapping technology methods.</li> </ol>
<b>Graphic Design - AA</b>	<ol style="list-style-type: none"> <li>1. Create artistic concepts and themes in digital work.</li> <li>2. Demonstrate strong craftsmanship (using industry standard software and technology) in creating digital work.</li> </ol>
<b>Graphic Design - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Create artistic concepts and themes in digital work.</li> <li>2. Demonstrate strong craftsmanship (using industry standard software and technology) in creating digital work.</li> </ol>
<b>Health and Nutrition – Discipline</b>	<ol style="list-style-type: none"> <li>1. Understand and apply a plan of action for a healthy behavior change.</li> <li>2. Evaluate and formulate physiological and psychological behaviors of sexual health.</li> <li>3. Understand and apply plan dietary changes necessary to improve personal diet.</li> </ol>
<b>Health Care Management - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Identify and analyze unique legal issues in health care, including HIPAA (patient privacy laws and regulations), Medicare and Medicaid reimbursement requirements, negligence/malpractice issues, advance directives, and employment law for medical staff and independent contractors.</li> <li>2. Apply effective management approaches in health care organizations, including organizational structure and governance, information technology, facilities and guest services, planning, marketing and strategy.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Identify and analyze financial structures of both for profit and non-profit healthcare organizations.</li> </ol>
<b>History – Discipline</b>	<ol style="list-style-type: none"> <li>1. Synthesize factual information and historical evidence from a variety of sources and identify the connections between them.</li> <li>2. The students will demonstrate a body of knowledge about and critical understanding of historical eras, their key events and ideas, and the process of change over time.</li> </ol>
<b>Human Resources Assistant - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Understand and apply knowledge of human resources to a modern organization, including employment laws, staffing, compensation, training, development, workforce evaluation, motivation, and labor relationships.</li> <li>2. Create effective oral and written business communications using modern communication technologies.</li> <li>3. Identify the basics of information technology and apply software applications to manage of human resources.</li> </ol>

<p><b>Human Services (See also Case Management and Multicultural Awareness) - AA</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding and provide an overview of the field of human and social services in both the public and private sector.</li> <li>2. Demonstrate cultural awareness and sensitivity needed to respectfully serve the diverse service population.</li> <li>3. Demonstrate the ability to assess the needs of clients and provide appropriate referrals for them.</li> <li>4. Demonstrate the ability to use introspection to increase self-awareness.</li> <li>5. Demonstrate appropriate boundaries and the ability to make ethical decisions.</li> </ol>
<p><b>Human Services (See also Case Management and Multicultural Awareness) - AS</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding and provide an overview of the field of human and social services in both the public and private sector.</li> <li>2. Demonstrate cultural awareness and sensitivity needed to respectfully serve the diverse service population.</li> <li>3. Demonstrate the ability to assess the needs of clients and provide appropriate referrals for them.</li> <li>4. Demonstrate the ability to use introspection to increase self-awareness.</li> <li>5. Demonstrate appropriate boundaries and the ability to make ethical decisions.</li> </ol>
<p><b>Humanities (General) - AA</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding between the arts as personal expression and the arts as socially transformative.</li> <li>2. Demonstrate an understanding of both objective and subjective responses to a work of art (literary, performing, or fine).</li> </ol>
<p><b>Illustration - Certificate</b></p>	<ol style="list-style-type: none"> <li>1. Create artistic concepts and themes in digital work.</li> <li>2. Demonstrate strong craftsmanship (using industry standard software and technology) in creating digital work.</li> </ol>
<p><b>Inspection and Pipe Welding - Certificate of Proficiency</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate proficiency required form advanced; manufacturing, fabrication, and maintenance welding tasks compatible with the industrial norms for higher skilled workforce. They should be able to either skills and knowledge professional manner under minimum to no supervision.</li> <li>2. Pass the American Welding Society (A.W.S.) test and the appropriate areas of study.</li> </ol>
<p><b>Interior Design - AS</b></p>	<ol style="list-style-type: none"> <li>1. Develop functional interior spaces.</li> <li>2. Demonstrate proficiency in drawing appropriate floor plans.</li> </ol>
<p><b>Interior Design - Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Develop functional interior spaces.</li> <li>2. Demonstrate proficiency in drawing appropriate floor plans.</li> </ol>
<p><b>International Studies - AA</b></p>	<ol style="list-style-type: none"> <li>1. Develop a strong comprehension of international politics and U.S. foreign policy.</li> <li>2. Encourage active engagement with international affairs current events.</li> <li>3. Ability to link international developments to national politics and elections, and the everyday activities of individuals.</li> </ol>
<p><b>Intersegmental General Ed Transfer Curriculum (IGETC) - Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Develop effective speaking and writing skills.</li> <li>2. Understand and apply logic, reasoning and problem solving.</li> <li>3. Develop creative and innovative abilities.</li> </ol>
<p><b>Japanese – Discipline</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate proficiency in understanding and using, orally, the grammatical structures presented and vocabulary assigned.</li> <li>2. Demonstrate proficiency in understanding and using, in writing, the grammatical structures presented and vocabulary assigned.</li> </ol>

<p align="center"><b>Journalism - AA</b></p>	<ol style="list-style-type: none"> <li>1. Apply knowledge and understanding of the Internet, including various databases in order to independently conduct the research they need to produce credible and well constructed content for publication.</li> <li>2. Demonstrate knowledge of a broad range of equipment, software, trends, changes and tools needed to be successful in the journalism field.</li> <li>3. Demonstrate critical understanding of journalism practices, including facts, standards, conventions, and principles, including critical understanding of internal and external forces affecting their operation.</li> </ol>
<p align="center"><b>Journalism - AA-T</b></p>	<ol style="list-style-type: none"> <li>1. Apply knowledge and understanding of the Internet, including various databases in order to independently conduct the research they need to produce credible and well constructed content for publication.</li> <li>2. Demonstrate knowledge of a broad range of equipment, software, trends, changes and tools needed to be successful in the journalism field.</li> <li>3. Demonstrate critical understanding of journalism practices, including facts, standards, conventions, and principles, including critical understanding of internal and external forces affecting their operation.</li> </ol>
<p align="center"><b>Kinesiology - AA-T</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding of health and wellness information using the scientific method, scientific research and established knowledge.</li> <li>2. Utilize knowledge to design, develop, and implement an effective personalized fitness program.</li> <li>3. Understand movement as it applies to physical activity to create efficiency of psychomotor skills and achieve maximum benefits in that activity.</li> </ol>
<p align="center"><b>Kitchen and Bath Design - Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Develop and design functional kitchen and bath spaces.</li> <li>2. Draw appropriate floor plans and elevations per NKBA requirements.</li> <li>3. Apply materials and color selections for Kitchen and Bath spaces.</li> <li>4. Demonstrates an understanding of professional requirements.</li> </ol>
<p align="center"><b>Liberal Arts - AA</b></p>	<ol style="list-style-type: none"> <li>1. Develop effective speaking and writing skills.</li> <li>2. Apply logic, reasoning and problem solving.</li> <li>3. Develop creative and innovative abilities.</li> </ol>
<p align="center"><b>Liberal Studies-Elementary Teacher Preparation - AA-T</b></p>	<ol style="list-style-type: none"> <li>1. Develop effective speaking and writing skills.</li> <li>2. Apply logic, reasoning and problem solving.</li> <li>3. Develop creative and innovative abilities.</li> </ol>
<p align="center"><b>LVN to RN Nursing Program - AA</b></p>	<ol style="list-style-type: none"> <li>1. Incorporate the core of knowledge unique to the nursing profession in the delivery of health care in acute, chronic, or community health settings.</li> <li>2. Utilize the nursing process to provide care for clients, families and significant others with diverse health needs and practices.</li> <li>3. Respond to the demands of rapidly changing information technology by incorporating computer literacy in health care delivery and utilizing the internet for research.</li> </ol>
<p align="center"><b>Machine Tool Technology - AS</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to fabricate machined parts in a timely and professional manner with minimal supervision.</li> <li>2. Demonstrate the expertise needed to create parts, drawings, and assemblies using SolidWorks design software.</li> </ol>
<p align="center"><b>Machinist - Certificate of Achievement</b></p>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to fabricate machined parts in a timely and professional manner with minimal supervision.</li> <li>2. Demonstrate the ability to create basic CNC machine tool setups.</li> </ol>

<b>Management - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Marketing - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Understand and apply generally accepted accounting principles to prepare financial statements.</li> <li>2. Develop understanding of the law and the legal environment as it relates to business operations, including ethical considerations.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Mass Communications - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate knowledge of the history, processes, and instruction of a variety of media, including the ability to exercise critical judgment in the evaluation of media productions.</li> <li>2. Demonstrate through projects that with the power of a communicator comes more and ethical responsibility.</li> </ol>
<b>Mathematics - AA</b>	<ol style="list-style-type: none"> <li>1. (Critical Thinking) Analyze mathematical problems critically using logical methodology.</li> <li>2. (Communication) Communicate mathematical ideas, understand definitions, and interpret concepts.</li> <li>3. (Development of the Whole Person) Increase confidence in understanding mathematical concepts, communicating ideas and thinking analytically.</li> </ol>
<b>Mathematics - AS</b>	<ol style="list-style-type: none"> <li>1. (Critical Thinking) Analyze mathematical problems critically using logical methodology.</li> <li>2. (Communication) Communicate mathematical ideas, understand definitions, and interpret concepts.</li> <li>3. (Development of the Whole Person) Increase confidence in understanding mathematical concepts, communicating ideas and thinking analytically.</li> </ol>
<b>Mathematics - AS-T</b>	<ol style="list-style-type: none"> <li>1. (Critical Thinking) Analyze mathematical problems critically using logical methodology.</li> <li>2. (Communication) Communicate mathematical ideas, understand definitions, and interpret concepts.</li> <li>3. (Development of the Whole Person) Increase confidence in understanding mathematical concepts, communicating ideas and thinking analytically.</li> </ol>
<b>Medical Assisting - AA</b>	<ol style="list-style-type: none"> <li>1. Prepare competent entry-level professional medical assistance in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.</li> <li>2. Respond to the demand of the rapidly changing information technology by incorporating computer literacy in health care to include electronic health records and electronic practice management.</li> <li>3. Use critical thinking skills in managing care of patients.</li> <li>4. Acquire and practice the skills for the Certified Medical Assistant examination (CMA-AAMA).</li> </ol>
<b>Medical Assisting - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Prepare competent entry-level professional medical assistance in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.</li> <li>2. Respond to the demand of the rapidly changing information technology by incorporating computer literacy in health care to include electronic health records and electronic practice management.</li> <li>3. Use critical thinking skills in managing care of patients.</li> <li>4. Acquire and practice the skills for the Certified Medical Assistant examination (CMA-AAMA).</li> </ol>

<b>Multicultural Awareness/ Relations for the Service Provider - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate an understanding and provide an overview of the field of human and social services in both the public and private sector.</li> <li>2. Demonstrate cultural awareness and sensitivity needed to respectfully serve the diverse service population.</li> <li>3. Demonstrate the ability to use introspection to increase self-awareness.</li> </ol>
<b>Multicultural Awareness/ Self-Reflection - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate cultural awareness and sensitivity needed to respectfully serve the diverse service population.</li> <li>2. Demonstrate the ability to use introspection to increase self-awareness.</li> </ol>
<b>Museum Studies – AA</b>	<ol style="list-style-type: none"> <li>1. Develop an understanding and appreciation for the important social and cultural functions of museums of all types.</li> <li>2. Acquire and practice the skills needed by a range of museum professionals.</li> </ol>
<b>Music - AA-T</b>	<ol style="list-style-type: none"> <li>1. Examine music as a form of expression that reflects personal creativity as well as social, historical, political, religious and cultural changes and influences.</li> <li>2. Examine and discuss music in relationship to other forms of human expression, including art, architecture, philosophy, religion, and politics.</li> <li>3. Demonstrate proficiency in communication technologies for the purposes of research, composition, listening, performance, recording, and cross-discipline collaboration.</li> </ol>
<b>Music Industry Entrepreneur - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Understand and solve the challenges of self-employment in the music industry.</li> <li>2. Understand and create a core value proposition for an entrepreneurial venture.</li> <li>3. Prepare a high quality business plan for a new venture.</li> <li>4. Effectively navigate the unique legal issues of the music business.</li> <li>5. Demonstrate proficiency in the fundamentals of music recording.</li> </ol>
<b>Numerical Control - AS</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to fabricate setup, program, and machine parts manually and on numerically controlled lathes and milling machines in a timely and professional manner with minimal supervision.</li> <li>2. Demonstrate the expertise needed to turn parts using both manual and CNC equipment.</li> </ol>
<b>Numerical Control Programmer (Machinist) - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to fabricate setup, program, and machine parts manually and on numerically controlled lathes and milling machines in a timely and professional manner with minimal supervision.</li> <li>2. Demonstrate the expertise needed to turn parts using both manual and CNC equipment.</li> </ol>
<b>Nursing - AA</b>	<ol style="list-style-type: none"> <li>1. Incorporate the core of knowledge unique to the nursing profession in the delivery of health care in acute, chronic, or community health settings.</li> <li>2. Utilize the nursing process to provide care for clients, families and significant others with diverse health needs and practices.</li> <li>3. Respond to the demands of rapidly changing information technology by incorporating computer literacy in health care delivery and utilizing the internet for research.</li> <li>4. Use critical thinking skills in decisions related to managing care for groups of clients.</li> <li>5. Practice within the profession's ethical and legal framework.</li> </ol>
<b>Nursing Program, LVN to RN - AA</b>	<ol style="list-style-type: none"> <li>1. Incorporate the core of knowledge unique to the nursing profession in the delivery of health care in acute, chronic, or community health settings.</li> <li>2. Utilize the nursing process to provide care for clients, families and significant others with diverse health needs and practices.</li> <li>3. Respond to the demands of rapidly changing information technology by incorporating computer literacy in health care delivery and utilizing the internet for research.</li> <li>4. Use critical thinking skills in decisions related to managing care for groups of clients.</li> <li>5. Practice within the profession's ethical and legal framework.</li> </ol>



<b>PE and Activities – Discipline</b>	<ol style="list-style-type: none"> <li>1. Demonstrate an appreciation of the relationship between movement, health and wellness.</li> <li>2. Utilize the proper equipment and knowledge to design, develop, and implement an effective personalized fitness program.</li> <li>3. Understand movement and skill development as it relates to physical activity.</li> </ol>
<b>Personal Fitness Training Entrepreneur - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Ability to provide individualized training programs.</li> <li>2. Demonstrate proficiency in preparing a basic business plan with a core value proposition for an entrepreneurial venture.</li> <li>3. Create high quality marketing plans for a new venture.</li> <li>4. Evaluate and analyze the challenges of self-employment in the personal fitness training industry.</li> </ol>
<b>Photography - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate technical competency in the operation of a camera.</li> <li>2. Demonstrate technical competency making a photographic print.</li> <li>3. Effectively communicate a unique vision through personal artistic expression and conceptual meaning.</li> <li>4. Ability to discuss photography in terms of technical merit, aesthetic value, and conceptual meaning.</li> </ol>
<b>Photography - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate technical competency in the operation of a camera.</li> <li>2. Demonstrate technical competency making a photographic print.</li> <li>3. Effectively communicate a unique vision through personal artistic expression and conceptual meaning.</li> <li>4. Ability to discuss photography in terms of technical merit, aesthetic value, and conceptual meaning.</li> </ol>
<b>Physical Education - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate critical thinking skills within the context of exercise, health, and wellness.</li> <li>2. Utilize the proper equipment and knowledge to design and implement a personalized this program.</li> </ol>
<b>Physics – Discipline</b>	<ol style="list-style-type: none"> <li>1. Demonstrate how to read, diagram and solve qualitatively and quantitatively key physics applications aided by correct and efficient lab experiments using industry standard equipment.</li> <li>2. Effectively, efficiently, and correctly run lab experiments using industry standard equipment.</li> <li>3. Demonstrate an understanding of experimentation and real world applications within the scientific method as well as a mastery of physics lab experiments through the submission of a complete lab report with all required elements present.</li> </ol>
<b>Political Science - AA-T</b>	<ol style="list-style-type: none"> <li>1. Develop analytical capacities so that students are able to analyze complex local, domestic, and international political events.</li> <li>2. Familiarize students with the issues surrounding the exercise of political power.</li> </ol>
<b>Psychology - AA-T</b>	<ol style="list-style-type: none"> <li>1. Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.</li> <li>2. Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.</li> </ol>
<b>Radio and Television Broadcasting - AA</b>	<ol style="list-style-type: none"> <li>1. Understand the development of the different types of productions created for television.</li> <li>2. Use the current technology of television to develop and produce broadcast content.</li> </ol>
<b>Real Estate - AA</b>	<ol style="list-style-type: none"> <li>1. Identify and explain duties and obligations and legal aspect of real estate.</li> <li>2. Acquire and practice skills to pass state licensing exam and a career thereafter.</li> <li>3. Identify opportunities and strategies for successful real estate ventures.</li> </ol>

<b>Real Estate - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Identify and explain duties and obligations and legal aspect of real estate.</li> <li>2. Acquire and practice skills to pass state licensing exam and a career thereafter.</li> </ol>
<b>Real Estate - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Identify and explain duties and obligations and legal aspect of real estate.</li> <li>2. Acquire and practice skills to pass state licensing exam and a career thereafter.</li> <li>3. Identify opportunities and strategies for successful real estate ventures.</li> </ol>
<b>Real Estate Entrepreneur - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Ability to prepare for the challenges of self-employment or business ownership in the real estate industry.</li> <li>2. Prepare a basic business plan with a core value proposition for an entrepreneurial venture.</li> <li>3. Students are prepared for the real estate licensing exam, and to be an effective realtor.</li> </ol>
<b>Retail Management - AS</b>	<ol style="list-style-type: none"> <li>1. Understand and apply practices used in the management of retail stores.</li> <li>2. Identify the basics of information technology and apply software applications to enhance efficiency of business functions.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Retail Management - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Understand and apply practices used in the management of retail stores.</li> <li>2. Identify the basics of information technology and apply software applications to enhance efficiency of business functions.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Retailing - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Understand and apply practices used in the management of retail stores.</li> <li>2. Identify the basics of information technology and apply software applications to enhance efficiency of business functions.</li> <li>3. Create effective oral and written business communications using modern communication technologies.</li> <li>4. Apply critical thinking and analytical skills in decision making and problem solving.</li> </ol>
<b>Sign Language – Discipline</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the basic knowledge of ASL.</li> <li>2. Demonstrate the ability to communicate using the vocabulary learned in class.</li> </ol>
<b>Small Business Management - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Apply management principles to the selection, establishment, and operation of a small business.</li> <li>2. Use accounting principles to prepare financial reports for a small business both manually and using software.</li> <li>3. Develop understanding of the law and the legal environment as it relates to small business operations.</li> </ol>
<b>Social Science (General) - AA</b>	<ol style="list-style-type: none"> <li>1. Students are expected to demonstrate critical understanding of the structure of, and connections between, cultural and social groups historically and in current conditions.</li> <li>2. Students are expected to develop the ability to employ conceptual frameworks of analysis to understand and evaluate social, cultural, economic, and/or political systems in the United States and abroad.</li> </ol>
<b>Sociology - AA-T</b>	<ol style="list-style-type: none"> <li>1. Compare and contrast social structures (such as families, race/ethnic groups, religions) using the sociological perspective.</li> <li>2. Use culture as a social construct to explain social phenomena.</li> </ol>

<b>Software Specialist - AS</b>	<ol style="list-style-type: none"> <li>1. Recognize and apply appropriate information and hardware technology to achieve organizational goals.</li> <li>2. Demonstrate and apply appropriate software applications to achieve organizational goals.</li> <li>3. Understand basic hardware and software functions of a computer. Develop knowledge of technology applicable to the field, and proficiency in appropriate software.</li> <li>4. Demonstrate knowledge of technology applicable to the field, and proficiency in appropriate software.</li> </ol>
<b>Software Specialist - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Recognize and apply appropriate information and hardware technology to achieve organizational goals.</li> <li>2. Demonstrate and apply appropriate software applications to achieve organizational goals.</li> <li>3. Understand basic hardware and software functions of a computer. Develop knowledge of technology applicable to the field, and proficiency in appropriate software.</li> <li>4. Demonstrate knowledge of technology applicable to the field, and proficiency in appropriate software.</li> </ol>
<b>Spanish - AA</b>	<ol style="list-style-type: none"> <li>1. Demonstrate proficiency in understanding and using, orally, the grammatical structures presented and vocabulary assigned.</li> <li>2. Demonstrate proficiency in understanding and using, in writing, the grammatical structures presented and vocabulary assigned.</li> </ol>
<b>Speech Communication - AA</b>	<ol style="list-style-type: none"> <li>1. Pursue and evaluate knowledge through the skills of inquiry, research and critical thinking.</li> <li>2. Demonstrate effective skills in written and spoken communication.</li> </ol>
<b>Sports Injury Care - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Understand, implement safety, prevention, and treatment of athletic injury.</li> <li>2. Be able to assess a sprain or strain related to athletic injury.</li> </ol>
<b>Sports Injury Care - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Understand and demonstrate knowledge of the difference between a sprain and a strain.</li> <li>2. Be able to properly tape an ankle, elbow, and a knee.</li> </ol>
<b>Studio Arts - AA-T</b>	<ol style="list-style-type: none"> <li>1. Demonstrate visual literacy and explain it in terms of the elements and principles of design.</li> <li>2. Demonstrate an ability to work with media (drawing, painting, clay, etc.) of each discipline.</li> </ol>
<b>Theater Arts/ Theatre Arts - AA</b>	<ol style="list-style-type: none"> <li>1. Develop and implement pedagogical strategies to achieve it.</li> <li>2. Refine their curricula and pedagogy to strengthen these student skills.</li> <li>3. Explore their creative ideas, and this confidence leads to myriad educational goals, not the least is to complete their goals at Chabot and move into the next stage of their lives.</li> </ol>
<b>Theater Arts/ Theatre Arts - AA-T</b>	<ol style="list-style-type: none"> <li>1. Faculty develop and implement pedagogical strategies to achieve it.</li> <li>2. Refine their curricula analysis of material with the more instinctive, fresh, creative impulses used in response to dramatic material.</li> <li>3. Explore their creative ideas, and this confidence leads to myriad educational goals, not the least is to complete their goals at Chabot and move into the next stage of their lives.</li> </ol>
<b>Tool Maker - Certificate of Achievement</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the expertise needed to fabricate machined parts in a timely and professional manner with minimal supervision.</li> <li>2. Demonstrate the ability to create basic CNC machine tool setups.</li> </ol>
<b>Welding - Certificate of Proficiency</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the qualifications needed to gain interim welding positions required by the; manufacturing, fabrication, maintenance and construction industrial activities. They should be able to apply their skills and knowledge in a professional manner under supervision.</li> <li>2. Pass the American Welding Society (A.W.S) tests in the appropriate areas of study.</li> </ol>
<b>Welding Technology - AS</b>	<ol style="list-style-type: none"> <li>1. Demonstrate the proficiency needed to perform; manufacturing, fabrication, maintenance and construction tasks to be in compliance with the industrial norms, codes and standards. They should be able to apply their skills and knowledge in a professional manner under minimum to no supervision.</li> <li>2. Pass the American Welding Society (A.W.S) tests in the appropriate areas of study.</li> </ol>



**ASSOCIATE IN SCIENCE (AS)  
DEGREE  
Graduation Requirements**  
*Effective Fall 2017, Spring 2018, Summer 2018*



**MAJORS USING THE ASSOCIATE IN SCIENCE (AS) GENERAL EDUCATION (GE) PATTERN**

Accounting* Administrative Assistant* Advanced Manufacturing Technology Architecture Automotive Technology* Automotive Technology – BMW* Business –General* Business- Management* Business- Marketing*	Chemistry Computer Science Electronic Systems Technology* Engineering (ENGR)* Entrepreneurship Environmental Science Fire Prevention Inspector* Fire Technology* Human Services*	Industrial Technology* Interior Design* Machine Tool Technology* Mathematics Numerical Control* Retail Management* Software Specialist* Welding Technology*
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**AS Degree Graduation & Proficiency Requirements**

Complete the following:

1. **General Education (GE) Requirements** (courses listed on the other side of this flyer)
2. **Major Course Requirements** (courses listed in the Chabot College Catalog on the college website)
3. **Unit Requirement:** 60 semester college-level units
4. **Grade Point Average (GPA) Requirement:** Overall 2.0 or higher.
  - a. Each course listed below with a grade of “C” or higher:
    - i. English Composition
    - ii. American Cultures
    - iii. Math Proficiency
    - iv. All courses required for the major
5. **Units in Residence Requirement:** Minimum of 12 semester units at Chabot College
  - a. Occupational Technical majors must complete at least 12 units at Chabot College in the courses required for the **major**. *Occupational Technical majors are noted with an asterisk (\*) above.*
  - b. AS Engineering – see Chabot College Catalog for ENGR courses required to be completed at Chabot

**FREQUENTLY ASKED QUESTIONS**

**How can I find out if my courses from another college apply toward a degree at Chabot College?**

Contact the Office of Admission at *each* college you have previously attended and request *official* transcripts to be sent to the Chabot College Office of Admissions. Once Chabot College receives all transcripts, contact the Chabot Counseling Office for an appointment with a counselor for an unofficial evaluation of your transcripts.

**I plan to earn an Associate Degree for Transfer (AA-T/AS-T). Should I follow the GE courses on this flyer?**

**NO.** For the transfer AA-T/AS-T degrees, complete one of the following **transfer** general education (GE) patterns:

- California State University (CSU) General Education Breadth Requirements (CSU GE Breadth);
- OR**
- Intersegmental General Education Transfer Curriculum (IGETC)

**How do I apply for graduation (and the commencement ceremony)?**

If you attended other colleges, all official transcripts must be on file at the Chabot College Admissions Office. Complete a Request for Degree or Certificate form (available under “forms” on the Admissions Office website) no later than the fifth week of the fall or spring semester (summer term deadline will be earlier). Commencement is held in late May/early June.

