



## PLANNING & RESOURCE COUNCIL

### AGENDA

April 6, 2011

Purpose: **Participatory Governance Leaders Meeting**  
Location: **PRESIDENT'S CONFERENCE ROOM**  
Time: **1<sup>st</sup> & 3<sup>rd</sup> Wednesday - 1:30 p.m. to 3:00 p.m.**

<b>DATE April 6</b>	<b>AGENDA TOPIC</b>	<b>DISCUSSION LEADER</b>	<b>EXPECTED OUTCOME</b>
1:30 - 1:35	Introduction of Guests	Miner	
1:35 - 1:40	Approval of Minutes for <b>March 16, 2011*</b>	Miner	Approval
1:40 - 1:50	Accreditation Self Study Update	Hueg	Information/Discussion
1:50 - 2:05	Teaching & Learning Center Taskforce Progress Report	Starer	Information/Discussion
2:05 - 2:15	Learning and Outcomes Assessment	Holcroft	Information/Discussion
2:15 - 2:50	Budget Update	Miner/Treanor	Information/Discussion
2:50 - 3:00	•Questions/Rumors/ Announcements	Miner	Information

\*ATTACHMENTS:

Minutes 3.16.11



FOOTHILL COLLEGE

## PLANNING AND RESOURCE COUNCIL MINUTES

March 16, 2011

### IN ATTENDANCE:

Anderson, Balducci, Bourquin, Bowie, Casey, Cellile, Chenoweth, Davison, Day, Dehnad, Gallagher, Heiser, Hueg, Kue, McAlpin, Meade, Miner, Mumment, Myers, Noone, Oeh, Ong, Okamura, Orrell, Patyk, Schreiber, Southerby, Starer, Stenger, Swett, Taketa, Treanor

### ANNOUNCEMENTS AND INTRODUCTIONS – MINER

Guests: Chris White, Judy Baker, Sara Seyedin, Art Hand, Gertrude Gregorio, Margo Dobbins

### APPROVAL OF MINUTES FOR FEBRUARY 16, 2010

APPROVED BY CONSENSUS

### **ITEM I - ACCREDITATION UPDATE - HUEG**

By end of next week all standards will be done. The intro has been completed.

### **ITEM II - DIVISION PLANS**

#### **BUSINESS & SOCIAL SCIENCE – SEYEDIN**

See powerpoint

Who we are:

- Accounting\*
- Advertising
- American Studies
- Anthropology\*
- Business\*
- Business International Studies
- Child Development\*
- Economics\*
- Education
- General Studies
- Geography
- GIS
- History\*
- Law and Society
- Philosophy\*
- Political Science\*
- Psychology\*
- Real Estate\*
- Social Science
- Sociology\*
- Women's Studies\*

Comprised of:

- 21 departments/programs (13 Prog Reviews)
  - Travel Careers ended in June 2010
- 08/09 WSCH: 101,500
- 08/09 Productivity: 555
- 08/09 FTEF: 53.02
- 21 Fulltime faculty (20.08 FTEF, 38%)
  - 5 Probationary (Tenure track)

- 50-100 Part-time faculty (32.94 FTEF, 62%)

- Approx 48% of enrollment is online

Resource Requests:

- FTEF Positions

- Psychology
  - Business

- \$13,090 for SPSS Purchase

- \$20,000 for the Tutorial Center

Assumes B Budget, Perkins and Lottery are funded

## **PHYSICAL SCIENCES & MATH - MURRAY**

See powerpoint

Resource Requests

- Chemistry

- Evening Lab Technician

- PSME

- Center

- Coordinator

- IF:

- NSF STEMway: reduce B---budget \$20K for each 3 years

- DOL Grant: reduce B---budget \$20K for each 3 years

## **COMPUTER INFORMATION SYSTEM - BAKER**

See powerpoint

Who we are:

- Offers dozens of university-transferable courses leading to degrees and industry-recognized certificates

- Day, evening, weekend, and online courses

- Training for Oracle, CISCO, A+, LINUX and Microsoft certification exams

- Teach employable skills in:

- Enterprise Networking

- Internet Technology

- Computer Software Development

- Interactive & Multimedia Technology

- BioInformatics

- Database Management

- Video and Computer Game Design

Resource Requests

Upgrade Servers

- Cost: \$23,807

- Need to upgrade core servers and NetLab servers

- Propose replacing the existing 31 servers
  - with a Server blade enclosure and 3 blades

- Benefits

- Cut cost of operation

- Increase the level of reliability of our servers

- Cut power consumption by two thirds

- Reduce noise pollution
- Reduce heat generation
- PG&E offers an energy rebate for server reductions based on the number of old servers that are removed (up to \$200 per server)

Student Tutors for Online Courses

- Cost: \$8,100
- Students enrolled in fully online courses have limited access to on-campus tutoring services
- CTIS students need access to virtual tutoring services via the Internet using teleconferencing such as CCC Confer
- Need to hire student tutors to provide these services
  - Student tutors will be those who have successfully completed CTIS courses and have completed training in virtual tutoring and Etudes
  - Funds are requested to pay 3 