**CHABOT COLLEGE**  
**GENERAL EDUCATION for Associate in Science Degree**

*Effective Fall 2017, Spring 2018, Summer 2018*

Use the columns at the right to record your progress: **C=Completed IP=In Progress N=Need C IP N**  
**Courses marked with an asterisk (\*) may only be used in ONE GE area**

**A. LANGUAGE AND RATIONALITY**

**A1. English Composition** -- Complete **one course** (3 units) with a grade of "C" or higher

English 1A			
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**A2. Communication & Analytical Thinking** -- Complete **one course** (3 units)

Architecture 68 Business 14, 16 Chinese 1A*, 1B* Communication Studies 1, 2*, 10, 11*, 20, 46 Computer Application Systems 50, 92A, 92B, 92C, 92D Computer Science 8, 10, 14, 15, 19A English 70	Entrepreneurship 30 French 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2*, Geography 20*, 21*, 22* German 1A*, 1B* History 5*, 12* Industrial Technology 74 Interior Design 68 Italian 1A*, 1B*	Japanese 1A*, 1B* Mass Communications 43, 44 Mathematics 1, 2, 15, 16, 20, 31, 33, 36, 37, 40, 41, 43, 47, 53, 53A, 53B, 54, 54L, 55, 55A, 55B, 55L, 57, 65, 65B, 65L Psychology 5 Spanish 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2* Theater 3, 7*			
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**B. NATURAL SCIENCES** -- Complete **one course** (3 units). *A lab is not required for the associate degree, however, underlined courses indicate a lab.*

Anatomy <u>1</u> Anthropology 1*, <u>1L</u> , 13 Astronomy 10, 20, <u>30</u> Biology 2, 4, <u>6</u> , <u>10</u> , 25, <u>31</u> , <u>50</u> Biotechnology <u>20</u> , <u>30</u> , <u>40</u>	Chemistry <u>1A</u> , <u>10</u> , <u>30A</u> , <u>30B</u> , <u>31</u> Environmental Science 10, <u>11</u> , 12, 15, <u>15L</u> Geography 1*, <u>1L</u> , 8, 13, 20*, 21*, 22* Geological Sciences 1 Kinesiology <u>2</u>	Microbiology <u>1</u> Physical Science <u>15</u> Physics <u>2A</u> , <u>3A</u> , <u>3B</u> , <u>4A</u> , <u>4B</u> , <u>4C</u> , <u>5</u> , <u>11</u> Physiology <u>1</u> Psychology 4*			
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**C. HUMANITIES** -- Complete **one course** (3 units)

Architecture 2A, 2B, 4A, 4B, 8A, 8B, 12, 14, 16 Art 2A, 3A, 16A, 17A, 22, 23, 24, 54, 57 Art History 1, 4, 5, 6, 7, 8, 20, 50A, 51A Chinese 1A*, 1B* Communication Studies 2, 6 English 11A, 12A, 13A, 20, 21, 22, 24, 25, 26, 28, 31, 32, 35, 41, 45, 48 Film 14, 50, 60 French 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2*, 2A, 2B	General Studies 31 German 1A*, 1B*, 2A*, 2B* History 1*, 2* Humanities 50, 60, 65, 68, 72 Interior Design 52 Italian 1A*, 1B*, 2A*, 2B* Japanese 1A*, 1B*, 2A*, 2B* Music (MUSA) 40 Music (MUSL) 1, 2A, 2B, 2C, 2D, 3, 4, 5, 8 Music (MUSP) 12, 14, 44, 45	Philosophy 50, 60, 65, 70 Photography 20, 50, 53A Religious Studies 50, 64, 65, 70, 72 Sign Language 64, 65, 66 Spanish 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2*, 2A, 2B, 5 Theater Arts 1, 4, 7*, 10, 11, 12, 14, 21, 22, 47A, 48A, 50A			
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**D. SOCIAL AND BEHAVIORAL SCIENCES** -- Complete **one course** (3 units)

Administration of Justice 45, 50, 60, 70 Anthropology 1*, 2, 3, 4, 5, 7, 8, 12 Business 12, 20, 36, 40, 42 Communication Studies 11*, 12, 50 Early Childhood Development 40, 52, 56, 62, 69, 79, 87 Economics 1, 2, 10	Entrepreneurship 1, 5 Environmental Studies 1 Ethnic Studies 1, 2, 3, 10, 21, 22, 25 Geography 1*, 2, 3, 5, 10, 12, 21*, 22* Global Studies 1, 2 Health 8	History 1*, 2*, 3, 4, 5*, 7*, 8*, 12*, 19, 20*, 21*, 22*, 25*, 27* Mass Communications 40, 41 Political Science 1*, 10, 12*, 20, 25, 30, 45 Psychology 1, 2, 3, 4*, 6, 8, 12, 33, 45 Psychology-Counseling 1, 4, 13 Sociology 1, 2, 3, 4, 5, 6, 8, 10			
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**E. WELLNESS: Areas of Health OR Physical Education Activity** -- Complete **one course** (1 unit)

Early Childhood Development 54 Fire Tech 7 Health 1, 4 Kinesiology 14, 19, 24 Nutrition 1	<b>OR</b> Any Physical Education activity course with a course prefix of: ADPE, ATHL, DANC, PEAC or FT 88A, 88B, 88C, 88D <b>**PE Exemptions:</b> Students with official transcripts on file indicating an AA/AS degree (or higher) are automatically exempt. For an exemption due to a verified illness/physical disability, complete a "Request for a Course Waiver" in the Counseling Office.			
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**F. PROGRAM-BASED GENERAL EDUCATION (GE) REQUIREMENT** -- Complete **one course** (3 units)

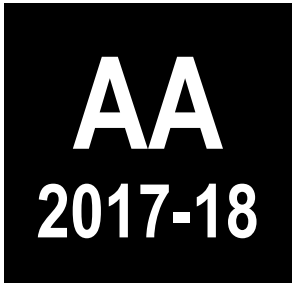
To find the program-based GE course requirement, go to the AS major/program page in the current Chabot College Catalog.			
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**AMERICAN CULTURES** -- Complete **1 course** with a grade of "C" or "P". *Courses below that are listed in other areas can satisfy two GE requirements.*

Anthropology 5 Art History 7 Communication Studies 11 Early Childhood Development 79 English 26, 32 Ethnic Studies 1	History 5, 7, 8, 12, 27 Humanities 65 Music (MUSL) 8 Psychology-Counseling 1, 4, 13 Sociology 1, 3 Theater Arts 14	<b>**IMPORTANT: Courses taken at Las Positas College, even with the same course name and number, may not satisfy this requirement. See a counselor for assistance.</b>			
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**MATHEMATICS PROFICIENCY:** Complete **one course** with a grade of "C" or "P" or higher **OR** demonstrate proficiency in mathematics (see below). *Chabot College Math Assessment or Math Division Proficiency Test will NOT satisfy the math requirement for transfer.*

1. Mathematics 1, 2, 15, 16, 20, 31, 33, 36, 37, 41, 43, 47, 53B, 54, 54L, 55, 55B, 55L, 57, Psychology 5, <b>OR</b> 2. Demonstrate proficiency beyond intermediate algebra: Chabot College Math Assessment, Math Department Proficiency Test; AP Statistics or Calculus Exam (score of "3" or higher), EAP Math (score of "standard exceeded").			
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# ASSOCIATE IN ARTS (AA) DEGREE

## Graduation Requirements

*Effective Fall 2017, Spring 2018, Summer 2018*



**MAJORS USING THE ASSOCIATE IN ARTS (AA) GENERAL EDUCATION (GE) PATTERN**

Administration of Justice*	Computer Science	Geography	Music
Anthropology (non-AA-T)	Dental Hygiene	Graphic Design	Nursing
Architecture	Early Childhood Development* (non-AS-T)	Human Services*	Photography
Art (General)	Early Childhood Intervention*	Humanities	Physical Education
Art-Emphasis in Ceramics	English-Emphasis in Literature	International Studies	Radio & TV Broadcasting
Art-Emphasis in Painting	Environmental Studies	Journalism (non-AA-T)	Real Estate*
Art-Emphasis in Sculpture	Ethnic Studies	Liberal Arts	Social Science
Art History	Fire Prevention Inspector*	LVN-ADN (Nursing)	Spanish (non-AA-T)
Behavioral Science	Fire Technology*	Mass Communications	Speech Communication (non-AA-T)
Biology	French	Mathematics (non-AS-T)	Theater Arts (non-AA-T)
Biology-Emphasis in Allied Health		Medical Assisting (MEDA)*	

### AA Degree Graduation & Proficiency Requirements

Complete the following:

1. **General Education (GE) Requirements** (listed on the other side of this flyer)
2. **Major Course Requirements** (see the Chabot College Catalog on the college website)
3. **Unit Requirement:** 60 semester college-level units
4. **Grade Point Average (GPA) Requirement:** Overall 2.0 or higher.
  - a. Each course listed below completed with a grade of “C” (or “P”) or higher:
    - i. English Composition
    - ii. American Cultures
    - iii. Math Proficiency
    - iv. All courses required for the major
5. **Units in Residence Requirement:** Minimum 12 semester units completed at Chabot College
  - a. Occupational Technical majors must complete at least 12 units at Chabot College in the courses required for their **major**. *Occupational Technical majors are noted with an asterisk (\*) above.*

#### FREQUENTLY ASKED QUESTIONS

**How can I find out if my courses from another college apply toward a degree at Chabot College?**

Contact the Office of Admission at *each* college you have previously attended and request *official* transcripts to be sent to the Chabot College Office of Admissions. Once Chabot College receives all transcripts, contact the Chabot Counseling Office for an appointment with a counselor for an unofficial evaluation of your transcripts.

**I plan to earn an Associate Degree for Transfer (AA-T/AS-T). Should I follow the GE courses on this flyer?**

- NO.** For the transfer AA-T/AS-T degrees, complete one of the following **transfer** general education (GE) patterns:
- California State University General Education Breadth Requirements (CSU GE Breadth);
- OR**
- Intersegmental General Education Transfer Curriculum (IGETC)

**How do I apply for graduation (and the commencement ceremony)?**

If you attended other colleges, all *official* transcripts must be on file at the Chabot College Admissions Office. Complete a Request for Degree or Certificate form (available under “forms” on the Admissions Office website) no later than the fifth week of the fall or spring semester (summer term deadline will be earlier). Commencement is held in late May/early June.

AA

2017-18

## CHABOT COLLEGE GENERAL EDUCATION for Associate in Arts Degree

Effective Fall 2017, Spring 2018, Summer 2018

Use the columns at the right to record your progress:				C=Completed	IP=In Progress	N=Need	C	IP	N	
<i>*Courses marked with an asterisk (*) may only be used in ONE GE area</i>										
<b>A. LANGUAGE AND RATIONALITY</b>										
<b>A1. English Composition</b> -- Complete <b>one course</b> (3 units) with a grade of "C" or higher										
English 1A										
<b>A2. Writing and Critical Thinking</b> -- Complete <b>one course</b> (3 units)										
Business 10 English 4, 7		German 2A*, 2B* French 2A*, 2B*		Italian 2A*, 2B* Japanese 2A*, 2B* Spanish 2A*, 2B*						
<b>A3. Communication and Analytical Thinking</b> -- Complete <b>one course</b> (3 units)										
Architecture 68 Business 14, 16 Chinese 1A*, 1B* Communication Studies 1, 2*, 10, 11*, 20, 46 Computer Application Systems 50, 92A, 92B, 92C, 92D Computer Science 8, 10, 14, 15, 19A English 70		Entrepreneurship 30 French 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2* Geography 20*, 21*, 22* German 1A*, 1B* History 5*, 12* Industrial Technology 74 Interior Design 68 Italian 1A*, 1B*		Japanese 1A*, 1B* Mass Communications 43, 44 Mathematics 1, 2, 15, 16, 20, 31, 33, 36, 37, 40, 41, 43, 47, 53, 53A, 53B, 54, 54L, 55, 55A, 55B, 55L, 57, 65, 65B, 65L Psychology 5 Spanish 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2*, Theater 3, 7*						
<b>B. NATURAL SCIENCES</b> -- Complete <b>one course</b> (3 units). <i>A lab is not required for the associate degree, however, underlined courses indicate a lab.</i>										
Anatomy <u>1</u> Anthropology 1*, <u>1L</u> , 13 Astronomy 10, 20, <u>30</u> Biology <u>2</u> , <u>4</u> , <u>6</u> , <u>10</u> , <u>25</u> , <u>31</u> , <u>50</u> Biotechnology <u>20</u> , <u>30</u> , <u>40</u>		Chemistry <u>1A</u> , <u>10</u> , <u>30A</u> , <u>30B</u> , <u>31</u> Environmental Science 10, <u>11</u> , 12, 15, <u>15L</u> Geography 1*, <u>1L</u> , 8, 13, 20*, 21*, 22* Geological Sciences 1 Kinesiology <u>2</u>		Microbiology <u>1</u> Physical Science <u>15</u> Physics <u>2A</u> , <u>3A</u> , <u>3B</u> , <u>4A</u> , <u>4B</u> , <u>4C</u> , <u>5</u> , <u>11</u> Physiology <u>1</u> Psychology 4*						
<b>C. HUMANITIES</b> -- Complete <b>one course</b> (3 units)										
Architecture 2A, 2B, 4A, 4B, 8A, 8B, 12, 14, 16 Art 2A, 3A, 16A, 17A, 22, 23, 24, 54, 57 Art History 1, 4, 5, 6, 7, 8, 20, 50A, 51A, Chinese 1A*, 1B* Communication Studies 2*, 6 English 11A, 12A, 13A, 20, 21, 22, 24, 25, 26, 28, 31, 32, 35, 41, 45, 48 Film 14, 50, 60 French 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2*, 2A*, 2B*		General Studies 31 German 1A*, 1B*, 2A*, 2B* History 1*, 2* Humanities 50, 60, 65, 68, 72 Italian 1A*, 1B*, 2A*, 2B* Interior Design 52 Japanese 1A*, 1B*, 2A*, 2B* Music (MUSA) 40 Music (MUSL) 1, 2A, 2B, 2C, 2D, 3, 4, 5, 8 Music (MUSP) 12, 14, 44, 45		Philosophy 50, 60, 65, 70 Photography 20, 50, 53A Religious Studies 50, 64, 65, 70, 72 Sign Language 64, 65, 66 Spanish 1A*, 1A1*, 1A2*, 1B*, 1B1*, 1B2*, 2A*, 2B*, 5 Theater Arts 1, 4, 7*, 10, 11, 12, 14, 21, 22, 47A, 48A, 50A						
<b>D. SOCIAL AND BEHAVIORAL SCIENCES</b> -- Complete <b>one course</b> (3 units)										
Administration of Justice 45, 50, 60, 70 Anthropology 1*, 2, 3, 4, 5, 7, 8, 12 Business 12, 20, 36, 40, 42 Communication Studies 11*, 12, 50 Early Childhood Development 40, 52, 56, 62, 69, 79, 87 Economics 1, 2, 10		Entrepreneurship 1, 5 Environmental Studies 1 Ethnic Studies 1, 2, 3, 10, 21*, 22*, 25* Geography 1*, 2, 3, 5, 10, 12, 21*, 22* Global Studies 1, 2 Health 8		History 1*, 2*, 3, 4, 5*, 7*, 8*, 12*, 19, 20*, 21*, 22*, 25*, 27* Mass Communications 40, 41 Political Science 1*, 10, 12*, 20, 25, 30, 45 Psychology 1, 2, 3, 4*, 6, 8, 12, 33, 45 Psychology-Counseling 1, 4, 13 Sociology 1, 2, 3, 4, 5, 6, 8, 10						
<b>E. WELLNESS</b>										
<b>E1. Areas of Health</b> -- Complete <b>one course</b> (3 units)										
Early Childhood Development 54 Fire Tech 7 Health 1, 4		Kinesiology 14, 19, 24 Nutrition 1		***NOTE: The E1. Areas of Health is not required for students earning an AA Degree in Nursing or Dental Hygiene.						
<b>E2. Physical Education Activity</b> -- Complete <b>one course</b> (1 unit) **										
Complete one unit of a physical education <b>activity course</b> with a course prefix of: <b>ADPE, ATHL, DANC, PEAC, FT 88A, 88B, 88C, 88D</b>										
<i>PE Exemptions: Students with official transcripts on file indicating an AA/AS degree (or higher) are automatically exempt. For an exemption due to a verified illness/physical disability, complete a "Request for a Course Waiver" in the Counseling Office.</i>										
<b>F. AMERICAN INSTITUTIONS</b> -- Complete <b>one course</b> (3 units)										
History 7*, 8*, 12*, 20*, 21*, 22*, 25*, 27* or Ethnic Studies 21*, 25*, 22* or Political Science 1*, 12*										
<b>AMERICAN CULTURES</b> -- Complete <b>one course</b> with a grade of "C" or "P" or higher. <i>Courses below that are listed in other GE areas can satisfy two requirements.</i>										
Anthropology 5 Art History 7 Communication Studies 11 Early Childhood Development 79 English 26, 32 Ethnic Studies 1		History 5, 7, 8, 12, 27 Humanities 65 Music (MUSL) 8 Psychology-Counseling 1, 4, 13 Sociology 1, 3 Theater Arts 14		***IMPORTANT: Courses taken at Las Positas College, <u>even with the same course name and number</u> , may not satisfy this requirement. See a counselor for assistance.						
<b>MATHEMATICS PROFICIENCY</b> -- Complete <b>one course</b> listed below with a grade of "C" or "P" OR demonstrate math proficiency (see below). <i>Chabot College Math Assessment or Math Division Proficiency Test will NOT satisfy the math requirement for transfer.</i>										
1. Mathematics 1, 2, 15, 16, 20, 31, 33, 36, 37, 41, 43, 47, 53B, 54, 54L, 55, 55B, 55L, 57, Psychology 5, OR										
2. Demonstrate proficiency beyond intermediate algebra: Chabot College Math Assessment, Math Department Proficiency Test; AP Statistics or Calculus Exam (score of "3" or higher), EAP Math (score of "standard exceeded").										

## Historically Black College and University (HBCU) Transfer Guarantee Project for California Community College Students

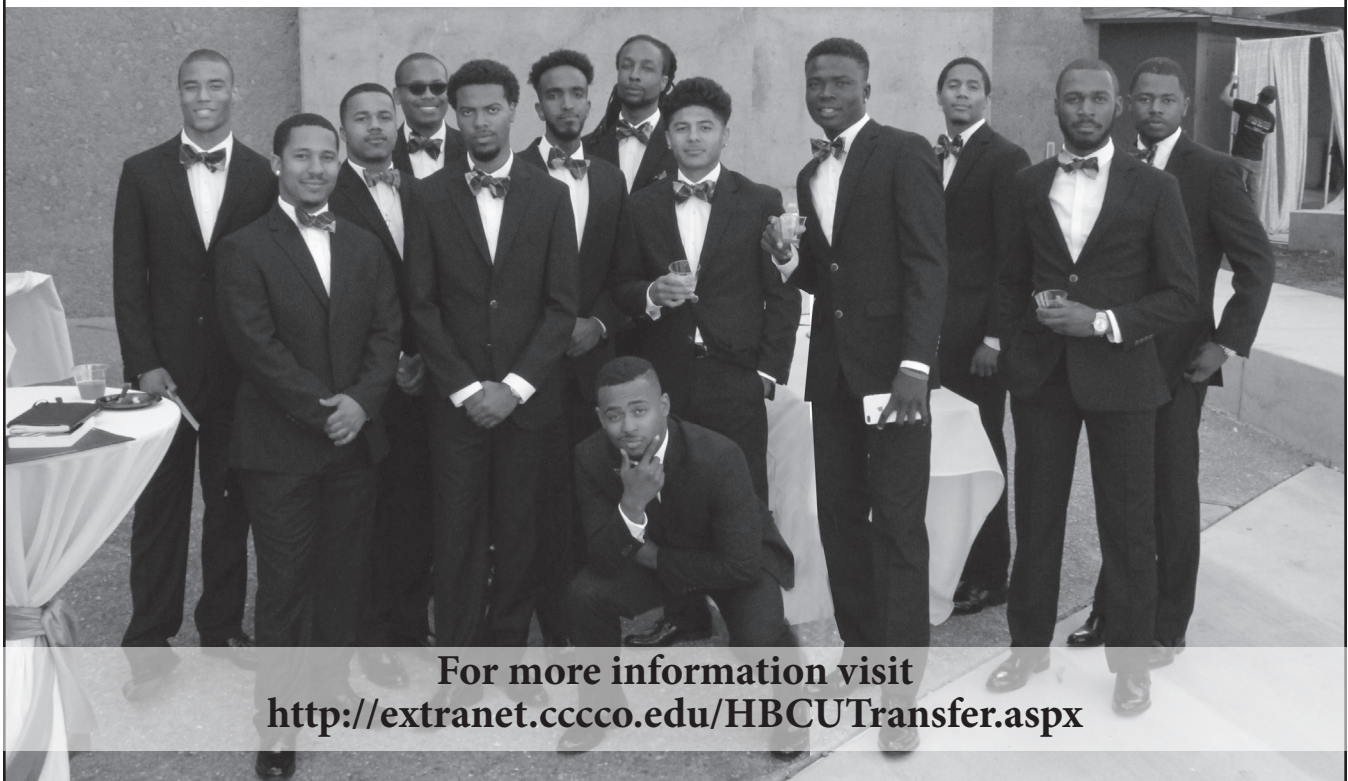
On March 17, 2015, the California Community Colleges and nine historically Black colleges and universities signed an historic agreement, which guarantees California community college students who complete certain academic requirements to transfer to a participating historically Black college and university campus.



### The thirty five participating institutions are:

- Alabama State University, Montgomery AL (Public)
- Alcorn State University, Lorman, MS (Public)
- Arkansas Baptist College, Little Rock, AR (Private)
- Bennett College, Greensboro, NC (Private)
- Bethune-Cookman University, Daytona Beach, FL (Private)
- Bowie State University, Bowie, MD (Public)
- Central State University, Wilberforce, OH (Private)
- Claflin University, Orangeburg, SC (Private)
- Clark Atlanta University, Atlanta, GA (Private)
- Dillard University, New Orleans, LA (Private)
- Edward Waters College, Jacksonville, FL (Private)
- Fisk University, Nashville, TN (Private)
- Florida Memorial University, Miami Gardens, FL (Private)
- Fort Valley State University, Fort Valley, GA (Public)
- Grambling State University, Grambling, LA (Public)
- Harris-Stowe State University, St. Louis, MO (Public)
- Huston-Tillotson University, Austin, TX (Private)
- Kentucky State University, Frankfort, KY (Public)
- Lane College, Jackson, TN (Private)
- Lincoln University of Missouri, Jefferson City, MO (Public)
- Lincoln University of PA, Lincoln University, PA (Private)
- Mississippi Valley State University, Itta Bena, MS (Public)
- North Carolina Central University (Public)
- Philander Smith College, Little Rock, AR (Private)
- Shaw University, Raleigh, NC (Private)
- Southern University and A&M College, Baton Rouge, LA (Public)
- Stillman College, Tuscaloosa, AL (Private)
- Talladega College, Talladega, AL (Private)
- Tennessee State University, Nashville, TN (Public)
- Texas Southern University, Houston, TX (Private)
- Tougaloo College, Tougaloo, MS (Private)
- Tuskegee University, Tuskegee, AL (Private)
- Virginia State University, Petersburg, VA (Public)
- West Virginia State University, Institute, WV (Public)
- Wiley College, Marshall, TX (Private)

The goal of our Historically Black Colleges and Universities Transfer Guarantee Project is to educate students about additional transfer opportunities at these institutions and develop pathways that will ultimately contribute to an increase in baccalaureate degree attainment.



For more information visit  
<http://extranet.cccco.edu/HBCUTransfer.aspx>



**The California Community Colleges Board of Governors  
awards \$1 million to UMOJA Community to  
better serve underrepresented students**



Demonstrating its firm resolve to improve the completion rates of underrepresented California community college students, the California Community Colleges Board of Governors approved a \$1 million contract to expand the services offered by the Umoja Community, a partnering nonprofit serving those students, on California community college campuses.

Umoja programs are designed to increase the retention rates as well as the graduation and transfer rates of underrepresented students, although program participation is open to all. Students enrolled in Umoja programs take classes to help them improve skills in reading, writing and critical thinking, meet with counselors at least twice a semester, receive tutoring support, attend workshops, and participate in field trips.

Contract funds will be distributed by Chaffey College to the Umoja Community to provide for state-level support and coordination for some of the following services:

- Expand the number of Umoja programs and increase the number of students served by existing programs;
- Expand existing partnerships with the University of California, California State University, Historically Black Colleges and Universities (HBCU), and Association of Independent California Colleges and Universities to increase the number of its students transferring to those institutions;
- Hire staff, including a statewide Umoja executive director and regional coordinators; and
- Expand Umoja program training and dissemination of Umoja Community practices.

The Board of Governors officially recognized the Umoja Community as a statewide success program in January 2008. The first Umoja programs were established at California community college campuses that same year. The Umoja Community administers programs at 30 California community college campuses. Three additional colleges plan to implement an Umoja program by fall 2015.

The Umoja Community program is modeled after two successful community college programs, the Daraja Project (Chabot College, Hayward, Calif.), and Project Success (El Camino College, Torrance, Calif.) Daraja students (age 21 or under) successfully completed the Basic Skills to Freshman Composition sequence at a rate 19 percent higher than other students (age 21 or under) not in Daraja. Project Success students have persistence rates at 96 percent and earn associate degrees at a rate twice that of comparable students not in Project Success.

**For more information visit [www.umojacommunity.org/about](http://www.umojacommunity.org/about)**



# CURRICULUM CHANGES

## NEW DEGREES

Advanced Manufacturing Technology (AS)\*  
Environmental Science (AS)\*

## REVISED DEGREES

Biology (AA)  
Biology (Emphasis in Allied Health) (AA)\*\*  
Dental Hygiene (AA)  
Electronic Systems Technology (AS)  
Graphic Design (AA)\*\*  
Liberal Arts (AA)  
Mathematics (AS)  
Medical Assisting (AA)  
Music (AA-T)  
Nursing (AA)\*\*  
30 unit LVN-RN (Non-Degree)\*\*  
LVN RN (AA)\*\*  
Spanish (AA-T)

## DELETED DEGREES

Music (AA)

## NEW CERTIFICATES

Advanced Manufacturing Technology (Certificate of Achievement)\*  
Digital Photography (Certificate of Achievement)\*\*  
Women's Studies (Certificate of Achievement)\*

## REVISED CERTIFICATES

Accounting Technician (Certificate of Achievement)

## DELETED CERTIFICATES

Automotive Engine Machining (Certificate of Achievement)  
Business Graphics (Certificate of Proficiency)  
Information and Communication Technology Cloud Infrastructure (Certificate of Proficiency)  
Information and Communication Technology Cloud Services (Certificate of Proficiency)  
Information and Communication Technology Support (Certificate of Proficiency)  
Office Technology (Certificate of Achievement)  
Office Technology (Certificate of Proficiency)

\* Pending State Approval

\*\* Effective Spring 2018 - Pending State Approval

# CHABOT COLLEGE

## 2017-2018 CURRICULUM CHANGES

### ADMINISTRATION OF JUSTICE (ADMJ)

(DELETED COURSES- EFFECTIVE SPRING 2018)

- 90 Reserve Module A: Arrest and Control**
- 91 Reserve Module A: Firearms**

### ANTHROPOLOGY (ANTH)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

#### **4 Language and Culture 3 units**

An introduction to the core concepts of linguistic anthropology and the study of language in culture and society, including how language perpetuates the identity of individuals through their social interactions and their culture in everyday speech events. Topics such as identity, social status, gender, race, and institutional power, are examined in contemporary language use. Traditional study of the methods of linguistic anthropologists as well as the study of the biological basis of communication and speech, the structure of language, language origins, language through time, language variation, the ethnography of communication, sociolinguistics, nonverbal communication and writing, and how cultural context sets meaning.

**Strongly Recommended: Eligibility for ENGL 1A**

(DEACTIVATED COURSES -EFFECTIVE SPRING 2018)

- 4901 Magic, Witchcraft and Religion**
- 4902 Cultures of the Middle East**

### ARCHITECTURE (ARCH)

(RENAMED/RENUMBERED AND UNIT CHANGES)

#### **2A Architectural Graphics in Drawings and Sketching 3 units**

Introduction to freehand and mechanically constructed drawings employing orthographic, axonometric and linear perspective drawing systems to represent three-dimensional form and environments on two-dimensional surfaces. Emphasis on the understanding of basic drawing conventions, their implications and applications.

**Requisites: none**

(RENAMED/RENUMBERED AND UNIT CHANGES)

#### **2B Architectural Graphics in Color Rendering 3 units**

Continuation of the content and issues introduced in Architecture 2A plus the theories and methods for applying shadows, reflections, materials, entourage, and color in a variety of drawing types. Layout and integration of composite drawings in support of the process and presentation of architectural designs.

**Prerequisite: ARCH 2A (completed with a grade of "C" or higher)**

(RENAMED/RENUMBERED AND UNIT CHANGES)

#### **33 Digital Communications in Modeling 3 units**

Introduction to 3-dimensional digital modeling using 3-dimensional software. Emphasis on learning basic commands to create 3-dimensional objects including building interiors and exteriors, and defining photo-realistic views with appropriate light sources.

**Strongly Recommended: ARCH 68 (completed with a grade of "C" or higher) or, ID 68 (completed with a grade of "C" or higher)**

(RENAMED/RENUMBERED AND UNIT CHANGES)

#### **68 Digital Tools for Design and Visual Communication 4 units**

(See also ID 68)

Introduction to digital tools with computer-aided design drafting. Ability to effectively use basic design principles in two dimensions. Topics include command basics including drawing entity creation and modification, industry layering standards, text and dimensioning systems appropriate to architecture, creating symbol libraries, external reference techniques, model and paper space commands, and plotting techniques. May not receive credit if ID 68 has been completed.

**Requisites: none**

(RENAMED/RENUMBERED AND UNIT CHANGES)

#### **80 Architectural Education and Practice 2 units**

Architectural education and practice in Architecture department setting approved by Architecture faculty as related to student's architecture major or classes at Chabot. Cooperative effort between student and instructor or architecture firm supervisor to accomplish agreed upon work objectives, complete projects and broaden experiences. Student provides verification of service experience or work on projects during the term. Students will get an architecture firm approved by architecture faculty or work on projects closely with instructor. Students will meet with architecture instructor for input and hands-on experience lectures and discussion focused on architecture firm structures, project procedures, design developments, specification book and construction documents.

**Strongly Recommended: ARCH 4A (completed with a grade of "C" or higher) and, ARCH 33 (completed with a grade of "C" or higher)**

(DELETED COURSES - EFFECTIVE SPRING 2018)

- 9901 3-D Modeling on the Computer**
- 9902 CAD for Architecture**
- 9903 Architecture of the Spirit**

## ART (ART)

(NEW COURSE)

### **9A Art Interdisciplinary Colloquium I 1 unit**

This is an interdisciplinary course, exploring the processes, ideas and diverse media of visual arts. The course addresses the thematic concepts that are central to the nature of art making today. Visual problem solving and teamwork will be emphasized throughout the course, in addition to an in-depth exploration of various materials and the nature of professional art practices.

**Prerequisite:** Portfolio Review by Instructor

(NEW COURSE)

### **9B Interdisciplinary Colloquium II 1 unit**

This is the advanced level of an interdisciplinary course, exploring the processes, ideas and diverse media of visual arts. The course addresses the thematic concepts that are central to the nature of art making today. Visual problem solving and teamwork will be emphasized throughout the course, in addition to an in-depth exploration of various materials and the nature of professional art practices. Learn leadership skills by mentoring entry level students.

**Prerequisite:** ART 9A (completed with a grade of "P" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### **24 3-D Foundations 3 units**

Introduction to the concepts, applications, and historical references related to three-dimensional design and spatial composition, including the study of the elements and organizing principles of design as they apply to three-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for three-dimensional studio projects.

**Requisites:** none

## ART HISTORY (ARTH)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

### **1 Introduction to Art 3 units**

Drawing, painting, sculpture, photography, architecture and other artforms in relation to human inventiveness in providing for material and aesthetic needs; orientation to contemporary and historic art forms and principles. (Formerly ART 1; may not receive credit if ART 1 has been completed.)

**Requisites:** none

## AUTOMOTIVE TECHNOLOGY (ATEC)

(DELETED CERTIFICATE)

### **AUTOMOTIVE ENGINE MACHINING CERTIFICATE OF ACHIEVEMENT**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### **7 Automotive and Air Conditioning Systems 2.5 units**

Automotive Heating and Air Conditioning including: Diagnosis, testing, adjustment, and repair of air conditioning, cooling and heating systems, heat and energy, air flow, refrigerant recycling, equipment and controls.

**Prerequisite:** ATEC 50 (May be taken concurrently)

**Strongly Recommended:** ATEC 63A

(PRE-REQUISITE DESCRIPTION CHANGED)

### **8 Automotive and Fuel Delivery Systems 4 units**

Automotive Air and Fuel Delivery including: Introduction to the principles of automotive fuel induction systems, including the inspection, diagnosis, and evaluation of fuel storage, fuel pumps, carburetion, intake and exhaust systems, engine operation principles, computerized engine controls, and fuel injection systems.

**Prerequisite:** ATEC 6A (completed with a grade of "C" or higher)

(PRE-REQUISITE DESCRIPTION CHANGED)

### **10 Automotive Advanced Engine Performance 3 units**

Automotive Engine Management Systems including: Ignition systems, combustion process, emission control devices, diagnostic practices for drivability, emissions, on board diagnostic systems, vehicle systems integration, and new engine technology.

**Prerequisite:** ATEC 8 (completed with a grade of "C" or higher)

(PRE-REQUISITE DESCRIPTION CHANGED)

### **90 Hybrid Vehicle Operation and Servicing 2 units**

Study of hybrid vehicle architecture, operation, and servicing.

**Strongly Recommended:** ATEC 6A and, ATEC 8 and, ATEC 2 and, ATEC 5 and ATEC 10 or equivalent

**Prerequisite:** ATEC 50 (completed with a grade of "C" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### **91 Hybrid Diagnosis and Alternate Fuels Technology 2 units**

Hybrid vehicle diagnosis and repair processes, and alternate fuels application and operation.

**Prerequisite:** AUTO 9901 (completed with a grade of "C" or higher), ATEC 90 (completed with a grade of "C" or higher)

## BIOLOGY (BIOL)

(REVISED DEGREE-UPDATED COURSES)

### BIOLOGY ASSOCIATE IN ARTS

Biologists study the origin, development, anatomy, physiology, ecology and other basic principles of living organisms. Various areas of specialization are available to biologists in research, manufacturing, teaching, natural resource management, consulting and administration. Biologists are usually classified according to specialty, i.e., microbiologists, ecologists, physiologists, zoologists, botanists. Preparation for some entry level jobs in these and other areas generally requires a bachelor's degree. Students interested in a career in biology should plan to obtain a master's or doctorate degree.

Year One		Units
BIOL 6	Principles of Plant Biology and Ecology	4
CHEM 1A	General College Chemistry I	5
CHEM 1B	General College Chemistry II	5
BIOL 4	Principles of Animal Biology and Evolution	4

Year Two		Units
BIOL 2	Principles of Cell/Molecular Biology and Genetics	5
PHYS 3A	College Physics A	4
PHYS 3B	College Physics B	4

#### General Education courses

For specific A.A. General Education courses refer to the catalog section on A.A. Graduation Requirements.

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**Total Units** **31**

(REVISED DEGREE)  
(EFFECTIVE SPRING 2018-PENDING STATE APPROVAL)

### BIOLOGY (EMPHASIS IN ALLIED HEALTH)

#### ASSOCIATE IN ARTS

The Associate of Arts in Biology with an emphasis in Allied Health will provide students with the foundation needed to apply for career programs in nursing, dental hygiene, physician assistant, medical technology/technicians, occupational therapy, and recreational therapy. Students will learn the basics of biology and chemistry as a foundation for studying the structure and function of the body in health and disease, for understanding how the body responds to infections, and for realizing what makes a healthy society.

#### Year One Units

BIOL 31	Introduction to College Biology	4
CHEM 30A	Introductory and Applied Chemistry I	4
ANAT 1	General Human Anatomy	5

#### Year Two Units

MICR 1	Microbiology	5
PHSI 1	Human Physiology	5

#### List A (choose one of the following):

	Units	
CHEM 30B	Introductory and Applied Chemistry II	4
	or	
SOCI 1	Principles of Sociology	3
	or	
PSY 1	General Psychology	3
	or	
NUTR 1	The Science of Nutrition	3
	or	
HLTH 1	Introduction to Health	3
	or	
BIOL 80	Introduction to Public Health	3

#### General Education Courses

For specific A.A. General Education courses refer to catalog section on A. A. Graduation Requirements.

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**Total Units** **26 - 27**

(NEW COURSE - EFFECTIVE SPRING 2018)

#### **80 Introduction to Public Health** **3 units**

This course provides an introduction to the discipline of Public Health. Students will gain an understanding of the basic concepts and terminologies of public health, will learn the history and accomplishments of public health officials and agencies, and will do in-depth examination of core public health disciplines. Topics include the epidemiology of infectious and chronic disease; prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management.

**Requisites: none**

# BMW

(REPRINT - EXCLUDED FROM 2016-2018 CATALOG)

## BMW MANUFACTURE TRAINING CERTIFICATE OF ACHIEVEMENT

This program prepares students for employment as entry-level automotive technicians. Students may also earn BMW of North America training credits in several different areas. Successful completion of the Certificate of Achievement can enhance the placement level at BMW dealerships across the nation. Potential career opportunities include: Apprentice or technician in automotive service industry.

### Career Opportunities in Automotive Technology

Automotive technician in BMW dealership, independently owned repair facilities, retail automotive service facilities.

ATEC 50	Introduction to Automotive Technology	3
ATEC 1	Automotive Engines	4
ATEC 4	Automotive Suspension and Steering	3
ATEC 5	Automotive Braking Systems	3
ATEC 6A	Automotive Electrical and Electronic Fundamentals	4
ATEC 7	Automotive Heating and Air Conditioning Systems	2.5
ATEC 8	Automotive Air and Fuel Delivery Systems	4
ATEC 90	Hybrid Vehicle Operation and Servicing	2
ATEC 91	Hybrid Diagnosis and Alternate Fuels Technology	2
BMW 10	BMW Technical Systems	5
BMW 20	BMW Body Electronics	5
BMW 30	BMW Chassis Dynamics	5
BMW 40	BMW Engine Electronics and Engine Technology	5
<b>Total Units</b>		<b>47.5</b>

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

### 10 BMW Technical Systems 5 units

Introduces and develops the use of BMW's technology including BMW's proprietary internet resource information systems and BMW's workshop equipment for diagnosis, coding, and programming. Additional content includes service, maintenance, and warranty programs.

**Prerequisite:** ATEC 50 (may be taken concurrently) or equivalent

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### 20 BMW Body Electronics 3 units

Covers basic electricity, DVOMs, breakout boxes and connectors, understanding diagnostics, BMW's drive away protection systems (EWS), electronic signals, batteries, starting and charging systems, bus communication systems, power modules, car access systems (CAS) and voltage supply systems.

**Prerequisite:** BMW 10 (completed with a grade of "C" or higher)

**Strongly Recommended:** ATEC 6A

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### 30 BMW Chassis Dynamics 5 units

Covers suspension geometry, BMW suspension systems, wheel alignment procedures, road force balancing, chassis dynamics, active steering systems, DSC dynamic drive systems, active all wheel drive systems, active roll stabilization, level control systems, electronic damper control, electronic parking brakes, and tire pressure monitoring systems.

**Prerequisite:** BMW 10 (completed with a grade of "C" or higher) and, BMW 20 (completed with a grade of "C" or higher)

**Strongly Recommended:** ATEC 5 and, ATEC 4

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### 40 BMW Engine Electronics and Engine Technology 5 units

Breaks down the current BMW engine management systems into power supply, fuel management, air management, ignition, emissions, and performance controls. Engine diagnosis and repair in VANOS, Valvetronic, differential intake air systems (DISA), engine and vehicle managements are reinforced.

**Prerequisite:** BMW 10 (completed with a grade of "C" or higher) and, BMW 20 (completed with a grade of "C" or higher)

**Strongly Recommended:** ATEC 8 and, ATEC 1

# BUSINESS (BUS)

(REVISED CERTIFICATE)  
**ACCOUNTING TECHNICIAN**  
CERTIFICATE OF ACHIEVEMENT

The Accounting Technician certificate targets individuals that want to find entry-level accounting positions within accounts receivable and accounts payable departments, payroll units, income tax firms, or financial services organizations. Students learn the theory and practice of the Generally Accepted Accounting Principles (GAAP), preparation of payroll documents, individual and business tax forms, basics of written and oral business communication, and accounting and payroll software. With the certificate in Accounting Technician, jobs are available in just about every corporate business and non-profit organization. This certificate is aligned with the AS degree in Accounting and should be the 1st step in a student's pathway towards obtaining the AS in Accounting.

### Career Opportunities in Business

The Accounting Technician certificate targets individuals that want to find entry-level accounting positions within accounts receivable and accounts payable departments, payroll units, income tax firms, or financial services organizations. With the certificate in Accounting Technician, jobs are available in just about every corporate business and non-profit organization.

### Core Courses

	Units
BUS 1A* Financial Accounting	4
BUS 8 Payroll Accounting	3
BUS 14 Business Communications	3
BUS 1B Managerial Accounting	4
CAS 58 Microsoft Access	3
BUS 3 Taxation of Individuals	3
BUS 92 Excel Spreadsheets for Accounting	2
BUS 93 QuickBooks	2

*The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.*

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**Total Units** **24**

\*Business 7 (Accounting for Small Business) is strongly recommended before taking Business 1A.

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

### **2 Intermediate Accounting** **4 units**

Fundamental accounting standards and concepts (including both the U.S. Generally Accepted Accounting Principles (GAAP) and the International Financial Reporting Standards (IFRS), environment, framework, procedure and reporting for current and noncurrent assets, current and long-term liabilities, expenditures, and net income. Topics include time value of money, income statement, statement of cash flows, balance sheet, analysis of cash, receivables, inventory, plant assets, intangible assets, current liabilities, long-term liabilities, and the related revenues and expenses.

**Prerequisite:** BUS 1A (completed with a grade of "C" or higher)

(REPRINT - CORRECTED FROM 2016-2018 CATALOG)

### **12 Introduction to Business** **3 units**

Survey of the private enterprise system and basic business concepts, business economics, types of business ownership, ethics, globalization, and organizational functions (management, marketing, accounting, human resources, and finance). Provides a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to influence an organization's policies and practices within the U.S. and a global environments.

**Requisites:** none

(UPDATED PRE-REQUISITES - EFFECTIVE SPRING 2018)

### **13 Advanced Topics in Accounting** **4 units**

Subject matter includes stockholders' equity, investments, pension and post-retirement benefits, leases, revenue recognition, cash flow statements, and full disclosure in financial reporting.

**Prerequisite:** BUS 1A (completed with a grade of "C" or higher)

(DELETED COURSE)

### **17 Business Ethics and Society**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

### **25 Taxation of Business Entities** **3 units**

A study of current Federal income tax law as it relates to sole proprietorships, corporations (C corps, S corps), and partnerships (General and Limited Partnerships, Limited Liability Companies, and Limited Liability Partnerships. California tax law differences will be highlighted.

**Prerequisite:** BUS 7 (completed with a grade of "C" or higher) or, BUS 1A (completed with a grade of "C" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

### **36 Introduction to Marketing** **3 units**

Survey of marketing, including consumer behavior, company and environmental analysis, market segmentation, product development, pricing, promotion, and distribution.

**Requisites:** none

(DELETED COURSES)

### **87 Project Management Certification Exam Preparation**

### **88 Introduction to Project Management**

### **89 Project Planning, Scheduling and Control**

(UPDATED PRE-REQUISITES - EFFECTIVE SPRING 2018)

### **92 Excel Spreadsheets for Accounting** **2 units**

Fundamentals of using electronic spreadsheets (Microsoft Excel) for accounting principles. Focus on solving accounting problems and completing accounting projects with Microsoft Excel.

**Prerequisite:** BUS 1A or equivalent or BUS 7 or equivalent

**Strongly Recommended:** CAS 54

(DELETED COURSE)

### **94 MS Project Fundamentals**



## CHEMISTRY (CHEM)

(UPDATED PREREQUISITES)

### **30A Introductory and Applied Chemistry I** 4 units

Chemistry of inorganic compounds, atomic theory, bonding, equations, gas laws, solutions, acid-base theory and oxidation-reduction. Designed to meet the requirements of certain programs in allied health and technological fields and for general education.

**Prerequisite:** MTH 65, MTH 65B or, MTH 65L or, MTH 53 or, MTH 53B (completed with a grade of "C" or higher)

## COMMUNICATION STUDIES (COMM)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGES)

### **48 Activities in Forensics** 1-4 units

May be repeated 3 times

Intercollegiate competition in the areas of public address, evidence-based and limited preparation debate, and oral interpretation of literature. Preparation of events includes research, writing, practice, and performance. Other activities may include performance in workshops, festivals, concert reading and the community.

**Requisites:** none

## COMPUTER APPLICATION SYSTEMS (CAS)

(DELETED CERTIFICATE)

### **OFFICE TECHNOLOGY** CERTIFICATE OF ACHIEVEMENT

(DELETED CERTIFICATE)

### **OFFICE TECHNOLOGY** CERTIFICATE OF PROFICIENCY

(DELETED CERTIFICATE)

### **BUSINESS GRAPHICS** CERTIFICATE OF PROFICIENCY

(DEACTIVATED COURSES - EFFECTIVE SPRING 2018)

**80 Basic Comp Program in Basic**

**82 Designing Web Pages**

**84 Designing Business Graphics**

**500 CAS Supplemental Instr Lab**

## COMPUTER NETWORK TECHNOLOGY (CNT)

(DELETED CERTIFICATE)

### **ICT CLOUD INFRASTRUCTURE** CERTIFICATE OF PROFICIENCY

(DELETED CERTIFICATE)

### **ICT CLOUD SERVICES** CERTIFICATE OF PROFICIENCY

(DELETED CERTIFICATE)

### **INFORMATION AND COMMUNICATION TECHNOLOGY SUPPORT** CERTIFICATE OF PROFICIENCY

## DANCE (DANC)

(NEW COURSE)

### **HAT3 Advanced Haitian Dance** .5-2 units

Designed to further the skills and knowledge base of the intermediate Haitian dancer. Students will learn advanced Haitian dance choreography.

**Prerequisite:** DANC HAT2 (completed with a grade of "C" or higher)

(NEW COURSE)

### **HAT4 Haitian Dance Performance** .5-2 units

Designed to develop the advanced Haitian dancer into a performing artist. Group choreography and event performance are highly emphasized in this course.

**Prerequisite:** DANC HAT3 (completed with a grade of "C" or higher)

# DENTAL HYGIENE (DHYG)

(REVISED DEGREE)  
**DENTAL HYGIENE**  
**ASSOCIATE IN ARTS**

Degree: AA- Dental Hygiene “Dental hygienists are preventive oral health professionals who have graduated from an accredited dental hygiene program in an institution of higher education, licensed in dental hygiene to provide educational, clinical, research, administrative and therapeutic services supporting total health through the promotion of optimum oral health.” (ADEA, 2012) The Dental Hygiene Program is accredited by the Commission on Dental Accreditation (CODA) which is nationally recognized by the United States Department of Education for programs at the post-secondary level. “CODA’s mission is to serve the oral health care needs of the public through the development and administration of standards that foster continuous quality improvement of dental and dental related educational programs.” The Dental Hygiene Program admits 20 students per year. Students interested in dental hygiene need a background in the basic sciences, English, Psychology, and Speech. This is a special admission program. Successful completion of the two year program qualifies the student to take the National Board Dental Hygiene Exam and the regional board exams for licensure as a Registered Dental Hygienist. The program includes courses such as Clinical Dental Hygiene, Dental Radiology, General and Oral Pathology, Expanded Functions for the Dental Hygienist, Educational Theories in Dental Hygiene, and Community Dental Health.

**SPECIAL APPLICATION REQUIRED**

Go to [www.chabotcollege.edu/dhyg](http://www.chabotcollege.edu/dhyg) for details

**Career Opportunities in Dental Hygiene**

Dental hygienists rank #2 in “Best Health Care Support Jobs” according to the US News Best Jobs Rankings. The Chabot College Dental Hygiene Program offers students a wonderful opportunity to receive a high quality education. Graduates are workforce ready and employable after passing the National Board Dental Hygiene Exam, Regional Board Exam and the Law and Ethics Exam for California.

Year One		Units
DHYG 50A	Dental Hygiene Orientation I	0.5
DHYG 60	Dental Anatomy and Morphology	1.5
DHYG 60S	Dental Anatomy and Morphology Independent Study	0.5
DHYG 61	Head and Neck Anatomy	2
DHYG 61S	Head and Neck Anatomy Independent Study	0.5
DHYG 69A	Oral Health Care Education	2
DHYG 71A	Pre-Clinical Dental Hygiene	4
DHYG 71S	Pre-clinical Dental Hygiene Independent Study	1
DHYG 74A	Dental Radiography I	3
HLTH 60*	Responding to Emergencies	1
HLTH 70B**	Healthcare Provider CPR	0.2
DHYG 51	General and Oral Pathology	4
DHYG 55A	Dental Materials	1.5
DHYG 69B	Treatment and Evaluation in Dental Hygiene	1
DHYG 71B	Clinical Dental Hygiene	4
DHYG 73	Educational Theories in Dental Hygiene Care	1.5
DHYG 74B	Dental Radiography II	1.5
DHYG 75	Medical Emergencies	1
NUTR 1***	The Science of Nutrition	3

Year Two		Units
DHYG 50B	Dental Hygiene Orientation II	0.5
DHYG 52A	Periodontics	2
DHYG 54	Pharmacology	2
DHYG 56A	Community Dental Health I	1
DHYG 57	Expanded Functions for the Dental Hygienist	2
DHYG 80A	Patient Management	1
DHYG 81A	Clinical Practice I	5
DHYG 82A	Clinical Experience Seminar I	1
DHYG 50C	Dental Hygiene Orientation III	0.5
DHYG 52B	Advanced Periodontics	1
DHYG 56B	Community Dental Health II	1
DHYG 58	Dental Office Practice	1
DHYG 80B	Advanced Clinical Topics	1
DHYG 81B	Clinical Practice II	5
DHYG 82B	Clinical Experience Seminar II	2
DHYG 83	Patients with Special Needs	1

**General Education Courses**

For specific General Education courses refer to catalog section on A.A. Graduation Requirements. The Dental Hygiene Program units combined with the Associate in Arts Degree (G.E.) requirements will be in excess of the minimum 60 units.

**Note:** To progress in the Dental Hygiene Program and to graduate from the program, students must earn a minimum grade of “C” in each course.

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**Total Units** **60.7**

- \* A student who presents a current Responding to Emergencies Card may request a waiver of Health 60
- \*\* A student who presents a current Professional Rescuer Cardiopulmonary Resuscitation Card may request a waiver of Health 70B
- \*\*\* Completion of Nutrition 1 is strongly recommended prior to entrance into the Dental Hygiene Program.

(UPDATED PREREQUISITES)

**50B Dental Hygiene Orientation II** **.5 units**  
 Orientation for second year dental hygiene students focusing on patient management and scheduling as well as policies and procedures for treating periodontally involved patients.  
**Prerequisite:** DHYG 71B (completed with a grade of “C” or higher)

(RENAMED/RENUMBERED AND UNIT CHANGES)

**55A Dental Materials** **1.5 units**  
 General and specialty practice materials and techniques.  
**Prerequisite:** DHYG 69A (completed with a grade of “C” or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**56B Community Dental Health II** **1 unit**  
 Continuation of Dental Hygiene 56A. Individual and community oral health problems, with emphasis on the dental hygienist as a resource person.  
**Prerequisite:** DHYG 56A (completed with a grade of “C” or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**58 Dental Office Practice 1 unit**

Dental office practices based on sound dental economics, legal and ethical framework of the State Dental Practice Act, and patient needs and services.

**Corequisite:** DHYG 81B

(RENAMED/RENUMBERED AND UNIT CHANGES)

**61S Head and Neck Anatomy .5 units**

Supplemental instruction on the embryology of the head, neck and oral cavity, structure and function of the oral cavity and adjacent structures. Emphasis on the recognition of normal structures, the anatomical relationships between structures and regional osteology.

**Corequisite:** DHYG 61

(UPDATED PREREQUISITES)

**74B Dental Radiography II 1.5 units**

Continuation of clinical experience in exposing films, group and individualized criticism of mounted films; principles of Panographic and Digital radiology; special patient needs; occlusal and pedodontic surveys; emphasis on radiographic interpretative skills.

**Prerequisite:** DHYG 74A (completed with a grade of "C" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**81A Clinical Practice I 5 units**

Continuation of clinical experience in performing dental hygiene therapy with emphasis on the young child and periodontal patient; patient education in prevention and control of dental disease and emergency procedures.

**Prerequisite:** DHYG 69B (completed with a grade of "C" or higher) and, DHYG 71B (completed with a grade of "C" or higher)

**Corequisite:** DHYG 56A and, DHYG 57 and, DHYG 80A and, DHYG 83

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**81B Clinical Practice I 5 units**

Continuation of clinical experience with a variety of clinical cases of adults and children to include a broad spectrum of clinical applications.

**Prerequisite:** DHYG 81A (completed with a grade of "C" or higher)

**Corequisite:** DHYG 58 and, DHYG 80B and, DHYG 82B and, DHYG 83

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**82A Clinical Experience Seminar I 1 unit**

Discussion and analysis of case-based clinical situations. Case studies addressing client care, protocol and advanced clinical techniques. Exploration of and education in cultural and linguistic competence.

**Corequisite:** DHYG 80A

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**82B Clinical Experience Seminar II 2 units**

Discussion and analysis of complex case-based clinical situations. Ethical, legal decision making, occupational standards and incident reporting in the clinical setting. Review of materials pertaining to the National Dental Hygiene Board and the Clinical State Licensing exams.

**Corequisite:** DHYG 58 and, DHYG 80B

## EARLY CHILDHOOD DEVELOPMENT (ECD)

(NEW COURSE - EFFECTIVE SPRING 2018)

**30 CA Preschool Learning Foundations: English Language Development 1 unit**

Introduction to the English language learners domain of the California Preschool Learning Foundations and Frameworks including strands of listening, speaking, reading and writing. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites:** none

(NEW COURSE - EFFECTIVE SPRING 2018)

**31 Performing Arts Preschool Foundations 1 unit**

Introduction to the performing arts domain of the California Preschool Learning Foundations and Frameworks including strands of music, drama, and dance. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites:** none

(NEW COURSE - EFFECTIVE SPRING 2018)

**32 Math: Preschool Foundations 1 unit**

Introduction to the mathematics domain of the California Preschool Learning Foundations and Frameworks including the strands of number sense, algebra and functions, measurement, geometry, and mathematical reasoning. Provides strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites:** none

(NEW COURSE - EFFECTIVE SPRING 2018)

**33 Science: Preschool Foundations 1 unit**

Introduces the science domain of the California Preschool Learning Foundations and Frameworks including the strands of scientific inquiry, physical, life, and earth sciences and provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites:** none

(NEW COURSE - EFFECTIVE SPRING 2018)

**34 Literacy: Preschool Foundations 1 unit**

Introduction to the language and literacy development domain in the California Preschool Learning Foundations and Frameworks including the strands of listening and speaking, reading, and writing. Provides practical considerations for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites:** none

(NEW COURSE - EFFECTIVE SPRING 2018)

**35 Social and Emotional Preschool Foundations 1 unit**

Introduction to the social and emotional development domain of the California Preschool Learning Foundations and Frameworks including the strands of self, social interaction, and relationships. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites: none**

(NEW COURSE - EFFECTIVE SPRING 2018)

**36 Visual Arts: Preschool Foundations 1 unit**

Introduction to the visual arts domain of the California Preschool Learning Foundations and Frameworks including artistic expression and response, and skills using various art mediums. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites: none**

(NEW COURSE - EFFECTIVE SPRING 2018)

**37 Health: Preschool Foundations 1 unit**

Introduction to the health domain of the California Preschool Learning Foundations and Frameworks including strands of health habits, safety, and nutrition. Provides practical strategies for implementing the curriculum frameworks. Applicable to required or professional development units for Child Development Permit holders, as well as pre-school, transitional kindergarten, and early-primary teachers.

**Requisites: none**

(NEW COURSE - EFFECTIVE SPRING 2018)

**38 History-Social Science: Preschool Foundations 1 unit**

Introduction to the history and social science domain of the California Preschool Learning Foundations and Frameworks including strands of self and society, civics, history, geography, ecology, and economics. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites: none**

(NEW COURSE - EFFECTIVE SPRING 2018)

**39 Physical Development: Preschool Foundations 1 unit**

Introduction to the physical development domain of the California Preschool Learning Foundations and Frameworks including strands of fundamental movement skills, perceptual-motor skills and movement concepts, and active physical play. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers.

**Requisites: none**

(NEW COURSE)

**41 Strategies for Working with Challenging Behaviors 3 units**

Appropriate for classroom teachers in various settings including Transitional Kindergarten, students will identify developmentally appropriate behaviors, challenging behaviors and the various influences that affect children's behavior. Students will analyze children's behaviors and select strategies to make positive changes. Emphasizes the connection between children's social and emotional development and their success in the classroom, and how the teachers' perceptions, experiences, and behavior influence child behaviors.

**Requisites: none**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**54 Child Health, Safety and Nutrition 3 units**

Aspects of nutrition, health and safety that promote and maintain the health and well-being of all children and adults who work with young children. Topics include health and nutritional guidelines, maintaining safe and healthy learning environments, state regulations, policies and procedures, common childhood illnesses, infectious diseases, school-family collaboration and emergency preparedness, first aid and injury prevention.

**Requisites: none**

(DELETED COURSES)

**61 Literature for the Young Child**

**64 Play: Materials and Environments**

**85 Mentor Seminar Fall**

**86 Mentor Seminar Spring**

**88 Early Childhood Environments (Effective Spring 2018)**

**89 Issues in Early Childhood Education**

## ECONOMICS (ECN)

(UPDATED PREREQUISITES)

### 1 Principles of Microeconomics 3 units

Economic analysis of market systems, price theory, including supply and demand analysis, marginal utility, elasticity, cost and revenue concepts, perfect and imperfect competition, international trade theory, pricing of the factors of production, poverty and income inequalities.

**Strongly Recommended:** Eligibility for ENGL 1A

**Prerequisite:** MTH 53, MTH 53A (completed with a grade of “C” or higher), MTH 65 (completed with a grade of “C” or higher), MTH 65B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the mathematics assessment process.

(UPDATED PREREQUISITES)

### 2 Principles of Macroeconomics 3 units

Economic analysis of the theory of income determination, including national income analysis, business cycles, the consumption function, the multiplier, fiscal policy, monetary policy, money and banking, the public debt, economic growth and development, comparative economic systems and international trade.

**Strongly Recommended:** ENGL 1A

**Prerequisite:** MTH 53 or, MTH 53A or, MTH 65 or, MTH 65B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics assessment process.

## ELECTRONIC SYSTEMS TECHNOLOGY (ESYS)

(REVISED DEGREE)

### ELECTRONIC SYSTEMS TECHNOLOGY ASSOCIATE IN SCIENCE

Chabot offers three programs in Electronic Systems Technology: A.S. degree in Electronic Systems Technology and Certificates of Achievement in Consumer Technology and Industrial Technology. The A.S. degree prepares you for entry-level positions in a wide range of industries that use electronics technician skills, including biotechnology, manufacturing, entertainment, automotive and consumer products. Electronic Systems Technology is a key enabler of all of these contemporary industries. With multiple courses offered in eight-week accelerated sessions, the Electronics Systems Technology program offers the option of choosing your own pace as you progress through the program. A typical full-time student will take four courses per semester, two in the first eight-week session, and two in the second. You may take more or fewer courses to match your personal schedule and learning style.

Year One		Units
ESYS 50	Introduction to Electronic Systems Technology	2
ESYS 51	Fabrication Techniques for Electronic Systems Technology	2
ESYS 63A	IT Essentials: PC Hardware and Software I	2
ESYS 63B	IT Essentials: PC Hardware and Software II	2
ESYS 52	Electronic Systems Measurement and Troubleshooting	2
ESYS 54	Analog Circuits and Semiconductor Devices	2
ESYS 55A	Microcontroller Systems	2
ESYS 55B	Digital Logic Systems	2
Year Two		Units
ESYS 56A	Electronic Power Systems I	2
ESYS 56B	Electronic Power Systems II	2
ESYS 57A	Process Control Systems	2
ESYS 57B	PLC and Robotic System Components	2
ESYS 58	Wireless Communication Systems	2
ESYS 60	Electronic Systems Analysis	2
ESYS 61	Electronic Systems Project Management	2
ESYS 62	Internet of Things: Home Technology Systems	2

#### General Education Units for A.S. Degree

For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.

<b>Required for the Major Specific G.E. Requirement</b>		<b>Units</b>
<b>Complete a minimum of 3 units from:</b>		
BUS 14	Business Communications	3
ENGL 70	Report Writing	3
INDT 74	Measurements and Calculations	3
MTH 36	Trigonometry	3
MTH 37	Trigonometry with an Emphasis on its Geometric Foundations	5
PHYS 11	Descriptive Physics	4
CAS 92A	Introduction to Networks	3
CAS 74	Introduction to Linux/Unix	3

*The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.*

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**Total Units** **35 - 37**

(UPDATED PREREQUISITES)

**52 Electronic Systems Measurement and Troubleshooting** **2 units**

Measurement and characterization of electronic systems, data collection, and reporting results in industry-accepted formats. Comparing system and component performance to published specifications and developing troubleshooting techniques. Laboratory practice includes the proper use of standard test instruments.

**Strongly Recommended: ESYS 50**

(UPDATED PREREQUISITES)

**54 Analog circuits and Semiconductor Devices** **2 units**

Analog circuits, including amplifiers, oscillators, and filters, using single-chip analog devices, operational amplifiers, field-effect transistors, bipolar transistors.

**Strongly Recommended: ESYS 52**

(UPDATED PREREQUISITES)

**55A Microcontroller Systems** **2 units**

Architecture, programming, application and troubleshooting of single-chip microcontroller electronic systems. Digital building blocks, number systems, programming in high-level and assembly language. Interfacing the microcontroller for practical applications, measurement techniques and instrumentation, troubleshooting techniques.

**Strongly Recommended: ESYS 50**

(UPDATED PREREQUISITES)

**55B Digital Logic Systems** **2 units**

Architecture, programming, application and troubleshooting of complex programmable logic device (CPLD) electronic systems. Includes programming in VHDL. Digital building blocks, number systems, Boolean algebra, combinational and sequential logic, integrated logic families, digital circuit measurement techniques and instrumentation, troubleshooting techniques.

**Strongly Recommended: ESYS 55A**

(UPDATED PREREQUISITES)

**56A Electronic Power Systems I** **2 units**

Switching power supply systems. Alternative energy systems. Advanced power bus management and control systems.

**Strongly Recommended: ESYS 52**

(UPDATED PREREQUISITES)

**56B Electronic Power Systems I** **2 units**

Power supply transformer, rectifier and filtering circuits. Measurement of line and load regulation, ripple, and efficiency in linear and switching power supply systems. Linear regulation techniques and troubleshooting.

**Strongly Recommended: ESYS 56A**

(UPDATED PREREQUISITES)

**57A Process Control Systems** **2 units**

Programmable logic control systems; function, interrelationship, and troubleshooting of systems components. PLC input/output systems and requirements. Ladder logic programming using basic I/O instructions, logic instructions, timers, counters, and comparison functions.

**Strongly Recommended: ESYS 50**

(UPDATED PREREQUISITES)

**57B PLC and Robotic System Components** **2 units**

Integration of sensors, indicators, controllers and final control elements for Programmable Logic Control and robotic systems. Control loop theory, PID, loop tuning, and control loop troubleshooting. Process control system design and tuning.

**Strongly Recommended: ESYS 57A**

(NEW COURSE)

**57C Electrical Motors and Control Systems** **2 units**

Electrical motors and controls for commercial and industrial applications. DC, stepper, 1-phase and 3-phase AC motors, including variable-frequency drives. Includes motor theory and hands-on applications.

**Strongly Recommended: ESYS 57A and, ESYS 57B**

(NEW COURSE)

**57D Industrial Networks and Internet of Things** **2 units**

Networking and security standards for industrial systems. Includes Ethernet, TC/IP, and emerging standards for IoT (Internet of Things) networks. Wired and wireless network communication systems. IoT security frameworks, guidance, and policies.

**Strongly Recommended: ESYS 57A and, ESYS 57B**

(UPDATED PREREQUISITES)

**58 Wireless Communication Systems** **2 units**

Introduction to wireless communications concepts and data communications, including modulation techniques, antenna and wave propagation. Digital data communication fundamentals and digital modulation techniques. Fiber optic and laser technology.

**Strongly Recommended: ESYS 52**

(UPDATED PREREQUISITES)

**60 Electronic Systems Analysis** **2 units**

Analysis of electronic systems and circuits using modern software tools and mathematical formulae. Reactive circuits, active devices, amplifier, oscillator, and filter circuits. Includes many, but not all, of the objectives for the ETA and ISCET Certified Electronic Technician exam.

**Strongly Recommended: ESYS 54 and, MTH 55**

(UPDATED PREREQUISITES)

**61 Electronic Systems Project Management 2 units**

Planning, tracking, and completing electronics prototype projects; includes chassis, printed circuit board layout, connection and soldering techniques, use of hand tools, and machines in electronic fabrication. Use of computer software tools as applied to project management and electronic fabrication.

**Strongly Recommended:** ESYS 51 and, ESYS 54

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**63A IT Essentials: PC Hardware and Software I 2 units**

First of two courses of the Cisco Networking Academy IT Essentials program. Students will describe the internal components of a computer, assemble a computer system, install an operating system, and troubleshoot using system tools and diagnostic software. Students will also connect to the Internet and share resources in a network environment. Additional topics covered include laptops and portable devices, wireless connectivity and basic implementation skills, Voice over Internet Protocol (VoIP), security, safety and environmental issues, applied network configuration and troubleshooting skills, and communication skills. May not receive credit if Computer Application Systems 83 has been completed.

**Requisites:** none

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**63B IT Essentials: PC Hardware and Software II 2 units**

Second of two courses of the Cisco Networking Academy IT Essentials program. Students will describe the process for upgrading computer hardware, assemble a computer system, upgrade, configure, and optimize an operating system, and troubleshoot using system tools and diagnostic software. Students will also connect to the Internet and share resources in a network environment. Additional advanced topics covered include laptops and portable devices, wireless connectivity, Voice over Internet Protocol (VoIP), security, applied network configuration and troubleshooting skills. May not receive credit if Computer Application Systems 83 has been completed.

**Strongly Recommended:** ESYS 63A

(DELETED COURSES - EFFECTIVE SPRING 2018)

- 72A Networking for Home & Small Business**
- 72B Networking for Small to Medium Business or ISP**
- 72C Routing and Switching in the Enterprise**
- 72D Designing and Supporting Computer Networks**

## ENGINEERING (ENGR)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**25 Computational Methods for Engineers and Scientists 3 units**

(See also MTH 25 and PHYS 25)

Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB, SimuLink, MuPad, and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. May not receive credit if Mathematics 25 or Physics 25 has been completed.

**Prerequisite:** MTH 1 (completed with a grade of "C" or higher)

## ENGLISH AS A SECOND LANGUAGE (ESL)

(UPDATED PREREQUISITES)

**110B Intermediate Reading and Writing 6 units**

Logical paragraph development; reading both fiction and nonfiction; emphasis on the development of vocabulary and grammatical structures of written English.

**Prerequisite:** ESL 110A (completed with a grade of "P" or higher) or Eligibility for ESL 110B demonstrated through the ESL Placement Process

(UPDATED GRADING OPTION)

**120 Writing Workshop for Non-Native Speakers: .5 units  
Emphasis on Pre-writing & Paragraph  
Organization**

Individualized and group instruction in writing with emphasis on pre-writing and paragraph organization. Student develops and reinforces academic writing skills through conferencing with instructor, group workshops, completing online exercises, completing and revising writing assignments, and working with instructor and tutors on individual writing needs.

**Strongly Recommended:** Eligibility for ESL 110B

(UPDATED GRADING OPTION)

**121 Writing Workshop for Non-Native Speakers: .5 units  
Emphasis on Thesis Development and Essay  
Organization**

Individualized and group instruction in writing with emphasis on thesis development and essay organization. Student develops and reinforces academic writing skills through conferencing with instructor, group workshops, completing online exercises, completing and revising writing assignments, and working with instructor and tutors on individual writing needs.

**Strongly Recommended:** Eligibility for ESL 110B

(UPDATED GRADING OPTION)

**122 Writing Workshop for Non-Native Speakers: .5 units  
Emphasis on Editing and Writing Process**

This course is for non-native speakers of English who are taking English courses or other courses that require academic writing. It is also open to students enrolled in ESL courses. Editing and the writing process are emphasized, but all aspects of the writing process are addressed as needed on an individual basis.

**Requisites: none**

(DELETED COURSES - EFFECTIVE SPRING 2018)

**128 Faculty-Student Tutorial - ESL**

**149 Writing Workshop for Non-Native Speakers**

## ENTREPRENEURSHIP (ENTR)

(REPRINT - CORRECTED FROM 2016-2018 CATALOG)

### ADMINISTRATIVE ASSISTANT ENTREPRENEUR CERTIFICATE OF PROFICIENCY

The Administrative Assistant Entrepreneurship program prepares students to start a small home-based administrative support business. The focus is on building core administrative assisting capabilities supplemented with entrepreneurship and business planning courses. All courses in this certificate are offered online.

**Core Courses**

ENTR 1	Introduction to Entrepreneurship	3
CAS 50	Introduction to Computer Application Systems	3
	or	
CSCI 8	Computer Literacy	3
CAS 88A	Microsoft Word I	3
CAS 54A	Microsoft Excel I	3
CAS 58	Microsoft Access	3
CAS 72F	Introduction to Microsoft PowerPoint	1
BUS 50F	Developing a Business Plan	1

The above listing is a suggested sequence only. Some courses may have prerequisites. Students may take courses in any sequence except where a prerequisite applies.

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**Total Units** **17**

## ENVIRONMENTAL SCIENCE (ENSC)

(NEW DEGREE - PENDING STATE APPROVAL)

### ENVIRONMENTAL SCIENCE ASSOCIATE IN SCIENCE

The Associate in Science in Environmental Science degree provides students with a foundation in scientific principles and the diversity of life. Environmental Science students study life at various levels of organization ranging from the molecular level to the entire biosphere. Greatest emphasis is on population, community, ecosystem and biome levels. Students answer scientific questions by critically evaluating scientific information, developing and testing hypotheses using the tools and techniques of the ecological, biological and physical sciences, analyzing data, and interpreting results. The Associate in Science in Environmental Science degree prepares students for careers in research, environmental protection and health, environmental law and policy, conservation management, agriculture, food, natural resource management and forestry. Preparation for some entry level jobs in careers such as environmental protection and health technician may require an associate's degree while most careers require at least a bachelor's degree and scientists or specialists will need to obtain a master's or doctorate degree.

**Career Opportunities in Environmental Science**

The Associate in Science degree in Environmental Science provides students with a foundation in ecological principles and preparation for a wide variety of careers in research, teaching, natural resource management, consulting and administration. Environmental Science is a multidisciplinary field with many sub disciplines including population ecology, community ecology, conservation and ecosystem management. According to the Bureau of Labor Statistics, employment for environmental scientists is expected to grow faster than other occupations during the next decade, due to increases in careers in environmental science protection and health, conservation management, agriculture, food, natural resources and forestry.

<b>Year One</b>		<b>Units</b>
ENSC 11	Humans and the Environment with Laboratory	4
	or	
ENSC 15	Agroecology	3
	and	
ENSC 15L	Agroecology Laboratory	1
GEOS 1	Physical Geology with Laboratory	4
BIOL 6	Principles of Plant Biology and Ecology	4
MTH 15	Applied Calculus I	3
	or	
MTH 1	Calculus I	5
<b>Year Two</b>		<b>Units</b>
PHYS 3A	College Physics A	4
BIOL 4	Principles of Animal Biology and Evolution	4
BIOL 2	Principles of Cell/Molecular Biology and Genetics	5
CHEM 1A	General College Chemistry I	5



## General Education Courses for the Associate in Sciences Degree:

For specific A.S. General Education Courses refer to the catalog section on A.S. Graduation Requirements.

Required Major Specific G.E. Requirement	Units
CHEM 1B General College Chemistry II	5
or	
PHYS 3B College Physics B	4
<b>Total Units</b>	<b>37 - 40</b>

## ENVIRONMENTAL STUDIES (ENST)

(NEW COURSE)

### 1 Introduction to Environmental Studies 3 units

An interdisciplinary survey of contemporary environmental issues, including the natural and human-induced causes of environmental change and degradation. Major issues related to preservation and use of natural resources, conservation, energy, and climate change are investigated from multiple perspectives in the social sciences.

**Strongly Recommended: Eligibility for ENGL 1A**

## ETHNIC STUDIES (ES)

(NEW COURSE)

### 10 Introduction to Asian American Studies 3 units

(See also SOCI 10)

An examination of the experiences and perspectives of Asian Americans from mid-1800's to the present. Major topics will include immigration, law, citizenship, racialization, colonialism, imperialism, war, family, political involvement, social movements, education, and employment. Provides a comparative context for understanding the panethnic movement. May not receive credit if SOCI 10 has been completed.

**Requisites: none**

## GEOLOGICAL SCIENCES (GEOS)

(NEW COURSE)

### 1 Physical Geography with Laboratory 4 units

Introduction to the study of the scientific composition and dynamics of the Earth ranging from the atomic scale of minerals to the global scale of plate tectonics. Included is the formation of the Earth, geochemistry, geophysics, hydrology, geomorphology and the interactions between humans and the geologic environment. The course is a foundation course for both the non-science major and majors in the Earth sciences and environmental sciences.

**Requisites: none**

## GRAPHIC ARTS (GRPH)

(REVISED DEGREE)

(EFFECTIVE SPRING 2018 - PENDING STATE APPROVAL)

### GRAPHIC DESIGN ASSOCIATE IN ARTS

The Graphic Design two-year diploma program provides students who have demonstrated artistic ability with practical, theoretical, and computer training in layout and design, preparation of reproduction art, printing processes, computer graphics, typography, and illustration. In addition to course assignments, students are involved in projects typical of the graphic design field. Career Opportunities in Graphic Design Advertising agencies, web development businesses, product manufacturers, publishers, and retailers hire graphic designers, either as contract workers or employees. Most large organizations, no matter what industry they're in, have a graphic designer on staff.

Year One	Units
DIGM 41 Graphic Design Concepts	3
DIGM 31A Photoshop I	1.5
DIGM 32A Illustrator I	1.5
DIGM 33A InDesign I	1.5
DIGM 33B InDesign II	1.5
DIGM 56 Graphic Design as a Profession	3

### Year Two Units

**Select 9 Units From The Following Courses:**

ARCH 33 Digital Communication in Modeling	3
ARCH 68 Digital Tools for Design and Visual Communication	4
ART 2A Introduction to Drawing	3
ART 2B Drawing and Composition	3
ART 3A Figure and Composition I	3
ART 23 2-D Foundations	3
ART 24 3-D Foundations	3
ART 45 Artist Portfolio and Self-Promotion	2
ART 61 Illustration	3
ART 12A Beginning Oil Painting	3
ART 13A Acrylic Painting - Beginning I	3
ARTH 1 Introduction to Art	3
ARTH 51A Introduction to Museum Studies	4.5
ARTH 51B Museum Studies	4.5
DIGM 31B Photoshop II	1.5
DIGM 32B Illustrator II	1.5
DIGM 36A Video Editing I	1.5
DIGM 36B Video Editing II	1.5
DIGM 58 Problem Solving in Graphic Design	2
DIGM 59 Advanced Graphic Design	3
PHOT 50 Introduction to Photography	3
PHOT 66 Digital Imaging	3
ID 68 Digital Tools for Design and Visual Communication	4

### General Education Courses

For specific General Education courses refer to catalog section on A.A. Graduation Requirements.

<b>Total Units</b>	<b>21</b>
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## HEALTHY AGING OLDER ADULTS (HEAG)

(NEW COURSE - EFFECTIVE SPRING 2018)

### **FW50 Fitness Walks for the Mature Adult 0 units**

This course is designed to improve cardiovascular fitness and overall wellness in the mature adult. Students will actively walk and hike in the surrounding community to improve their overall health and well being.

**Requisites: none**

## INTERIOR DESIGN (ID)

(RENAMED/RENUMBERED AND UNIT CHANGES)

### **68 Digital Tools for Design and Visual Communication 4 units**

(See also ARCH 68)

Introduction to digital tools with computer-aided design drafting. Ability to effectively use basic design principles in two dimensions. Topics include command basics including drawing entity creation and modification, industry layering standards, text and dimensioning systems appropriate to architecture, creating symbol libraries, external reference techniques, model and paper space commands, and plotting techniques. May not receive credit if ARCH 68 has been completed.

**Requisites: none**

## INDUSTRIAL TECHNOLOGY (INDT)

(NEW DEGREE)  
(PENDING STATE APPROVAL)

### **ADVANCED MANUFACTURING TECHNOLOGY ASSOCIATE IN SCIENCE**

Advanced manufacturing uses information, automation, sensing, and networking, and/or cutting edge materials and emerging capabilities enabled by the physical and biological sciences, for example nanotechnology, chemistry, and biology. This involves both new ways to manufacture existing products, and especially the manufacture of new products emerging from new advanced technologies. Learn the foundations of advanced manufacturing processes and specific manufacturing skills for entry into this growing field. The twelve-unit specialization in Electronics System Technology prepares the graduate for careers supporting factory automation, robotics, and electronic maintenance. The twelve-unit specialization in Machine Tool Technology prepares the graduate for careers in industrial maintenance and machine tool maintenance.

#### **Career Opportunities in Industrial Technology**

Advanced Manufacturing technicians are in demand in automation/robotics, automated machining, welding, and emerging manufacturing technologies.

#### **Core block (21 units)**

INDT 62	Advanced Manufacturing Operations	3
INDT 63	Introduction to Micro, Nano, and Semiconductor Manufacturing	3
INDT 64	Digital 2D Manufacturing	2
INDT 65	Digital 3D Manufacturing	2
MTT 50	Blueprint Reading, Sketching, and CAD	3
ESYS 51	Fabrication Techniques for Electronic Systems Technology	2
ESYS 57A	Process Control Systems	2
ESYS 57B	PLC and Robotic System Components	2
ENGR 11	Engineering Design and Analysis	2
	or	
ESYS 61	Electronic Systems Project Management	2

#### **Select one option (12 units)**

ESYS 50	Introduction to Electronic Systems Technology and	2
ESYS 52	Electronic Systems Measurement and Troubleshooting and	2
ESYS 56A	Electronic Power Systems I and	2
ESYS 56B	Electronic Power Systems II and	2
ESYS 57C	Electrical Motors and Control Systems and	2
ESYS 57D	Industrial Networks and Internet of Things or	2
MTT 60A	Machine Tool Technology I and	4
MTT 71A	Numerical Control Program I and	4
MTT 71C	Numerical Ctrl Programming III	4

#### **Required Major Specific G.E. Requirement**

PHYS 11	Descriptive Physics	4
	or	
PHYS 3A	College Physics A	4

For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.

General Education Units For A.S. Degree:

For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.

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**Total Units 37**

(NEW CERTIFICATE - PENDING STATE APPROVAL)

## ADVANCED MANUFACTURING TECHNOLOGY CERTIFICATE OF ACHIEVEMENT

Advanced manufacturing uses information, automation, sensing, and networking, and/or cutting edge materials and emerging capabilities enabled by the physical and biological sciences, for example nanotechnology, chemistry, and biology. This program involves both new ways to manufacture existing products and the manufacturing of new products emerging from new advanced technologies. Learn the foundations of advanced manufacturing processes for entry into this growing field.

### Career Opportunities in Industrial Technology

Advanced Manufacturing technicians are in demand in automation/robotics, automated machining, welding, and emerging manufacturing technologies.

### Core block (19 units)

INDT 62	Advanced Manufacturing Operations	3
INDT 63	Introduction to Micro, Nano, and Semiconductor Manufacturing	3
INDT 64	Digital 2D Manufacturing	2
INDT 65	Digital 3D Manufacturing	2
MTT 50	Blueprint Reading, Sketching, and CAD	3
ESYS 51	Fabrication Techniques for Electronic Systems Technology	2
ESYS 57A	Process Control Systems	2
ESYS 57B	PLC and Robotic System Components	2

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**Total Units** **19**

(NEW COURSE)

### 62 Advanced Manufacturing Operations 3 units

Advanced manufacturing operational processes, including lean manufacturing, statistical process control (SPC or "six-sigma"), and quality management systems (e.g. ISO 9000). Examination of the impact of Big Data on manufacturing operations.

**Requisites: none**

(NEW COURSE)

### 63 Introduction to Micro, Nano and Semiconductor Manufacturing 3 units

Technologies and procedures used in the manufacturing of micro- and nano-scale devices and semiconductors. This course covers safety, clean room operations, high vacuum systems, lithography, oxidation, deposition, etch, and inspection.

**Strongly Recommended: INDT 74 or, MTH 55**

(NEW COURSE)

### 64 Digital 2D Manufacturing 2 units

Introduction to manufacturing with two-dimensional digital layout input. Raster and vector drawing formats, and their suitability and applications for manufacturing processes. Design and produce projects using laser cutting and engraving.

**Advisory: INDT 74 or, MTT 50**

(NEW COURSE)

### 65 Digital 3D Manufacturing 2 units

Introduction to manufacturing with three-dimensional digital layout input. Creating designs using standard 3D design software and 3D scanner. Optimization of project design for construction on 3D printer. Examination of materials available for 3D printing.

**Strongly Recommended: INDT 74 or, MTT 50**

(REMOVED REPEATABILITY)

### 74 Measurements and Calculations 3 units

Calculator techniques for whole number and decimal arithmetic problem solving, fraction-decimal conversion, percentages, ratio and proportion, algebra, geometry, areas and volumes. English metric conversion, and numerical trigonometry as applied in industry.

**Requisites: none**

## JAPANESE (JAPN)

(NEW COURSE)

### 2A Intermediate Japanese 4 units

Review of grammar; practice in conversation and composition; research on topics related to Japan. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course.

**Prerequisite: JAPN 1B (completed with a grade of "C" or higher)**

(NEW COURSE)

### 2B Advanced Japanese 4 units

Advanced review of grammar; practice in conversation and composition; research on topics related to Japan. Following an immersion instruction format, the class is entirely taught in the target world language of the selected course.

**Prerequisite: JAPN 2A (completed with a grade of "C" or higher)**

## LEARNING SKILLS (LNSK) (FORMERLY LISTED UNDER ENGLISH)

(RENAMED/RENUMBERED AND UNIT CHANGES)

### 116 Learning Skills-Diagnostic Clinic and Study Skills 1 unit

Determination of eligibility for learning disabilities services through diagnostic testing. Includes state-mandated tests. Focus on compensatory methods as derived from test results.

**Requisites: none**

(RENAMED/RENUMBERED AND UNIT CHANGES)

### 117 Learning Skills-Reading 4 units

Reading to develop decoding, vocabulary and comprehension skills. Use of specialized techniques developed especially for students with learning disabilities. Includes reading comprehension strategies and vocabulary development, and other compensatory strategies. Designed for students with learning disabilities.

**Prerequisite: LNSK 116 (completed with a grade of "P" or higher) or, LNSK 116 (completed with a grade of "P" or higher)**

(UPDATED PREREQUISITES)

**118A Learning Skills-Reading/Writing 3 units**

Strategies to develop college writing skills with an emphasis on developing reading comprehension strategies, summarizing and writing responses to the readings. Includes compensatory strategies. Designed for students with learning disabilities to improve reading and writing skills.

**Requisites: none**

(RENAMED/RENUMBERED AND UNIT CHANGES)

**118B Learning Skills-Writing/Reading 3 units**

Elements of the writing process including prewriting, organizing, writing and revising, and review of basic grammar. Includes reading comprehension strategies and review of compensatory strategies. Designed for students with learning disabilities to improve reading and writing skills.

**Requisites: none**

(RENAMED/RENUMBERED AND UNIT CHANGES)

**119 Learning Skills-Mathematics 3 units**

Preparation for problem solving success in college for those with learning disabilities. Emphasis on quantitative reasoning abilities needed to process and integrate word problems and related problem solving tasks. Designed for students with identified learning disabilities.

**Prerequisite: LNSK 116 (completed with a grade of "P" or higher) or, LNSK 116 (completed with a grade of "P" or higher)**

(RENAMED/RENUMBERED, UNIT CHANGES AND UPDATED PREREQUISITES)

**120 Learning Skills-Study Strategies 2 units**

Guided practice in specific compensatory and study strategies for those with learning disabilities. Designed for Learning Skills students actively enrolled in an academic course. Focus on utilizing skills and strategies in conjunction with academic course materials. Designed for students with identified learning disabilities.

**Requisites: none**

(RENAMED/RENUMBERED, UNIT CHANGES AND UPDATED PREREQUISITES)

**121 Learning Skills-Quantitative Strategies 2 units through Language Skills**

Guided practice in specific compensatory and study strategies for students with learning disabilities in language based quantitative reasoning skills (dyscalculia). Focus on utilizing skills and strategies in conjunction with academic course materials. Development of math and language skills. Designed for Learning Skills students enrolled in math.

**Requisites: none**



## KINESIOLOGY (KINE)

(REPRINT- OMITTED FROM 2016-2018 CATALOG)

### FITNESS INSTRUCTOR CERTIFICATE OF ACHIEVEMENT

#### Required Courses

KINE 1	Introduction to Kinesiology & Physical Education	3
KINE 8	Introduction to Sport in Contemporary Society	3
	or	
KINE 6	Performance Enhancement thru Mental Training	3
	or	
KINE 15	Introduction to Personal Fitness Training	3
HLTH 1	Introduction to Health	3
	or	
KINE 14	Introduction to Health and Fitness For Your Disability	3
KINE 5	Introduction to the Components of Physical Fitness - the Human Body	3
PEAC HER1	Basic Heart Rate Training: Fitness Training Utilizing a Heart Rate Monitor	0.5 - 2
	or	
KINE ASSE	Physical Fitness Assessments	1
HLTH 60	Responding to Emergencies	1
	or	
HLTH 70B	Healthcare Provider CPR	0.2
NUTR 1	The Science of Nutrition	3
BIOL 50	Anatomy and Physiology	4
KINE 2	Introduction to Athletic Training	4

A total of 2 units of any ATHL, PEAC or ADPE class(es)  
(Physical Education activity) 2

**Total Units** **25.7 - 28**

(REPRINT- OMITTED FROM 2016-2018 CATALOG)

### FITNESS INSTRUCTOR CERTIFICATE OF PROFICIENCY

#### Required Courses

KINE 1	Introduction to Kinesiology & Physical Education	3
	or	
KINE 8	Introduction to Sport in Contemporary Society	3
	or	
KINE 6	Performance Enhancement thru Mental Training	3
	or	
KINE 15	Introduction to Personal Fitness Training	3
HLTH 1	Introduction to Health	3
	or	
KINE 14	Introduction to Health and Fitness For Your Disability	3
KINE 5	Introduction to the Components of Physical Fitness - the Human Body	3
HLTH 60	Responding to Emergencies	1
	or	
HLTH 70B	Healthcare Provider CPR	0.2
	A total of 2 units of any ATHL, PEAC or ADPE class(es) (Physical Education activity)	2
	NUTR 1 The Science of Nutrition	3

**Total Units** **14.2 - 15**

(NEW COURSE - EFFECTIVE SPRING 2018)

**OPE Orientation to Physical Education Activity Classes** **.5 units**

Designed to cover the basic concepts in training, safety and the rules for using the Chabot Fitness Center facility. Nutrition and training concepts to aid in the prevention of adult type II diabetes will be presented.

**Requisites: none**



## MASS COMMUNICATIONS (MCOM)

(DELETED COURSES - EFFECTIVE SPRING 2018)

- 14 Writing and Photography for a Weekly Publication**  
**15 Publications - Editorial Leadership and Production**

(NEW COURSE)

**57 KCRH Radio Leadership Experience 3 units**

Leadership experience in KCRH radio station operations including programming, music, audio production techniques, promotions, news, live sports, and underwriting sales. Experience in broadcast operation of KCRH-FM.

**Prerequisite: MCOM 56 (completed with a grade of "C" or higher)**

(DELETED COURSE - EFFECTIVE SPRING 2018)

**63 Cable TV Station Operation**

## MATHEMATICS (MTH)

(REVISED DEGREE)

### MATHEMATICS ASSOCIATE IN SCIENCE

Mathematics and related subjects play important dual roles in our culture. On the one hand, mathematics is a study in its own right; on the other hand it is an indispensable tool for expressing and understanding ideas in the sciences, engineering, and an increasing number of other fields.

Year One		Units
MTH 1	Calculus I	5
MTH 2	Calculus II	5

**Choose at least one other course from the following:**

CSCI 14	Introduction to Structured Programming In C++	4
CSCI 15	Object-Oriented Programming Methods	4
CSCI 20	Introduction to Data Structures	4
CSCI 21	Computer Organization and Assembly Language Programming	4
ENGR 25	Computational Methods for Engineers and Scientists	3
ENGR 36	Engineering Mechanics -Statics	3
ENGR 43	Electrical Circuits and Devices	4
ENGR 45	Materials of Engineering	3
MTH 25	Computational Methods for Engineers and Scientists	3
PHYS 4A	General Physics I	5
PHYS 25	Computational Methods for Engineers and Scientists	3

Year Two		Units
MTH 3	Multivariable Calculus	5

**Choose two Mathematics courses from the following:**

MTH 4	Elementary Differential Equations	3
MTH 6	Elementary Linear Algebra	3
MTH 8	Discrete Mathematics	4

**General Education Units for A.S. Degree**

For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.

**Required Major Specific G.E. Requirement**  
**Complete a minimum of 3 units from the following:**

ANAT 1	General Human Anatomy	5
ANTH 1	Biological/Physical Anthropology	3
ANTH 1L	Biological/Physical Anthropology Laboratory	1
ANTH 2	Introduction to Archaeology	3
ANTH 3	Social and Cultural Anthropology	3
ANTH 5	Cultures of the U.S. in Global Perspective	3
ANTH 8	Native American Cultures	3
ANTH 12	Magic, Religion, Witchcraft and Healing	3
ARCH 2A	Architectural Graphics in Drawing and Sketching	3
ARCH 2B	Architectural Graphics in Color Rendering	3
ARCH 4A	Architectural Drafting Principles I	3
ARCH 4B	Architectural Drafting Principles II	3
ARCH 8A	Fundamentals of Architectural Design I	4
ARCH 8B	Fundamentals of Architectural Design II	4
ARCH 12	Construction Materials and Methods	3
ARCH 14	California Architecture and Urban Design	3
ARCH 16	Landscape Architecture	2
ASTR 10	Introduction to Astronomy: The Solar System	3
ASTR 20	Introduction to Astronomy: Stars and The Universe	3
ASTR 30	Introduction to Astronomy Lab	1
BIOL 2	Principles of Cell/Molecular Biology and Genetics	5
BIOL 4	Principles of Animal Biology and Evolution	4
BIOL 6	Principles of Plant Biology and Ecology	4
BIOL 10	Introduction to the Science of Biology	4
BIOL 31	Introduction to College Biology	4
BIOL 50	Anatomy and Physiology	4
CHEM 1A	General College Chemistry I	5
CHEM 10	Introduction to Chemistry	4
CHEM 30A	Introductory and Applied Chemistry I	4
CHEM 30B	Introductory and Applied Chemistry II	4
CHEM 31	Introduction to College Chemistry	4
CSCI 8	Computer Literacy	3
CSCI 10	Introduction to Programming Using Visual BASIC.NET	4
CSCI 14	Introduction to Structured Programming In C++	4
CSCI 15	Object-Oriented Programming Methods	4
CSCI 19A	Object-Oriented Programming Methods in Java	4
ECN 1	Principles of Microeconomics	3
ECN 2	Principles of Macroeconomics	3
ECN 10	General Economics	3
ENSC 10	Humans and the Environment	3
ENSC 11	Humans and the Environment with Laboratory	3
GEOG 1	Introduction to Physical Geography	3
GEOG 1L	Introduction to Physical Geography Laboratory	1
GEOG 8	Introduction to Weather and Climate	3
GEOG 20	Introduction to Geographic Information Systems	3
MTH 33	Finite Mathematics	4
MTH 43	Introduction to Probability and Statistics	4
MICR 1	Microbiology	5
PHYS 2A	Introduction to Physics I	4

PHYS 3A	College Physics A	4
PHYS 3B	College Physics B	4
PHYS 4A	General Physics I	5
PHYS 4B	General Physics II	5
PHYS 4C	General Physics III	5
PHYS 5	Modern Physics	3
PHYS 11	Descriptive Physics	4
PHSI 1	Human Physiology	5
PSY 5	Introductory Statistics for the Behavioral and Social Sciences	4

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**Total Units** **24 - 27**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**1 Calculus I** **5 units**

Elements of analytic geometry, derivatives, limits and continuity, differentiation of algebraic and trigonometric functions, the definite integral.

**Prerequisite:** MTH 20 (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the mathematics assessment process.

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**2 Calculus II** **5 units**

Continuation of differential and integral calculus, including transcendental, and inverse functions. Techniques of integration, numerical integration, parametric equations, polar coordinates, sequences, power series and Taylor series. Primarily for mathematics, physical science, and engineering majors.

**Prerequisite:** MTH 1 (completed with a grade of “C” or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**20 Pre-Calculus Mathematics** **5 units**

Rational functions and relations with emphasis on logical development and graphing. Solutions of polynomial equations and inequalities, the binomial theorem, strengthening of skills in working with exponential, logarithmic, and trigonometric functions, equations, graphs, and applications.

**Prerequisite:** MTH 36 (completed with a grade of “C” or higher) or, MTH 37 (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics Assessment Process.

(UPDATED PREREQUISITES)

**25 Computational Methods for Engineers and Scientists** **3 units**

(See also ENGR 25 and PHYS 25)

Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB, SimuLink, MuPad, and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. May not receive credit if ENGR 25 or PHYS 25 has been completed.

**Prerequisite:** MTH 1 (completed with a grade of “C” or higher)

(NEW COURSE - EFFECTIVE SPRING 2018)

**31C Co-Requisite Support for College Algebra** **3 units**

A review of the core prerequisite skills for college algebra. Intended for students who are concurrently enrolled in MTH 31, College Algebra. Review topics include: Factoring, function concepts, solving and graphing linear equations and inequalities in one and two variables, rational exponents and radicals, definitions of and relationship between exponential and logarithmic functions, properties of logarithm, solving exponential and logarithmic equations. Topics covered in more depth include: Quadratic functions, operations on polynomials and rational expressions, graphing functions using basic translation and reflection, solving systems of equations in three variables. Recommended for students who are committed to an accelerated math pathway for business and life sciences; who have completed intermediate algebra or high school Algebra 2 with a C or higher, especially not recently; and who need more instructional support than MTH 31 alone.

**Corequisite:** MTH 31

**Strongly Recommended:** Completion of high school Algebra 2 with C or higher, or equivalent.

(UPDATED PREREQUISITES)

**33 Finite Mathematics** **4 units**

Straight lines, systems of linear equations, matrices, systems of linear inequalities, linear programming, mathematics of finance, sets and Venn diagrams, combinatorial techniques and an introduction to probability. Applications in business, economics and the social sciences.

**Prerequisite:** MTH 55 (completed with a grade of “C” or higher) or, MTH 55L (completed with a grade of “C” or higher) or, MTH 55B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Early Assessment Program or an appropriate skill level demonstrated through the mathematics assessment process.

(UPDATED PREREQUISITES)

**36 Trigonometry** **5 units**

Plane trigonometry. Includes circular and right triangle trigonometric functions; trigonometric equations, graphs and identities; triangle solutions. Polar coordinates.

**Prerequisite:** MTH 57 (completed with a grade of “C” or higher) and, MTH 55 (completed with a grade of “C” or higher) or, MTH 55L (completed with a grade of “C” or higher) or, MTH 55B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Early Assessment Program or an appropriate skill level demonstrated through the Mathematics Assessment process. May not receive credit if Mathematics 37 has been completed.

(UPDATED PREREQUISITES)

**37 Trigonometry with an Emphasis on its Geometric Foundations** **5 units**

Plane trigonometry, with topics from plane geometry. Contains the entire subject content of Mathematics 36. Includes circular and right triangle trigonometric functions; trigonometric equations, graphs and identities; triangle solutions. Polar coordinates. Also includes congruence, properties of polygons, parallel lines, similarity, areas, volumes, and coordinate geometry.

**Prerequisite:** MTH 55 (completed with a grade of “C” or higher) or, MTH 55L (completed with a grade of “C” or higher) or, MTH 55B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Early Assessment Program or an appropriate skill level demonstrated through the Mathematics Assessment process. May not receive credit if Mathematics 36 has been completed.

(UPDATED PREREQUISITES - EFFECTIVE FALL 2017)

**43 - Introduction to Probability and Statistics 4 units**

Descriptive statistics, including measures of central tendency and dispersion; elements of probability; tests of statistical hypotheses (one and two populations); correlation and regression; ANOVA; applications in various fields. Introduction to the use of computer software package to complete both descriptive and inferential statistics problems. May not receive credit if Mathematics 35 has been completed.

**Prerequisite:** MTH 53 (completed with a grade of “C” or higher) or, MTH 53B (completed with a grade of “C” or higher) or, MTH 54 (completed with a grade of “C” or higher) or, MTH 54L (completed with a grade of “C” or higher) or, MTH 55 (completed with a grade of “C” or higher) or, MTH 55B (completed with a grade of “C” or higher) or, MTH 55L (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Early Assessment Program or an appropriate skill level demonstrated through the Mathematics Assessment process. **Strongly Recommended:** Eligibility for ENGL 1A

(UPDATED PREREQUISITES)

**47 Mathematics for Liberal Arts 3 units**

An introductory study of several mathematical topics. Use of mathematics to make informed decisions in different areas of daily life such as finance and politics. Topics include logic, voting, apportionment, probability, statistics, finance, and graph theory.

**Prerequisite:** MTH 55 (completed with a grade of “C” or higher) or, MTH 55L (completed with a grade of “C” or higher) or, MTH 55B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Early Assessment Program or an appropriate skill level demonstrated through the mathematics assessment process.

(RENAMED/RENUMBERED AND UNIT CHANGES - EFFECTIVE SPRING 2018)

**53 Applied Algebra and Data Analysis 5 units**

Equations and formulas; linear, exponential, logarithmic functions; measurement and conversion of units; exponents and scientific notation; introduction to descriptive statistics including graphical methods; introduction to probability. Intended for students who do not need calculus.

**Prerequisite:** MTH 104 (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics Assessment process.

**Strongly Recommended:** ENGL 102 or, ENGL 101B

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**53A Elementary Applied Algebra and Data Analysis 3 units**

Equations and formulas; linear functions; scatterplots and linear models; measurement and conversion of units; proportional reasoning and problem solving. Intended for students who do not need calculus.

**Prerequisite:** MTH 104 (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics Assessment process.

**Strongly Recommended:** ENGL 102 or, ENGL 101B

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**53B Intermediate Applied Algebra and Data Analysis 3 units**

Formulas; inverse, exponential, and logarithmic functions; introduction to descriptive statistics including graphical methods; introduction to probability. Intended for students who do not need calculus.

**Prerequisite:** MTH 53A (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics Assessment process.

**Strongly Recommended:** ENGL 102 or, ENGL 101B

(REACTIVATED COURSE)

**55A Intermediate Algebra A 3 units**

Concepts covered in the first half of Mathematics 55 including complex numbers, quadratic equations, radical expressions, radical equations, rational exponents, absolute value equations and inequalities, and functions and their graphs.

**Prerequisite:** MTH 65 (completed with a grade of “C” or higher) or, MTH 65L (completed with a grade of “C” or higher) or, MTH 65B (completed with a grade of “C” or higher) or an appropriate skill level demonstrated through the Mathematics Assessment process. May not receive credit if Mathematics 55 has been completed.

(REACTIVATED COURSE)

**55B Intermediate Algebra B 3 units**

Concepts covered in the second half of Mathematics 55 including parabolas and circles, function composition, inverse functions and their graphs, systems of equations, and exponential and logarithmic functions and equations. May not receive credit if MTH55 or MTH55L has been completed.

**Prerequisite:** MTH 55A (completed with a grade of “C” or higher)

(REVIEWED COURSE WITH SUBSTANTIAL CHANGE)

**104 Prealgebra 4 units**

Brief review of arithmetic, including fractions, decimals, percentages; order of operations, and geometric formulas. Introduction to algebraic concepts, including signed numbers, properties of real numbers, algebraic expressions, linear equations, and graphs.

**Requisites: none**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**201 Math Jam A .5 units**

Review of pre-algebra and study skills required to reassess into a mathematics course or to increase success in your next mathematics course.

**Requisites: none**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**202 Math Jam B .5 units**

Review of elementary and intermediate algebra and study skills required to reassess into a mathematics course or to increase success in your next mathematics course.

**Requisites: none**



(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**203 Math Jam C** **.5 units**

Review of precalculus and study skills required to reassess into a mathematics course or to increase success in your next mathematics course.

**Requisites: none**

## MEDICAL ASSISTING (MEDA)

(REVISED DEGREE - UPDATED COURSES)

### MEDICAL ASSISTING ASSOCIATE IN ARTS

The Certificate Program in Medical Assisting is part of the Associate of Arts degree in Medical Assisting is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) 1361 Park Street, Clearwater, Florida 33756, (727) 210-2350, www.caahep.org, upon recommendation of the Medical Assisting Education Review Board (MAERB)) of the American Association of Medical Assistants' Endowment (AAMAE). Completion of this program qualifies the student to take the National Certification examination CMA-AAMA®-Certified Medical Assistant Exam. Graduates of the Medical Assisting programs at Chabot College will have an opportunity to apply for employment as entry level Medical Assistants in an ambulatory care setting. Medical Assistants are multi-skilled allied health professionals who can perform a variety of administrative and clinical skills. Students completing in sequence the 31 units for the accredited Medical Assisting Certificate program are eligible to sit the American Association of Medical Assistants (AAMA) Certified Medical Assistant (CMA-AAMA®) exam.

**Career Opportunities in Medical Assisting**

Graduates of the Medical Assisting programs at Chabot College will have an opportunity to apply for employment as entry level Medical Assistants in an ambulatory care setting.

<b>Year One (Fall)</b>	<b>Units</b>
HLTH 51A Basic Medical Terminology	4
PSY 1 General Psychology	3

<b>Year One (Spring)</b>	<b>Units</b>
BIOL 50 Anatomy and Physiology	4
BUS 7 Accounting for Small Business	3
CAS 50 Introduction to Computer Application Systems	3
or	
CSCI 8 Computer Literacy	3
HLTH 51B Disease Process and Advanced Medical Terminology	4

<b>Year Two (Fall)</b>	<b>Units</b>
MEDA 70A Clinical Skills For The Medical Assistant I	3
MEDA 71A Administrative Skills I	2
MEDA 72A Electronic Health Record Part 1	1
MEDA 75 Administration of Medications for the Medical Assistant	3

<b>Year Two (Spring)</b>		<b>Units</b>
MEDA 70B ++	Clinical Skills For The Medical Assistant 2	3
MEDA 71B ++	Administrative Skills 2	2
MEDA 72B ++	Electronic Health Record Part 2	1
MEDA 73 ++	Clinical Experience Practicum	4
MEDA 74 ++	Clinical Experience Seminar	1

**General Education Courses**

For specific General Education courses refer to catalog section on A. A. Graduation Requirements

*Prior to placement at Clinical Sites (MEDA 73), the student must submit medical, dental and immunization records. A background check is also required. Forms will be distributed in MEDA 70A.*

*To progress in the Medical Assisting Certificate Program and to graduate from the program, students must earn a minimum grade of "C" in each course.*

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<b>Total Units</b>	<b>41</b>
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++Offered only in the Spring term

(REPRINT - CORRECTED FROM 2016-2018 CATALOG)

### MEDICAL ASSISTING CERTIFICATE OF ACHIEVEMENT

The Certificate Program in Medical Assisting is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, Florida 33756, (727) 210-2350, www.caahep.org, on recommendation of the Medical Assisting Education Review Board (MAERB)) of the American Association of Medical Assistants' Endowment (AAMAE). Completion of this program qualifies the student to take the National Certification examination CMA-AAMA®-Certified Medical Assistant Exam. Graduates of the Medical Assisting programs at Chabot College will have an opportunity to apply for employment as Medical Assistants in an ambulatory care setting. Medical Assistants are multi-skilled allied health professionals who can perform a variety of administrative and clinical skills. Students completing in sequence the 31 units for the accredited Medical Assisting Certificate program are eligible to sit the American Association of Medical Assistants (AAMA) Certified Medical Assistant (CMA-AAMA®) exam.

**Career Opportunities in Medical Assisting**

Graduates of the Medical Assisting programs at Chabot College will have an opportunity to apply for employment as Medical Assistants in an ambulatory care setting.

**Fall Semester**

HLTH 51A	Basic Medical Terminology	4
CAS 50	Introduction to Computer Application Systems	3
	or	
CSCI 8	Computer Literacy	3
MEDA 70A *	Clinical Skills For The Medical Assistant I	3
MEDA 71A	Administrative Skills I	2
MEDA 75	Administration of Medications for the Medical Assistant	3
MEDA 72A	Electronic Health Record Part 1	1

Semester 2 involves Clinical experience. Prior to clinical experience the student must submit a medical exam and immunization records. A background check and drug screen may also be required. The CPR card required is the Basic Life Support (BLS) for Healthcare Providers from the American Heart Association that may be obtained through Chabot College Community Education or an off campus provider.

### Spring Semester

HLTH 51B	Disease Process and Advanced Medical Terminology	4
MEDA 70B	Clinical Skills For The Medical Assistant 2	3
MEDA 71B	Administrative Skills 2	2
MEDA 73 *	Clinical Experience Practicum	4
MEDA 74	Clinical Experience Seminar	1
MEDA 72B	Electronic Health Record Part 2	1

To progress in the Medical Assisting Certificate Program and to graduate from the program, students must earn a minimum grade of "C" in each course.

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**Total Units** **31**

\*Prior to placement at Clinical Sites (MEDA 73), the student must submit medical, and immunization records. A background check and drug screen is also required. Forms will be distributed in MEDA 70A.

## MUSIC (MUSL)

(DELETED DEGREE)

### **MUSIC** ASSOCIATE IN ARTS

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(REVISED DEGREE - UPDATED CATALOG DESCRIPTION)  
(PENDING STATE APPROVAL)

### **MUSIC** ASSOCIATE IN ARTS FOR TRANSFER (AA-T)

The Associate in Arts in Music for Transfer Degree offers students a general study in music. This liberal arts degree prepares students for study as an upper division student junior by combining the theoretical concepts with practical skill building courses to prepare the student with competency in the major. An entrance audition is required for this degree. The courses in this degree focus on harmony and musicianship, applied studio and performance. Recipients of the Associate in Arts in Music for Transfer Degree are guaranteed admissions into a Bachelor's of Arts degree in Music (B.A.) with junior standing at a campus of the California State University system. All students must complete the core classes and then perform a capstone jury in preparation for transfer.

#### **Required Core (24 units) Units**

<b>Theory Courses</b>		
MUSL 2A	Harmony and Musicianship I	4
MUSL 2B	Harmony and Musicianship II	4
MUSL 2C	Harmony and Musicianship III	4
MUSL 2D	Harmony and Musicianship IV	4

#### **Applied Music (4 semesters @ 1 unit each) Units**

MUSA 40	Applied Lessons	1
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#### **Large Ensemble (4 semesters @ 1 unit each) Units**

MUSP 12	Wind Ensemble	1
MUSP 13	Wind Symphony	1
MUSP 14	Jazz Lab	1
MUSP 15	Jazz Ensemble	1
MUSP 16	Jazz Orchestra	1
MUSP 44	Concert Choir	1
MUSP 45	Chamber Choir	1

#### **General Education Courses**

Required Major Courses: 24 units  
 CSU GE or IGETC (CSU) requirements: 37-39 units  
 CSU transfer Electives as needed to reach 60 CSU transferable units.  
**TOTAL UNITS: 60 Units**

**All courses making must be transferable to CSU, and a minimum GPA of 2.0 must be maintained.**

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**Total Units** **24**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**2A Harmony and Musicianship I 4 units**

Study of the fundamentals of Western music applicable to both classical and popular styles: notation; fundamental theoretical concepts; musicianship skills including sight singing, rhythmic training, ear training, dictation, and keyboard realization; and basic compositional skills.

**Strongly Recommended: MUSL 6 or equivalent skills**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**2B Harmony and Musicianship II 4 units**

This course is a study of harmony and voice leading in the Western Common Practice. It addresses diatonic functionality, four-part voice leading, simple musical structures, harmonic and formal analysis, and musicianship skills including sight singing, rhythmic training, dictation, and keyboard realization.

**Prerequisite: MUSL 2A (completed with a grade of "C" or higher)**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**2C Harmony and Musicianship III 4 units**

This course is a study of harmony and voice-leading in the Western Common Practice. It addresses sequences, melodic and rhythmic figuration, leading-tone 7th chords, mixture, applied dominants and modulation, four-part voice leading, large formal structures, harmonic and formal analysis, and musicianship skills including sight singing, rhythmic training, ear training, dictation, conducting, and keyboard realization.

**Prerequisite: MUSL 2B (completed with a grade of "C" or higher)**

## MUSIC RECORDING TECHNOLOGY (MURT)

(NEW COURSE)

**50 Music Industry Internship 1 unit**

Internship in the music industry as approved by Music Recording & Technology faculty in the context of the student's coursework and interests in the MURT department. Cooperative effort between student and music industry supervisor to accomplish agreed upon work objectives and experiential goals. Student provides verification of service experience hours during the term. Music industry organization to be approved by MURT faculty. Hours and duties made in agreement between student and music industry supervisor. Students will meet on-campus with MURT faculty for one hour per week to discuss experience & progress. Faculty permission required for registration in the class.

**Prerequisite: MURT 21 (completed with a grade of "C" or higher) and/or, MURT 22A (completed with a grade of "C" or higher) and/or, MURT 28 (completed with a grade of "C" or higher)**

## NURSING (NURS)

(REVISED DEGREE- UPDATED 7 YEAR  
RECENCY FOR PRE-REQUISITES)  
(EFFECTIVE SPRING 2018 - PENDING STATE APPROVAL)

### 30 UNIT LVN-RN NON-DEGREE

LVNs who enter into the second year of the Nursing Program may choose one of the two options: A.A. in Nursing, or "30 Unit Non-Degree" option. (Note about the "30 Unit Non-Degree option"-- The Associate Degree is NOT awarded with this option and the nurse will always be considered a "non-degree graduate." Please see the Director of Nursing if interested in the "30 Unit Non-Degree" option.) Graduates of these two options are eligible to take the National Council Licensing Examination for Registered Nurses (NCLEX-RN).

**Prerequisite for Admissions:**

(1) completion of Advanced Standing application; (2) validation of previous nursing knowledge.

**Prerequisite Courses**

	<b>Units</b>
Human Physiology with lab (PHSI 1 at Chabot)	4 - 5
Microbiology with lab (MICR 1 at Chabot)	4 - 5

Equivalent courses will be accepted, however course substitutions will not be considered.

There is a 7 year recency requirement for the Basic Science prerequisite courses.

A grade point average of 2.5 is required for the science courses.

NURS 70 Nursing Theory: LVN-RN Transitions	1.5
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If the student fails any of the Kaplan Exams (taken in conjunction with NURS 70) after two attempts the student cannot complete the 30-unit option, and will need to complete the LVN-RN Associate in Arts Degree.

NURS 84 Prescriptive Clinical Nursing Skills Practice	0.5
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**Clinical Sequence:**

The LVN must complete the following curriculum with a "C" or higher in each course regardless of the option chosen:

<b>Sophomore Year</b>		<b>Units</b>
NURS 53	Mental Health Nursing	4
NURS 69	Gerontological Nursing	1
NURS 88	Pathophysiology	3
NURS 88L	Physical Assessments	1
NURS 60B	Adult Health II	6
NURS 60C	Adult Health III	3.5

<b>Total Units</b>	<b>28.5 - 30.5</b>
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((REVISED DEGREE- UPDATED 7 YEAR  
REGENCY FOR PREREQUISITES)  
(EFFECTIVE SPRING 2018 - PENDING STATE APPROVAL)

**LVN-RN**  
**ASSOCIATE OF ARTS**

The Chabot Nursing program prepares graduates who can contribute to the advancement of nursing science and influence changes in a variety of settings within the health care system. The graduate possesses a repertoire of knowledge, skills, and attributes that serve as the foundation for safe, competent practice and lifelong learning. LVN's who enter into the second year of the Nursing Program may opt for one of the two following: A.A. in Nursing or 30 Unit Non- Degree option.

**Prerequisite for Admissions:**

(1) completion Advanced Standing application; (2) validation of previous nursing knowledge.

**Prerequisite Courses**

	<b>Units</b>
Human Anatomy with lab (ANAT 1 at Chabot)	4 - 5
Human Physiology with lab (PHSI 1 at Chabot)	4 - 5
Microbiology with lab (MICR 1 at Chabot)	4 - 5

Equivalent courses for the Basic Science prerequisite courses will be accepted, however course substitutions will not be considered.

There is a 7 year recency requirement for the Basic Science prerequisite courses.

A minimum of 2.5 GPA is required in the Basic Science prerequisite courses.

NURS 70	Nursing Theory: LVN-RN Transitions	1.5
NURS 70L	Clinical Skills Practice and Assessment Lab	0.5
NURS 84	Prescriptive Clinical Nursing Skills Practice	0.5

The above courses must be completed with a "C" or higher before validation or admissions to the Nursing Program.

If the student fails any Kaplan Exams after two attempts, they may take the theory portion of OB (NURS 81) or Pediatrics (NURS 82) or Pharmacology (NURS 64).

**Clinical Sequence:**

The LVN must complete the following curriculum with a "C" or better in each course regardless of the option chosen.

<b>Nursing Courses</b>	<b>Units</b>
NURS 53	Mental Health Nursing 4
NURS 69	Gerontological Nursing 1
NURS 88	Pathophysiology 3
NURS 88L	Physical Assessments 1
NURS 60B	Adult Health II 6
NURS 60C	Adult Health III 3.5
NURS 73*	Intravenous Therapy 0-1

**Additional Requirements for the AA in Nursing:**

(1) Psychology 1, Sociology 1, and Communication Studies 1 or 10. Equivalent courses will be accepted, however course substitutions will not be considered.

A grade of "C" or higher is required for each of the above courses.  
(2) Chabot AA\*General Education and Graduation requirements.\*  
Students with BA/BS degrees or higher from US regionally accredited colleges or universities are exempt from Chabot GE/ Graduation requirements.

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**Total Units 33 - 37**

\*NURS 73 is required if not certified in the LVN program.

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((REVISED DEGREE- UPDATED 7 YEAR REGENCY  
FOR PREREQUISITES)  
(EFFECTIVE SPRING 2018 - PENDING STATE APPROVAL)

**NURSING**  
**ASSOCIATE IN ARTS**

The Nursing Program is approved by the California Board of Registered Nursing. Upon completion of the major, the graduate is eligible to take the Registered Nursing Licensing Examination (NCLEX-RN). The program prepares graduates who can contribute to the advancement of nursing science and influence changes in a variety of settings within the health care system. The graduate possesses a repertoire of knowledge, skills, and attributes that serve as the foundation for safe, competent practice and lifelong learning.

**SPECIAL APPLICATION REQUIRED**

<b>Basic Sciences, Behavioral and Social Sciences Prerequisites</b>	<b>Units</b>
Human Anatomy with lab (ANAT 1 at Chabot)	4 - 5
Human Physiology with lab (PHSI 1 at Chabot)	4 - 5
Microbiology with lab (MICR 1 at Chabot)	4 - 5

The above listed courses must be taken before applying to the nursing program. Equivalent courses will be accepted, however course substitutions for the above courses will not be considered.

There is a 7 year recency requirement for the science prerequisite courses. A minimum of 2.5 GPA is required in Basic Sciences prerequisites.

<b>Behavioral and Social Science Prerequisites:</b>	<b>Units</b>
PSY 1      General Psychology	3
SOCI 1     Principles of Sociology	3

The above listed courses must be taken before applying to the Nursing program. Equivalent courses will be accepted, however course substitutions for the above courses will not be considered. A grade of C or higher is required for each class in this section.

**Communication Prerequisites:**

ENGL 1A	Critical Reading and Composition	3
COMM 1	Fundamentals of Speech Communication	3
	or	
COMM 10	Interpersonal Communication	3

The above listed courses must be taken before applying to the nursing program. Equivalent courses will be accepted, however course substitutions for the above courses will not be considered. A grade of "C" or higher is required for each Communication prerequisite.

<b>Year One</b>		<b>Units</b>
NURS 55	Fundamentals of Nursing Practice	8.5
NURS 58	Nursing Care for Patients with Infectious Disease	1
NURS 61	Clinical Nutrition	1.5
NURS 69	Gerontological Nursing	1
NURS 75	Fluid and Electrolytes	1
NURS 51	Maternity Nursing	4
NURS 52	Pediatric Nursing	4
NURS 88	Pathophysiology	3
NURS 88L	Physical Assessments	1

<b>Year Two</b>		<b>Units</b>
NURS 60A	Adult Health I	4
NURS 64	Pharmacology for Professional Nurses	2.5
NURS 53	Mental Health Nursing	4
NURS 73	Intravenous Therapy	1
NURS 60B	Adult Health II	6
NURS 60C	Adult Health III	3.5

**Additional Nursing Program Information**

To progress and graduate from the Nursing Program, students must earn a minimum grade of "C" in each nursing course. Graduates of this program receive an Associate in Arts degree in Nursing.

**Note:** The Board of Registered Nursing requirements supersede catalog rights for graduation.

**Additional Requirements for the AA in Nursing 10-18**

For specific General Education courses refer to catalog section on A.A. Graduation Requirements. Students with a BA/BS degree or higher from US regionally accredited colleges or universities are exempt from Chabot GE/Graduation requirements.

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**Total Units** **80 - 91**

(DELETED COURSE)

**50 Fundamentals of Nursing Practice**

(UPDATED PREREQUISITES- EFFECTIVE SPRING 2018)

**51 Maternity Nursing 4 units**

Nursing care of the childbearing family. The focus is on the physiological and psychological needs of families as they are affected by pregnancy, labor and birth, postpartum, and newborn stages. Theory and clinical practice include integration of assessment skills, women's health, violence against women, nutrition, pain management, ethical issues, and teaching strategies unique to childbearing families. Quality, Safety, Education in Nursing (QSEN) concepts are incorporated. Total weeks - 9.

**Prerequisite:** NURS 55 (completed with a grade of "C" or higher)

(UPDATED PREREQUISITES- EFFECTIVE SPRING 2018)

**52 Pediatric Nursing 4 units**

Emphasis placed on the use of the nursing process in promoting adaptive processes necessary for coping with the health issues of infants, children and adolescents. Theory and clinical practice includes integration of assessment skills, growth and development, family abuse issues, nutrition, pharmacological concepts, ethical issues, and teaching strategies unique to child-rearing families. Clinical focuses on care of clients in community and acute care settings. Concepts related to the California Nursing Practice Act, and Quality, and Safety Education in Nursing (QSEN) will be incorporated. Total weeks-9.

**Prerequisite:** NURS 55 (completed with a grade of "C" or higher), NURS 61 (completed with a grade of "C" or higher), NURS 69 (completed with a grade of "C" or higher), NURS 75 (completed with a grade of "C" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**54 Clinical Topics .5 units**

Study of selected clinical topics and associated nursing processes related to nursing practice.

**Prerequisite:** NURS 70 (completed with a grade of "C" or higher) and possession of a valid California LVN license or, NURS 55 (completed with a grade of "C" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**55 Fundamentals of Nursing Practice 8.5 units**

Introduction to fundamental concepts and practices in nursing care across the life span. Application of the nursing process to the care of adult clients with acute and chronic disorders and fundamental nursing skills. Theoretical content provides an overview of the care of clients with diverse cultural backgrounds and spiritual needs as well as principles of therapeutic communication and mental health. Concepts related to the California Nursing Practice Act, as well as principles of safe clinical practice will be included.

**Prerequisite:** Acceptance into the Nursing Program.

**Corequisite:** NURS 69, NURS 61, NURS 58

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**60C Adult Health III Modified Course Proposal 3.5 units**

Emphasis on the use of the nursing process in the care of adults experiencing selected conditions requiring treatment in medical-surgical care settings. Theory and clinical practice includes integration of assessment skills, nutrition, medication administration and legal-ethical issues. Concepts related to the California Nursing Practice Act, and Quality, and Safety Education in Nursing (QSEN) will be incorporated. Total - 9 weeks

**Prerequisite:** NURS 55 (completed with a grade of "C" or higher) and, NURS 61 (completed with a grade of "C" or higher) and, NURS 69 (completed with a grade of "C" or higher), NURS 75 (completed with a grade of "C" or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**64 Pharmacology for Professional Nurses 2.5 units**

Introduction to the principles of clinical pharmacology, the administration of drugs as therapeutic agents, and the interactions of drugs and body tissues. The purpose, action, and expected physiological responses of therapeutic agents and dosage forms currently used in treating pain, infectious processes and selected acute and chronic disease states in the cardiovascular, endocrine, respiratory, autonomic nervous and central nervous system is explored as well as the integration of the concepts in the nursing process.

**Prerequisite:** NURS 55 (completed with a grade of “C” or higher) or, NURS 70L (completed with a grade of “C” or higher) or, NURS 70 (completed with a grade of “C” or higher)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**70 Nursing Theory: LVN-RN Transitions 1.5 units**

Emphasis on nursing topics that prepare the LVN adult learner for advanced standing in an Associate Degree RN Nursing Program. Includes roles transition, survival skills for the nontraditional student, theoretical foundations of nursing, communicating effectively, critical thinking in nursing practice, nursing process, and legal - ethical components of nursing.

**Prerequisite:** Valid California LVN license, at least one-year work experience as an LVN in a health care setting, and attendance at an Advance Standing (Military, LVN-RN) orientation meeting, ANAT 1 and, MICR 1 and, PHSI 1 (completed with a grade of “C” or higher) and Minimum of 2.5 GPA in the three science prerequisites. Completion of an Advance Standing Application for Chabot College.

**Corequisite:** Working at least part-time as an LVN or equivalent.

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**70L Clinical Skills Practice and Assessment Lab .5 units**

Clinical skills practice lab provides framework for satisfying selected nursing content and skills offered during first year of associate degree nursing curriculum. Designed for LVN students desiring admission to Chabot Nursing Program with Advanced Standing.

**Corequisite:** NURS 70

(UPDATED PREREQUISITES)

**75 Fluid and Electrolytes 1 unit**

Introduction to principles of fluid and electrolyte balance. Assessment and treatment of imbalances; parenteral therapy; acid-base balance; interpretation and application of laboratory results.

**Corequisite:** NURS 60A or, NURS 51 or, NURS 52 or, NURS 53

**Prerequisite:** NURS 55

(UPDATED PREREQUISITES - EFFECTIVE SPRING 2018)

**84 Prescriptive Clinical Nursing Skills Practice .5 units**

Emphasis is on gaining experience in practicing and refining selected clinical skills used in the delivery of nursing care to a client in the acute care or community based setting. This required course provides the opportunity for preparation for the Clinical Performance Examination, as well as for practicing different skills using up-to-date equipment in the Skills Lab.

**Prerequisite:** NURS 55 (completed with a grade of “C” or higher)

(DELETED COURSE)

**85 Registered Nurse Refresher (Theory and Clinical)**

## PHYSICAL EDUCATION ACTIVITY (PEAC)

(NEW COURSE - EFFECTIVE SPRING 2018)

**FFL3 Flag Football League 3 .5-2 units**

This course is designed to teach organized flag football. Advanced play design and defensive & offensive schemes will be taught in a league structure

**Prerequisite:** PEAC FFL2

(UPDATED PREREQUISITES - EFFECTIVE SPRING 2018)

**FUN1 Core Conditioning for Abs, Hips and Thighs .5-2 units**

This beginning course will develop core strength and improve total body fat loss through a high intensity training program. Course is moderate to hard in intensity. Students will learn about training and prevention of metabolic syndrome through diet and exercise.

**Strongly Recommended:** Personal physician’s approval to exercise vigorously.

**Corequisite:** KINE OPE

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE)

**HER1 Basic Heart Rate Training: Fitness Training Utilizing a Heart Rate Monitor .5-2 units**

Improvement of cardiovascular fitness through the use of a heart rate monitor. Use of a heart rate monitor, target heart rate training zones and adult type II diabetes prevention will be covered.

**Requisites:** none

(NEW COURSE)

**JUD4 Competition Judo .5-2 units**

Class designed to help the students learn rules to enter Judo competition and tournaments.

**Prerequisite:** PEAC JUD3 (completed with a grade of “C” or higher)

(NEW COURSE - EFFECTIVE SPRING 2018)

**PLF3 Advanced Plyometric and Agility Training for Women .5-2 units**

Designed for women who have completed the intermediate plyometric training course and want to continue to improve their agility and power output.

**Prerequisite:** PEAC PLF2 (completed with a grade of “C” or higher)

(NEW COURSE - EFFECTIVE SPRING 2018)

**SPM3 Advanced Plyometric and Agility Training for Men .5-2 units**

Designed for men who want to continue to improve their ability to jump high and sprint fast.

**Prerequisite:** PEAC SPM2 (completed with a grade of “C” or higher)

(NEW COURSE)

**VOL4 Competitive Volleyball .5-2 units**

This course is designed to teach team skills and strategies needed to play competitive team volleyball.

**Prerequisite:** PEAC VOL3 (completed with a grade of “C” or higher)

(NEW COURSE - EFFECTIVE SPRING 2018)

**WEE1 Weight Training for Everyone 1-2.5 units**

This course is designed to provide the student with the basic principles of strength training for overall health and wellness. Once the student has completed an orientation, the student will be able to attend a large number of weight training classes that fit his/her schedule.

**Requisites: none**

(NEW COURSE - EFFECTIVE SPRING 2018)

**WEE2 Intermediate Weight Training for Everyone .5-2 units**

Time flexible weight training course designed to further the student's knowledge of resistance training for health and well being.

**Prerequisite: PEAC WEE1 (completed with a grade of "P" or higher) or, PEAC FUN1 (completed with a grade of "P" or higher) or, PEAC WE11 (completed with a grade of "P" or higher) or, PEAC WOW1 (completed with a grade of "P" or higher)**

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**53A Beginning Digital Camera Use 1.5 units**

Introduction to digital photography using DSLR, mirrorless, or advanced point and shoot cameras. Course will cover basic exposure principles with automatic and manual modes, composition, and image editing. Survey of photography's multiple genres and its changing role in society and culture.

**Requisites: none**

(NEW COURSE - EFFECTIVE SPRING 2018)

**71 Color, Light and the California Landscape 3 units**

Photographing the natural and urban landscapes that are iconic to California. Emphasis on using digital cameras and technology to control color and light. Overview of concepts and techniques used by historical and contemporary California landscape photographers.

**Prerequisite: PHOT 50 (completed with a grade of "C" or higher), PHOT 61 (completed with a grade of "C" or higher)**

## PHOTOGRAPHY (PHOT)

(NEW DEGREE)

(EFFECTIVE SPRING 2018 - PENDING STATE APPROVAL)

### DIGITAL PHOTOGRAPHY CERTIFICATE OF ACHIEVEMENT

The Certificate in Digital Photography provides students with a foundation in digital imaging with an emphasis in studio techniques. Students learn advanced digital post-processing techniques working with Adobe software as well as industry standard techniques photographing in a studio environment. The Digital Photography Certificate fosters individual style and a unique vision by allowing students to develop a genre-specific portfolio to begin their professional practice.

#### Career Opportunities in Photography

Architectural Photographer, Commercial Photographer, Corporate Photographer, Industrial Photographer, Photojournalist, Portrait Photographer, Scientific Photographer

Core Courses	Units
DIGM 31A Photoshop I	1.5
PHOT 61 Digital Color Materials and Processes	3
PHOT 53A Beginning Digital Camera Use	1.5
PHOT 62 Portfolio Workshop	3
PHOT 64A Artificial Light Photography	3
PHOT 66 Digital Imaging	3
PHOT 50 Introduction to Photography	3
<b>Total Units</b>	<b>18</b>

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGE - EFFECTIVE SPRING 2018)

**50 Introduction to Photography 3 units**

Introduction to the processes, principles, and tools of photography. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in photography.

**Requisites: none**

## PHYSICS (PHYS)

(UPDATED PREREQUISITES)

**11 Descriptive Physics 4 units**

Motion, gravitation, heat, light, sound, electricity, magnetism, atoms and nuclei. Present day scientific problems and developments such as alternative energy sources, solar energy, nuclear power, lasers, relativity and black holes. Designed for non-majors in physical science. Includes an introduction to laboratory, principles and techniques with emphasis on the basic concepts discussed in the class. May not receive credit if Physics 10 or Physics 10L has been completed.

**Strongly recommended: Mathematics 104**

(UPDATED PREREQUISITES)

**25 Computational Methods for Engineers and Scientists 3 units**

(See also ENGR 25 and MTH 25)

Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB, SimuLink, MuPad, and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied-mathematics, physical-mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. May not receive credit if Engineering 25 or Math 25 has been completed.

**Prerequisite: MTH 1 (completed with a grade of "C" or higher)**

(NEW COURSE - EFFECTIVE SPRING 2018)

**27 Introduction to Unmanned Flight & Rocket Science 3 units**

This course introduces students to the physics behind, as well as the creation and operation of, unmanned flight vehicles such as rockets, balloons and unmanned aerial vehicles (drones), which collect inflight atmospheric data that are later analysed and presented.

**Prerequisite: MTH 1 (completed with a grade of "C" or higher) and, CSCI 7 (completed with a grade of "C" or higher) and Corequisite: PHYS 4B**

## PSYCHOLOGY-COUNSELING (PSCN)

(REPRINT- CORRECTED FROM 2016-2018 CATALOG)

### HUMAN SERVICES ASSOCIATE OF ARTS

This degree has been designed to provide students an introduction to social and/or psychological theory, multicultural theory, and Psychology-Counseling skills needed to work as a service provider in a social service setting. Students may follow either the AA or AS General Education pattern, as desired.

#### Year One

PSY 1	General Psychology	3
	or	
SOCI 1	Principles of Sociology	3
PSCN 1	Introduction to Psychology-Counseling in a Multicultural Environment	3
	or	
PSY 7	Introduction to Counseling Theory and Skills Self-Assessment/Self-Reflection Course(s)	3
	Option Course	3

#### Year Two

PSY 2	Introduction to Psychological Methodology	3
	or	
PSY 3	Social Psychology	3
	or	
SOCI 2	Social Problems	3
PSCN 4	Multiethnic/Cultural Communication	3
	or	
COMM 11	Intercultural Communication	3
PSCN 2	Introduction to Case Management for Human Services	3
PSCN 11	Interpersonal Relationships	2
PSCN 13	Multicultural Issues in Contemporary America	3
PSCN 80	Occupational Community Service in Human Services	2

#### General Education Units for the A.A. Degree

For specific General Education courses refer to catalog section on A. A. Graduation requirements.

#### Select a total of 3 units from the following self-assessment/self-reflection courses: Units

PSCN 10	Career and Educational Planning	2
PSCN 12	Self-Esteem For Success	2
PSCN 15	College Study Skills	2
PSCN 20	The College Experience	2
PSCN 23	College Readiness	3
PSCN 26	College Success and the Chicano Experience	1
PSCN 36	Women in Transition	2

#### Select a total of 3 units from the following options: Units

ANTH 3	Social and Cultural Anthropology	3
ANTH 5	Cultures of the U.S. in Global Perspective	3
ECD 60	Introduction to the Young Child With Exceptional Needs	3
ENGL 21	The Evolution of the Black Writer	3
ENGL 22	Mexican American/Latino Literature of the U.S.	3
ENGL 32	U.S. Women's Literature	3
ENGL 38	Survey of Modern British Literature	3
ES 1	Introduction to Ethnic Studies	3
ES 2	Contemporary Ethnic Minority Families in the U.S.	3
ES 3	Introduction to Muslim-American Studies	3
	Foreign Language- Beginning Foreign Language	5
HLTH 4	Women and Health	3
HLTH 8	Human Sexuality	3
MUSL 5	American Cultures in Music	3
PSY 6	Abnormal Psychology	3
PSY 8	Human Sexuality	3
PSY 12	Lifespan Psychology	3
RELS 50	Religions of the World	3
RELS 70	Spiritual Traditions and Contemporary Voices	3
SL 64	Beginning Sign Language	3
SL 65	Intermediate Sign Language	3
SOCI 3	Introduction to Race and Ethnic Relations	3
SOCI 4	Marriage and Family Relations	3
SOCI 8	Human Sexuality	3
SOCI 10	Introduction to Asian American Studies	3

**Total Units 28**

(REPRINT- CORRECTED FROM 2016-2018 CATALOG)

### HUMAN SERVICES ASSOCIATE IN SCIENCE

This degree has been designed to provide students an introduction to social and/or psychological theory, multicultural theory, and Psychology-Counseling skills needed to work as a service provider in a social service setting. Students may follow either the AA or AS General Education pattern, as desired.

#### Year One

PSY 1	General Psychology	3
	or	
SOCI 1	Principles of Sociology	3
PSCN 1	Introduction to Psychology-Counseling in a Multicultural Environment	3
	or	
PSY 7	Introduction to Counseling Theory and Skills Self-Assessment/Self-Reflection Course(s)	3
	Option Course	3



**Year Two**

PSY 2	Introduction to Psychological Methodology	3
	or	
PSY 3	Social Psychology	3
	or	
SOCI 2	Social Problems	3
PSCN 4	Multiethnic/Cultural Communication	3
	or	
COMM 11	Intercultural Communication	3
PSCN 2	Introduction to Case Management for Human Services	3
PSCN 11	Interpersonal Relationships	2
PSCN 13	Multicultural Issues in Contemporary America	3
PSCN 80	Occupational Community Service in Human Services	2

**Select a total of 3 units from the following Units****Self-assessment/self-reflection courses:**

PSCN 10	Career and Educational Planning	2
PSCN 12	Self-Esteem For Success	2
PSCN 15	College Study Skills	2
PSCN 20	The College Experience	2
PSCN 23	College Readiness	3
PSCN 26	College Success and the Chicano Experience	1
PSCN 36	Women in Transition	2

**Select a total of 3 units from the following options: Units**

ANTH 3	Social and Cultural Anthropology	3
ANTH 5	Cultures of the U.S. in Global Perspective	3
ECD 60	Introduction to the Young Child With Exceptional Needs	3
ENGL 21	The Evolution of the Black Writer	3
ENGL 22	Mexican American/Latino Literature of the U.S.	3
ENGL 32	U.S. Women's Literature	3
ENGL 38	Survey of Modern British Literature	3
ES 1	Introduction to Ethnic Studies	3
ES 2	Contemporary Ethnic Minority Families in the U.S.	3
ES 3	Introduction to Muslim-American Studies	3
FORE 1A	Beginning Foreign Language	0
HLTH 4	Women and Health	3
HLTH 8	Human Sexuality	3
MUSL 5	American Cultures in Music	3
PSY 6	Abnormal Psychology	3
PSY 8	Human Sexuality	3
PSY 12	Lifespan Psychology	3
RELS 50	Religions of the World	3
RELS 70	Spiritual Traditions and Contemporary Voices	3
SL 64	Beginning Sign Language	3
SL 65	Intermediate Sign Language	3
SOCI 3	Introduction to Race and Ethnic Relations	3
SOCI 4	Marriage and Family Relations	3
SOCI 8	Human Sexuality	3
SOCI 10	Introduction to Asian American Studies	3

**Total Units 28****General Education Units for A.S. Degree**

For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements.

**REQUIRED MAJOR SPECIFIC G.E. REQUIREMENT. Units**  
**Complete a minimum of 3 units from the following.**

PSCN 1	Introduction to Psychology-Counseling in a Multicultural Environment	3
PSCN 4	Multiethnic/Cultural Communication	3
PSCN 13	Multicultural Issues in Contemporary America	3

(REVISED DEGREE)

**LIBERAL ARTS  
ASSOCIATE IN ARTS**

Frequently Asked Questions -What is the AA in Liberal Arts? A degree for students seeking broad knowledge in liberal arts and sciences, with a choice of five "areas of emphasis". Students may choose to receive an AA in Liberal Arts with one area of emphasis. The five areas of emphasis are: 1. Arts and Humanities 2. Communication in the English Language 3. Social and Behavioral Sciences 4. Math and Science 5. Kinesiology and Wellness Why pursues this degree? Many new college students are exploring majors, and begin by selecting the AA in Liberal Arts as their initial educational goal/major. The AA in Liberal Arts provides a broad-based curriculum and can serve as a starting point for a wide variety of majors and careers. Also, students who are planning to transfer, and wish to earn an AA degree, usually can complete both goals with many of the same courses. The AA in Liberal Arts, however, is not a requirement for transfer to the California State University (CSU) or the University of California (UC). Can I transfer with the AA in Liberal Arts? Yes and no. Many students earn this degree and transfer, however, the AA in Liberal Arts alone does not qualify students to transfer to the majority of colleges and universities. Consult with a counselor for additional information. What are the requirements for the AA in Liberal Arts? Complete all of the following: -Chabot College AA General Education Requirements (see AA Degree General Education flyer) -Area of Emphasis — Eighteen units in one of the five "areas of emphasis" (listed in this flyer) -Courses within the "area of emphasis" must include courses from two different subjects/disciplines If I want the AA in Liberal Arts and to transfer, what other requirements are needed? For most transfer schools, additional general education courses are needed, as well as lower division (freshman- and sophomore-level) courses in the transfer major. For transfer to a California State University (CSU) campus, you may complete the general education by following the CSU General Education Breadth or the IGETC course pattern. For the University of California (UC), many campuses/majors accept the IGETC course pattern to satisfy general education requirements. Also, for CSU and UC, 60 transferable units are need prior to transfer. Consult with a counselor for additional information. What else should I know about the AA in Liberal Arts? Double Counting: Courses that appear in both the "area of emphasis" and in the general education patterns can be used to satisfy both requirements. The units are only "counted" one time, but a single course can be used to satisfy both GE and major requirements. Where can I get more help in choosing classes and educational goals? Make an appointment to see a counselor to write a Student Educational Plan (SEP). An SEP is an opportunity to discuss your goals with a counselor and create a multi-semester "map" of courses needed to reach your educational goal(s). Even if you are unclear on your educational goals, you are encouraged to create an SEP with a counselor.

## General Education

Associate in Arts General Education and Graduation requirements are found in the Chabot College Catalog. 26

### Areas of Emphasis 1-5 (18 units)

1. 18 units from ONE area of emphasis listed below.
2. When appropriate, courses selected can be used to also fulfill General Education areas.
3. Include courses from two different subjects/disciplines.
4. Courses completed at other colleges need to satisfy CSU/GE or IGETC requirements, or satisfy a similar general education area at the transfer college, or satisfy the area of emphasis criteria.

### Elective Units

Electives may be necessary to total 60 overall units required for the Associate degree.

### Emphasis 1- Arts and Humanities

Select at least 18 units from the list below that includes courses from at least two subjects/disciplines. When appropriate, courses can also be counted toward completion of General Education requirements.

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

	<b>Units</b>		
ART 2A	3	ARTH 5*	Art History - Renaissance to Modern 3
ART 2B*	3	ARTH 6*	Art History - Twentieth-Century Art 3
ART 3A*	3	ARTH 8	Non-Western Art 3
ART 3B*	3	ARTH 20*	History of Photography 3
ART 3C*	3	ARTH 51A	Introduction to Museum Studies 4.5
ART 3D*	3	ARTH 51B	Museum Studies 4.5
ART 7A*	3	CHIN 1A*	Beginning Chinese 5
ART 7B*	3	CHIN 1B*	Elementary Chinese 5
ART 7C*	3	ENGL 11A	Introduction to Creative Writing 3
ART 7D*	3	ENGL 11B	Intermediate Creative Writing 3
ART 12A*	3	ENGL 12A	The Craft of Writing - Fiction 3
ART 12B*	3	ENGL 12B	Intermediate Craft of Writing - Fiction 3
ART 12B*	3	ENGL 13A	Craft of Writing - Poetry 3
ART 12C*	3	ENGL 13B	Intermediate Craft of Writing - Poetry 3
ART 13A*	3	ENGL 20*	Studies in Shakespeare 3
ART 13B*	3	ENGL 21*	The Evolution of the Black Writer 3
ART 13C*	3	ENGL 22*	Mexican American/Latino Literature of the U.S. 3
ART 13D*	3	ENGL 24*	Storytelling in Modern American Novels and Films 3
ART 16A*	3	ENGL 25*	Asian-American Literature 3
ART 16B*	3	ENGL 26*	The Literature of Immigration and Migration 3
ART 16C*	3	ENGL 28*	Classic and Contemporary Youth Literature 3
ART 16D*	3	ENGL 31*	Introduction to Gay and Lesbian Literature 3
ART 17A*	3	ENGL 32*	U.S. Women's Literature 3
ART 17B*	3	ENGL 35*	Modern and Contemporary U.S. Literature 3
ART 18A*	3	ENGL 41*	World Literature (17th Century to the Present) 3
ART 20*	3	ENGL 45*	Studies in Fiction 3
ART 22	3	ENGL 48*	The Literature of the Holocaust 3
ART 23*	3	FRNC 1A*	Beginning French 5
ART 24*	3	FRNC 1A1	Beginning French 1 3
ARTH 1*	3	FRNC 1A2	Beginning French 2 3
ARTH 4*	3	FRNC 1B*	Elementary French 5
		FRNC 1B1	Elementary French 1 3
		FRNC 1B2	Elementary French 2 3
		FRNC 2A*	Intermediate French 4
		FRNC 2B*	Advanced French 4
		GERM 1A*	Beginning German 5
		GERM 1B*	Elementary German 5
		GERM 2A*	Intermediate German 4
		GERM 2B*	Advanced German 4
		GNST 31*	Women's Spirituality: An Examination of Ancient and Emerging Traditions 3
		HIS 1*	History of Western Civilization to 1600 3
		HIS 2*	History of Western Civilization Since 1600 3
		HIS 3*	World History: Beginnings to 1500 3
		HIS 4*	World History: 1500 to the Present 3
		HUMN 50*	The Artful Life 3
		HUMN 60*	Creativity and the Community 3
		HUMN 65*	The American Style 3
		HUMN 68*	World Mythology 3
		HUMN 72*	Contemporary Humanities 3
		ITAL 1A*	Beginning Italian 5
		ITAL 1B*	Elementary Italian 5
		JAPN 1A*	Beginning Japanese 5
		JAPN 1B*	Elementary Japanese 5
		JAPN 2A	Intermediate Japanese 4
		JAPN 2B	Advanced Japanese 4
		MUSA 11*	Jazz Improvisation 1
		MUSA 20A*	Guitar I 1
		MUSA 20B*	Guitar II 1
		MUSA 21A*	Piano I 1
		MUSA 21B*	Piano II 1
		MUSA 22A*	Jazz Piano I 1
		MUSA 22B*	Jazz Piano II 1



MCOM 42	Writing for Broadcasting	3
PHIL 60*	Introduction to Philosophy: Ethics	3
PHIL 65*	Introduction to Philosophy: Theory of Knowledge	3
PHIL 70*	Introduction to Political and Social Philosophy	3
PSCN 4*	Multiethnic/Cultural Communication	3

### Emphasis 3 - Social and Behavioral Science

Select at least 18 units from the list below that includes courses from at least two subjects/disciplines. When appropriate, courses can be counted toward completion of General Education requirements.

These courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

		Units
ADMJ 45*	Law and Democracy	3
ADMJ 50*	Introduction to the Administration of Justice	3
ADMJ 60*	Criminal Law	3
ADMJ 70*	Community Relations	3
ANTH 1*	Biological/Physical Anthropology	3
ANTH 2*	Introduction to Archaeology	3
ANTH 3*	Social and Cultural Anthropology	3
ANTH 4*	Language and Culture	3
ANTH 5*	Cultures of the U.S. in Global Perspective	3
ANTH 7	Introduction to Global Studies	3
ANTH 8*	Native American Cultures	3
ANTH 12*	Magic, Religion, Witchcraft and Healing	3
ANTH 13*	Forensic Anthropology	3
BUS 10*	Business Law	4
BUS 12*	Introduction to Business	3
BUS 17	Business Ethics and Society	3
BUS 20*	Law and Society	3
BUS 36	Introduction to Marketing	3
COMM 11*	Intercultural Communication	3
COMM 12	Gender, Sexual Identity, and Communication	3
ECD 52*	Childhood and Adolescence	3
ECD 56*	Child Growth and Development	3
ECD 67	Infant and Toddler Development and Caregiving	3
ECN 1*	Principles of Microeconomics	3
ECN 2*	Principles of Macroeconomics	3
ECN 10*	General Economics	3
ENTR 5	The Entrepreneurial Mindset	3
ES 1*	Introduction to Ethnic Studies	3
ES 2*	Contemporary Ethnic Minority Families in the U.S.	3
ES 3*	Introduction to Muslim-American Studies	3
ES 21	African-American History 20 Cent	3
ES 22	Mexican American History and Culture	3
ES 25	American Indian History and Culture	3
GLST 1	Introduction to Global Studies	3
GLST 2	Issues in Global Studies	3
GNST 31*	Women's Spirituality: An Examination of Ancient and Emerging Traditions	3
GEOG 2*	Cultural Geography	3
GEOG 3*	Economic Geography	3
GEOG 5*	World Regional Geography	3
GEOG 12*	Geography of California	3
GEOG 20*	Introduction to Geographic Information Systems	3

HLTH 8*	Human Sexuality	3
HIS 1*	History of Western Civilization to 1600	3
HIS 2*	History of Western Civilization Since 1600	3
HIS 3*	World History: Beginnings to 1500	3
HIS 4*	World History: 1500 to the Present	3
HIS 7*	U.S. History Through Reconstruction	3
HIS 8*	U.S. History Since Reconstruction	3
HIS 12*	History of California	3
HIS 19*	Hist Modern China and Japan	3
HIS 20*	The African-American Experience in U.S. History Through Reconstruction	3
HIS 21*	African-American History 20 Cent	3
HIS 22*	Mexican American History and Culture	3
HIS 25*	American Indian History and Culture	3
HIS 27*	U.S. Women's History	3
MCOM 40*	Introduction to Broadcasting	3
MCOM 41*	Introduction to Mass Communications	3
POSC 1*	Introduction to American Government	3
POSC 10	Seminar in Comparative Politics	3
POSC 12*	Introduction to California State and Local Government	3
POSC 20*	Comparative Politics	3
POSC 25*	Introduction to Political Theory	3
POSC 30*	International Relations	3
POSC 45*	Law and Democracy	3
PSY 1*	General Psychology	3
PSY 2*	Introduction to Psychological Methodology	3
PSY 3*	Social Psychology	3
PSY 4*	Brain, Mind and Behavior	3
PSY 6*	Abnormal Psychology	3
PSY 8*	Human Sexuality	3
PSY 12*	Lifespan Psychology	3
PSY 33*	Personal and Social Adjustment	3
PSY 45	Psychology of Creativity and Innovation	3
PSCN 1	Introduction to Psychology-Counseling in a Multicultural Environment	3
PSCN 4*	Multiethnic/Cultural Communication	3
PSCN 13*	Multicultural Issues in Contemporary America	3
SOCI 1*	Principles of Sociology	3
SOCI 2*	Social Problems	3
SOCI 3*	Introduction to Race and Ethnic Relations	3
SOCI 4*	Marriage and Family Relations	3
SOCI 5*	Introduction to Social Research Methods	3
SOCI 6*	Introduction to Gender	3
SOCI 8*	Human Sexuality	3
SOCI 10*	Introduction to Asian American Studies	3

### Emphasis 4 - Mathematics and Science:

Select at least 18 units from the list below that includes courses from at least two subjects/disciplines. When appropriate, courses can be counted toward completion of General Education requirements.

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Mathematics emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools.

Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.

		<b>Units</b>			
ANAT 1*	General Human Anatomy	5	PHSI 1*	Human Physiology	5
ANTH 1*	Biological/Physical Anthropology	3	PSY 4*	Brain, Mind and Behavior	3
ANTH 1L*	Biological/Physical Anthropology Laboratory	1	PSY 5*	Introductory Statistics for the Behavioral and Social Sciences	4
ANTH 13*	Forensic Anthropology	3			
ASTR 10*	Introduction to Astronomy: The Solar System	3	<b>Emphasis 5 - Kinesiology and Wellness</b>		
ASTR 20*	Introduction to Astronomy: Stars and The Universe	3	Select a total of 18 units and include 15 units from Group 1 and 3 units from Group 2. In Group 1, include courses from at least two subjects/disciplines. When appropriate, courses can also be counted toward completion of General Education requirements.		
ASTR 30*	Introduction to Astronomy Lab	1	<i>Strongly recommended: Students who are getting the AA degree with an emphasis in Kinesiology and Wellness are encouraged to take a minimum of three activity courses in at least three different PEAC Activity areas: Aquatics, Fitness, Individual Sports, Team Sports, and Dance.</i>		
BIOL 2*	Principles of Cell/Molecular Biology and Genetics	5			
BIOL 4*	Principles of Animal Biology and Evolution	4			
BIOL 6*	Principles of Plant Biology and Ecology	4			
BIOL 10*	Introduction to the Science of Biology	4			
BIOL 25*	Human Heredity and Evolution	3			
BIOL 31*	Introduction to College Biology	4			
BIOL 50*	Anatomy and Physiology	4			
BIOT 20*	Chemistry for Biotechnology	4			
BIOT 30*	Basic Biotechnology: Introduction to Cell and Molecular Biology	4			
					<b>Units</b>
CHEM 1A*	General College Chemistry I	5	<b>Group 1-(Minimum 15 units selected from the following):</b>		
CHEM 1B*	General College Chemistry II	5	ANAT 1	General Human Anatomy	5
CHEM 10*	Introduction to Chemistry	4	BIOL 2	Principles of Cell/Molecular Biology and Genetics	5
CHEM 12A*	Organic Chemistry I	5	BIOL 4	Principles of Animal Biology and Evolution	4
CHEM 12B*	Organic Chemistry II	5	BIOL 6	Principles of Plant Biology and Ecology	4
CHEM 30A*	Introductory and Applied Chemistry I	4	BIOL 10	Introduction to the Science of Biology	4
CHEM 30B*	Introductory and Applied Chemistry II	4	BIOL 31	Introduction to College Biology	4
CHEM 31*	Introduction to College Chemistry	4	BIOL 50	Anatomy and Physiology	4
ENSC 10*	Humans and the Environment	3	CHEM 1A	General College Chemistry I	5
ENSC 11*	Humans and the Environment with Laboratory	4	CHEM 1B	General College Chemistry II	5
ENSC 15	Agroecology	3	CHEM 10	Introduction to Chemistry	4
ENSC 15L	Agroecology Laboratory	1	CHEM 12A	Organic Chemistry I	5
GEOG 1*	Introduction to Physical Geography	3	CHEM 12B	Organic Chemistry II	5
GEOG 1L*	Introduction to Physical Geography Laboratory	1	CHEM 30A	Introductory and Applied Chemistry I	4
GEOG 8*	Introduction to Weather and Climate	3	CHEM 30B	Introductory and Applied Chemistry II	4
GEOG 13	Climate Studies	3	CHEM 31	Introduction to College Chemistry	4
MICR 1*	Microbiology	5	EMS 1	First Responder	2.5
MTH 1*	Calculus I	5	HLTH 1	Introduction to Health	3
MTH 2*	Calculus II	5	HLTH 4	Women and Health	3
MTH 3*	Multivariable Calculus	5	HLTH 8	Human Sexuality	3
MTH 4*	Elementary Differential Equations	3	HLTH 60	Responding to Emergencies	1
MTH 6*	Elementary Linear Algebra	3	KINE 1*	Introduction to Kinesiology & Physical Education	3
MTH 8*	Discrete Mathematics	4	KINE 2*	Introduction to Athletic Training	4
MTH 15*	Applied Calculus I	3	KINE 3BB*	Introduction to the Principles of Coaching Baseball	2
MTH 16*	Applied Calculus II	3	KINE 5*	Introduction to the Components of Physical Fitness - the Human Body	3
MTH 20*	Pre-Calculus Mathematics	5	KINE 12BK*	Introduction to Basketball Officiating	2
MTH 31*	College Algebra	3	KINE 16*	Theory & Technique of Offensive Football	2
MTH 33*	Finite Mathematics	4	KINE 17*	Theory & Technique of Defensive Football	2
MTH 36	Trigonometry	3	KINE 3	Introduction to Principles of Coaching Interscholastic Sports: Beyond the Basics	3
MTH 37	Trigonometry with an Emphasis on its Geometric Foundations	5	KINE 3FT	Introduction to Coaching Football	2
MTH 40*	Concepts of Mathematics	3	KINE 3SF	Introduction to Coaching Softball	2
MTH 41*	Number Systems	3	KINE 3SO	Introduction to Coaching Soccer	2
MTH 43*	Introduction to Probability and Statistics	4	KINE 3TK	Introduction to Coaching Track and Field	2
MTH 47*	Mathematics for Liberal Arts	3	KINE 4	Introduction to Sports Management	3
PSCI 15*	Descriptive Physical Science: Introduction to Principles of Physical Science	5	KINE 6	Performance Enhancement thru Mental Training	3
PHYS 2A*	Introduction to Physics I	4	KINE 7	Introduction to Lifetime Fitness	3
PHYS 2B*	Introduction to Physics II	4	KINE 8	Introduction to Sport in Contemporary Society	3
PHYS 3A	College Physics A	4	KINE 10	Nutrition for Fitness and Fat Loss	3
PHYS 3B	College Physics B	4	KINE 11	Nutrition For Sports And Human Performance	3
PHYS 4A*	General Physics I	5	KINE 12BB	Introduction to Baseball Officiating	2
PHYS 4B*	General Physics II	5	KINE 12FT	Introduction to Football Officiating	2
PHYS 5*	Modern Physics	3	KINE 12TK	Introduction to Track & Field Officiating	2
PHYS 11*	Descriptive Physics	4	KINE 14	Introduction to Health and Fitness For Your Disability	3

KINE 15	Introduction to Personal Fitness Training	3
KINE 23	Techniques of Strength Training Instruction	3
KINE CSA	College Success for Athletes	1
KINE BBDT	Theory and Technique of Defensive Baseball	2
KINE BBOT	Theory and Technique of Offensive Baseball	2
KINE PDBB	Principles of Defensive Baseball	2
KINE POBB	Principles of Offensive Baseball	2
MICR 1	Microbiology	5
NUTR 1	The Science of Nutrition	3
NUTR 57	Nutrition for Fitness and Fat Loss	3
NUTR 58	Nutrition for Sports and Athletic Performance	3
PHYS 3A	College Physics A	4
PHYS 3B	College Physics B	4
PHYS 2A	Introduction to Physics I	4
PHYS 2B	Introduction to Physics II	4
PHYS 11	Descriptive Physics	4
PHSI 1	Human Physiology	5
PSY 1	General Psychology	3
PSY 2	Introduction to Psychological Methodology	3
PSY 3	Social Psychology	3
PSY 4	Brain, Mind and Behavior	3
PSY 8	Human Sexuality	3
PSY 12	Lifespan Psychology	3
PSCN 1	Introduction to Psychology-Counseling in a Multicultural Environment	3
PSCN 4	Multiethnic/Cultural Communication	3
PSCN 10	Career and Educational Planning	2
PSCN 12	Self-Esteem For Success	2
PSCN 21	Strategies for College Success	1
PSCN 22	College Success Series	0.5-1.5
PSCN 23	College Readiness	3
SOCI 1	Principles of Sociology	3
SOCI 2	Social Problems	3
SOCI 3	Introduction to Race and Ethnic Relations	3
SOCI 8	Human Sexuality	3

<b>Group 2 -</b>	<b>Units</b>
<b>(Minimum 3 units selected from the following)</b>	
Any ATHL or PEAC Course(s)	3
<hr/> <b>Total Units</b>	<hr/> <b>18 - 21</b>

## SERVICE LEARNING (SERV)

(NEW COURSE)

### 5A Service Learning for World Languages: **2 units** Beginning

Practice of a World Language in a real setting that requires involvement with local community organizations and/or schools, approved by instructor. Introduction to practical skills and knowledge of cultural differences through volunteer field projects. Class will meet one hour per week on campus for reflection and discussion of community issues, and students will serve at least 3 hours per week in community agencies or schools.

**Prerequisite:** SPA 1B (completed with a grade of "C" or higher) or, SPA 1B2 (completed with a grade of "C" or higher) or, CHIN 1B (completed with a grade of "C" or higher) or, FRNC 1B (completed with a grade of "C" or higher) or, FRNC 1B2 (completed with a grade of "C" or higher) or, ITAL 1B (completed with a grade of "C" or higher) or, JAPN 1B (completed with a grade of "C" or higher)

(NEW COURSE)

### 5B Service Learning for World Languages **2 units**

Further practice of a World Language in a real setting that requires involvement with local community organizations and/or schools, approved by instructor. Introduction to practical skills and knowledge of cultural differences through volunteer field projects. Class will meet one hour per week on campus for reflection and discussion of community issues, and students will serve at least 3 hours per week in community agencies or schools.

**Prerequisite:** SERV 5A (completed with a grade of "P" or higher)

(NEW COURSE)

### 5C Service Learning for World Languages: **2 units** Advanced Intermediate

Placement in meaningful volunteer projects in community organizations or schools, where a World Language is spoken. Advanced intermediate skills and knowledge required to serve as effective volunteers or tutors. Discuss specific problems in the community and investigate and carry out service projects to address them. Meets one hour per week on campus for reflection and discussion, and students serve at least 3 hours per week in community agencies or schools.

**Prerequisite:** SERV 5B (completed with a grade of "P" or higher)

(NEW COURSE)

### 5D Service Learning for World Languages: **2 units** Advanced

Placement in meaningful volunteer projects in community organizations or schools, where a World Language is spoken. Advanced skills and knowledge to serve as effective volunteers or tutors. Discuss specific problems in the community and investigate and carry out service projects to address them. Meets one hour per week on campus for reflection and discussion, and students serve at least 3 hours per week in community agencies or schools

**Prerequisite:** SERV 5C (completed with a grade of "P" or higher)

## SPANISH (SPAN)

(REVISED DEGREE)

### SPANISH

#### ASSOCIATE IN ARTS FOR TRANSFER (AA-T)

This program includes four semesters of thorough linguistic and cultural training in Spanish, along with courses that shed light on Mexico's and the Spanish-speaking world's role in history, art, the humanities, and our own contemporary society. Spanish is one of the world's most influential languages and there are opportunities for working in many industries where knowledge of Spanish is considered valuable. Many majors at four-year universities have foreign language requirements that would be satisfied with the language courses in this degree program. Courses offered in this program meet general education and transfer requirements. Successful completion of the transfer degree in Spanish guarantees the student acceptance to a local California State University to pursue a baccalaureate degree with Junior status.

#### Required Core (\*)

SPA 1A	Beginning Spanish	5
	or	
SPA 1A1	Beginning Spanish 1	3
	and	
SPA 1A2	Beginning Spanish 2	3
SPA 1B	Elementary Spanish 1	5
	or	
SPA 1B1	Elementary Spanish 1	3
	and	
SPA 1B2	Elementary Spanish 2	3
SPA 2A	Intermediate Spanish	4
SPA 2B	Advanced Spanish	4

#### (\*)Substitution Courses:

If a student places out of any core course(s) and is not awarded units for that course, the student will need to take additional units to compensate for the course/units required to reach 18 total units in the major (Title 5 regulations). Course substitutions are made at the discretion of the local college and may or may not be delineated in the local degree.

#### Additional Required Course

ENGL 4	Critical Thinking and Writing about Literature	3
	or	
ENGL 7	Critical Thinking and Writing across Disciplines	3

#### Required courses for the major: 21 units

CSU/GE or IGETC (CSU): 37-39 units

(Possible double counting 9 units)

CSU transfer Elective units as needed to reach 60 CSU transferable units.

All courses in the major area of emphasis are required to have a grade of "C" or higher, and a cumulative GPA of 2.0 must be achieved.

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**Total Units**

**21 - 23**

## SOCIOLOGY (SOCI)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGES)

### 10 Introduction to Asian American Studies 3 units

(See also ES 10)

An examination of the experiences and perspectives of Asian Americans from mid-1800's to the present. Major topics will include immigration, law, citizenship, racialization, colonialism, imperialism, war, family, political involvement, social movements, education, and employment. Provides a comparative context for understanding the panethnic movement. May not receive credit if ES 10 has been completed.

**Requisites: none**

## THEATER ARTS (THTR)

(REVIEWED COURSE WITH NONSUBSTANTIAL CHANGES - EFFECTIVE SPRING 2018)

### 3 Improvisation for the Theater 3 units

Introduction to the techniques and theories of improvisation and its various uses in theater. Development of the ability to think quickly, develop characters, work in an ensemble and create spontaneously through various exercises. Recommended for non-theater as well as theater majors.

**Requisites: none**

(UPDATED PREREQUISITES - EFFECTIVE SPRING 2018)

### 4 Acting on Camera 3 units

Introduction to the principles and techniques of acting on camera. Different techniques for work with three cameras, commercials, acting for film and acting for television. Work with technique for various on camera types of auditions, i.e., commercials, film and television.

**Strongly Recommended: THTR 2 , THTR 1**

(RENAMED/RENUMBERED AND UNIT CHANGES)

### 5A Introduction to Theater for Young Audiences 3 units

Participate in a theater production to be performed for local K-12 students. Plays will be cast by audition, however, everyone who enrolls will be a part of the production.

**Requisites: none**

(NEW COURSE)

### 5B Intermediate Theater for Young Audiences 3 units

Participate in a theater production to be performed for local K-12 students. Plays will be cast by audition, however, everyone who enrolls will be a part of the production.

**Prerequisite: THTR 5A (completed with a grade of "C" or higher)**

(NEW COURSE)

**14 American Cultures in Theater 3 units**

The history, representation and contributions of various ethnic groups in American theater and the study of theater as an instrument for expressing and understanding cultural identity. The focus will be on at least three of the following cultural groups: African Americans, Asian Americans, European Americans, Latin Americans and Native Americans.

**Strongly Recommended: Eligibility for ENGL 1A**

(NEW COURSE)

**15A Introduction to Directing for Theater 3 units**

Learn the basics of directing actors working on dramatic writing for live performance. Focus will be given to blocking, text analysis, structuring rehearsal, leading a group in artistic collaboration.

**Prerequisite: THTR 1**

(DELETED COURSES - EFFECTIVE SPRING 2018)

**20 Intro to Design for Theater**

**30 Emerging Work**

**40 Intro to Technical Theater**

**50B Theater Management: The Basics**

**50C Theater Management: Intermediate**

**50D Theater Management: Advanced**

(NEW COURSE)

**61A Social Issues Theater for Young Audiences 3 units**

Chabot theater students meet with local K-12 students to create a unique theatrical piece based on issues important to those students. The piece is then performed in the same K-12 schools.

**Requisites: none**

## WOMEN'S STUDIES (WMST)

(NEW CERTIFICATE)

(EFFECTIVE SPRING 2018 - PENDING STATE APPROVAL)

### WOMEN'S STUDIES

#### CERTIFICATE OF ACHIEVEMENT

The Women's Studies program offers students an understanding of gender, socialization and women's experiences across cultures; knowledge of women's literary, political, and historical achievements; strategies for improving communication; and promoting healthy behaviors in our personal, social, and work lives. The program includes experiential learning through a service-learning component.

#### Career Opportunities in Women's Studies

Students who complete a cross-disciplinary course of study that focuses on women's experiences often pursue careers in the social justice field. Possible career paths include education, law, non-profit organizations, public health, and social service agencies.

#### Required Courses

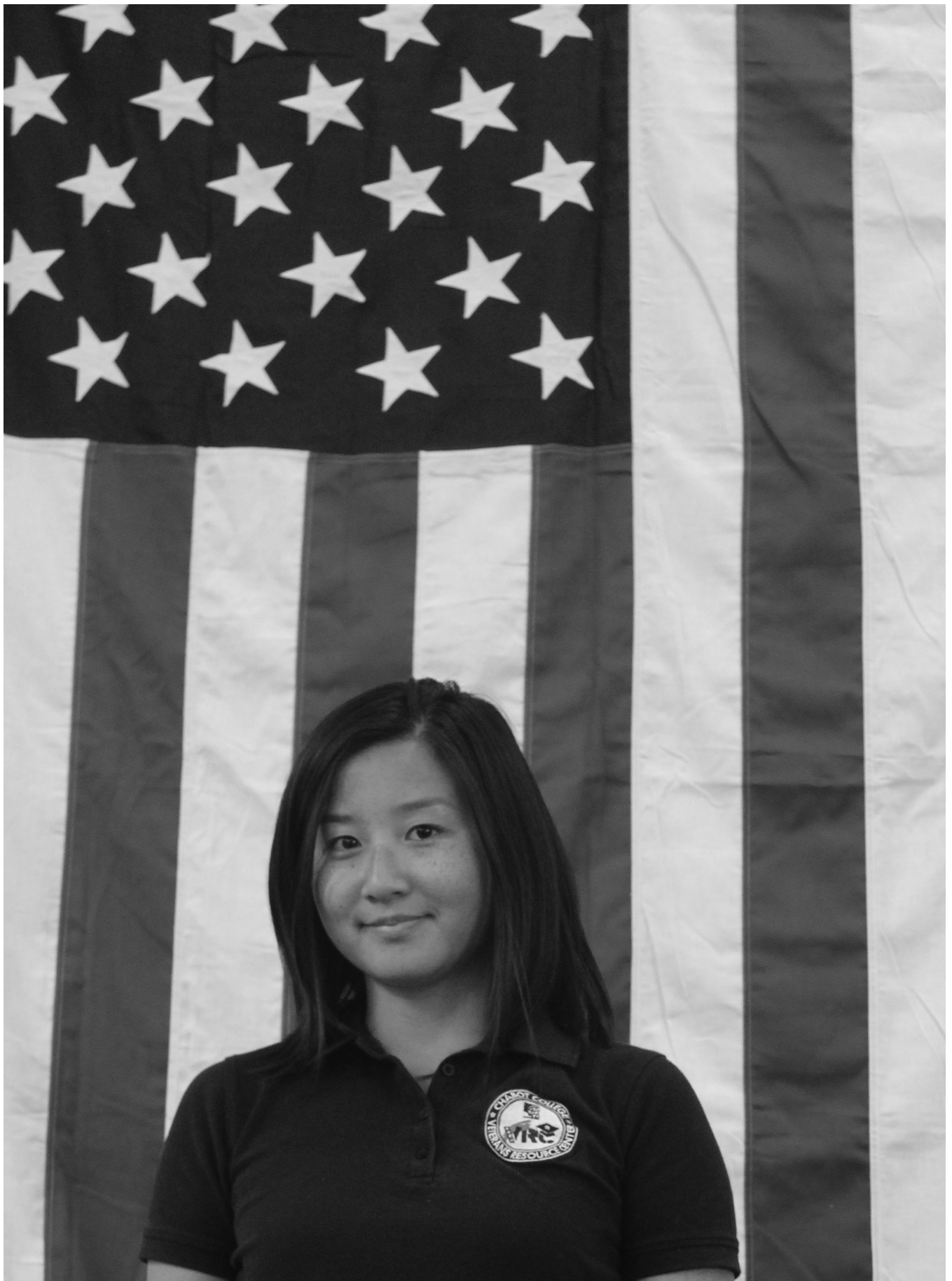
COMM 12	Gender, Sexual Identity, and Communication	3
ENGL 32	U.S. Women's Literature	3
HIS 27	U.S. Women's History	3
HLTH 4	Women and Health	3
SERV 85A	Learning in Action: Beginning	3
SOCI 6	Introduction to Gender	3

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**Total Units 18**









# ADVANCED PLACEMENT PROGRAM

## COLLEGE CREDIT FOR ADVANCED PLACEMENT (AP) EXAMINATIONS

Credit may be earned for the College Entrance Examination Board (CEEB) Advanced Placement (AP) Exams with scores of 3, 4, or 5 as listed below. **Course credit and units granted at Chabot College may differ from course credit and units granted by a transfer institution.**

For the most up-to-date information on transfer credit for AP exams, contact your transfer school or counselor.

AP EXAM	Chabot College Degrees & Certificates	Chabot College AA/AS: GE Area & Units	CSU GE	CSU Transfer Units	IGETC	Maximum UC Transfer Units
Art History	Art History 4 or 5	Area C 3 semester units	Area C1 or C2 3 semester units	6 semester units	Area 3A or 3B 3 semester units	8 quarters/ 5.3 semester units
Art (Studio) 2-D Design, 3-D Design, Drawing	N/A	Area C, portfolio review required 3 semester units	N/A	3 semester units each	N/A	8 quarters/ 5.3 semester units (Maximum units for all Studio Art Exams)
Biology	Biology 31	Area B 4 semester units	Area B2 and B3 4 semester units	6 semester units	Area 5B & 5C 4 semester units	8 quarters/ 5.3 semester units
Calculus AB/AB Subscore	Math1	Area A3 on AA/A2 on AS & Math Proficiency 5 semester units	Area B4 3 semester units	3 semester units*	Area 2A 3 semester units	4 quarters/ 2.7 semester units max between AB and AB/ subscore**
Calculus BC	Math 2	Area A3 on AA/A2 on AS & Math Proficiency 5 semester units	Area B4 3 semester units	6 semester units*	Area 2A 3 semester units	8 quarters/ 5.3 semester units**
<b>AP CALCULUS EXAM LIMITATIONS:</b>						
Chemistry	Chemistry 1A	Area B 5 semester units	Areas B1 and B3 4 semester units	6 semester units	Area 5A & 5C 4 semester units	8 quarters/ 5.3 semester units
Chinese Language & Culture	N/A	Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
Computer Science A	Computer Science 14	Area A3 on AA/A2 on AS 4 semester units	N/A	3 semester units**	N/A	2 quarters/ 1.3 semester units***
Computer Science AB	Computer Science 14 & 19A	Area A3 on AA/A2 on AS 8 semester units	N/A	6 semester units**	N/A	4 quarters/ 2.7 semester units***
Computer Science Principles	Computer Science N/A -- see CS faculty	Area A3 on AA/A2 on AS 3 semester units	N/A	6 semester units**	N/A	8 quarters/ 5.3 semester
<b>AP CS EXAM LIMITATIONS (CS exam limits apply to CS A and CS AB exams only):</b>						
Economics-Macroeconomics	Economics 2	Area D 3 semester units	Area D 3 semester units	3 semester units	Area 4 3 semester units	4 quarters/ 2.7 semester units
Economics-Microeconomics	Economics 1	Area D 3 semester units	Area D 3 semester units	3 semester units	Area 4 3 semester units	4 quarters/ 2.7 semester units
English - Language & Composition	English 1A	Area A1 or Area C 3 semester units	Area A2 3 semester units	6 semester units	Area 1A 3 semester units	8 quarters/ 5.3 semester units*
English - Literature & Composition	English 1A	Area A1 or Area C 3 semester units	Area A2 and C2 6 semester units	6 semester units	Area 1A or 3B 3 semester units	8 quarters units/ 5.3 semester units*
<b>AP ENGLISH EXAM LIMITATIONS: *8 QUARTER/5.3 SEMESTER UNITS MAXIMUM FOR BOTH</b>						



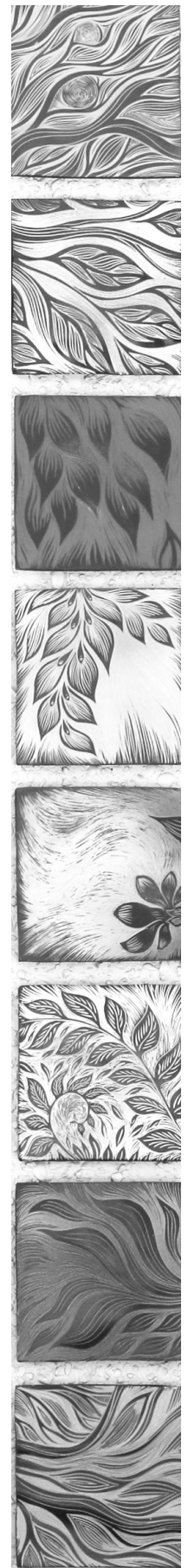
COLLEGE CREDIT FOR ADVANCED PLACEMENT (AP) TESTS

AP EXAM	Chabot College Degrees & Certificates	Chabot College AA/AS: GE Area & Units	CSU GE	CSU Transfer Units	IGETC	Maximum UC Transfer Units
Environmental Science		Area B 4 semester units	Area B2 and B3 (if taken prior to Fall 2009) or Area B1 and B3 (regardless of when taken). 4 semester units	4 semester units	Area 5A & 5C 3 semester units	4 quarters/ 2.7 semester units
French Language and Culture	French 1B	Area A3 on AA/A2 on AS or Area C - 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
French Literature		Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
German Language and Culture	German 1B	Area A3 on AA/A2 on AS or Area C - 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
Government & Politics-Comparative	Political Science 20	Area D 3 semester units	Area D 3 semester units	3 semester units	Area 4 3 semester units	4 quarters/ 2.7 semester units
Government and Politics-U.S.	Political Science 1	Area D or American Institutions 3 semester units	Area D and US-2 3 semester units	3 semester units	Area 4 and US 2 3 semester units	4 quarters/ 2.7 semester units
History-European	History 1 or 2	Area C or D 3 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4 3 semester units	8 quarters/ 5.3 semester units
History-U.S.	History 7 or 8	Area C or D or American Institutions 3 semester units	Area C2 or D and US-1 3 semester units	6 semester units	Areas 3B or 4 and US 1 3 semester units	8 quarters/ 5.3 semester units
History-World		Area C or D 3 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4 3 semester units	8 quarters/ 5.3 semester units
Human Geography		Area D 3 semester units	Area D 3 semester units	3 semester units	Area 4 3 semester units	4 quarters/ 2.7 semester units
Italian Language & Culture		Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
Japanese Language & Culture		Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
Latin		Area C 3 semester units	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	4 quarters/ 2.7 semester units



COLLEGE CREDIT FOR ADVANCED PLACEMENT (AP) TESTS

AP Exam	Chabot College Degrees & Certificates	Chabot College AA/AS: GE Area & Units	CSU GE	CSU Transfer Units	IGETC	Maximum UC Transfer Units
Music	Music 2A & 2B	Area C 3 semester units	Area C1 (if taken prior to Fall 2009) 3 semester units	6 semester units	N/A	8 quarters 5.3 semester units No units granted for sub-score
Physics 1	none	Area B 4 semester units	Areas B1 and B3 4 semester units*	4 semester units*	Areas 5A & 5C 4 semester units	8 quarters/ 5.3 semester units units**
Physics 2	none	Area B 4 semester units	Areas B1 and B3 4 semester units*	4 semester units*	Areas 5A & 5C 4 semester units	8 quarters/ 5.3 semester units
Physics B	Physics 4A	Area B 5 semester units	B1 and B3 4 semester units*	4 semester units*	Areas 5A & 5C 4 semester units	8 quarters/ 5.3 semester units**
Physics C -Mechanics	Physics 4A	Area B 5 semester units	Area B1 and B3 4 semester units*	4 semester units*	Areas 5A & 5C 3 semester units	4 quarters/ 2.7 semester units**
Physics C-Electricity/ Magnetism	Physics 4B	Area B 5 semester units	Area B1 and B3 4 semester units*	4 semester units*	Areas 5A & 5C 3 semester units	4 quarters/ 2.7 semester units**
<b>AP PHYSICS EXAM LIMITATIONS:</b>						
Psychology	Psychology1	Area D 3 semester units	Area D 3 semester units	3 semester units	Area 4 3 semester units	4 quarters/ 2.7 semester units
Spanish Language	Spanish 1B	Area A3 on AA/A2 on AS or Area C 5 semester units	Area C2 3 semester units	6 semester units	Areas 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
Spanish Language/ Culture		Area C 5 semester units	Area C2 3 semester units	6 semester units	Areas 3B and 6A 3 semester units	8 quarters/ 5.3 semester units
Statistics	Math 43	Area A3 for AA/A2 for AA & Math Proficiency 4 semester units	Area B4 3 semester units	3 semester units	Area 2 3 semester units	4 quarters/ 2.7 semester units
				*Maximum 4 semester units toward GE and 6 semester units toward transfer		
					**Maximum 8 quarters/ 5.3 semester units for all Physics exams	





## INTERNATIONAL BACCALAUREATE (IB) EXAM CREDIT

International Baccalaureate (IB) exams may be applied toward the California State University (CSU), CSU General Education (CSU GE) pattern, University of California (UC), and the Intersegmental General Education Transfer Curriculum (IGETC). Credit is awarded for Higher Level (HL) exams only. All units listed in the chart below are semester units.

Students should be aware that colleges courses, AP exams, IB exams, and A-Level exams may duplicate one another. In the event that exams and/or college course duplicate one another in content, course credit will only be awarded once. Students should contact individual campuses for more information on how subject credit may be granted for their major. All transfer information listed below updated yearly and is subject to change.

IB exams will not be used to satisfy unit, general education, or course requirements for Chabot College associate degrees or certificates.

International Baccalaureate (IB) Exam	CSU GE Area + IB Score	Maximum CSU Transfer Units Awarded	CSU GE Units Awarded	IGETC Area (Score of 5, 6, or 7)	IGETC Units Awarded	Maximum UC Transfer Units (Score of 5, 6, or 7)
Biology HL	B2 Score = 5	6	3	5B (without lab)	3	5.3
IB Chemistry HL	B1 Score = 5	6	3	5A (without lab)	3	5.3
IB Economics HL	D Score =5	6	3	4	3	5.3
IB Geography HL	D	6	3	4	3	5.3
IB History (any region) HL	C2 or D Score=5	6	3	3B or 4	3	5.3
IB Language A1 HL* (prior to FA 2013)	C2 Score=4 (any language)	6	3	3B (any language) 3B and 6A (any language except English)	3	5.3
IB Language A2 HL* (prior to FA 2013)	C2 Score=4 (any language)	6	3	3B (any language) 3B and 6A (any language except English)	3	5.3
IB Language A: Language and Literature HL	C2 Score+4	6	3	3B (any language except English)	3	5.3
IB Language B (any language) IB HL*	N/A Score=4	6	0	6A	3	5.3
IB Mathematics HL	B4 Score=4	6	3	2A	3	5.3
IB Physics HL	B1 Score=5	6	3	5A (without lab)	3	5.3
IB Psychology HL	D Score=5	6	3	4A	3	5.3
IB Theatre HL	C1 Score=4	6	3	3A	3	5.3

\*The IB Curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.



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COLLEGE

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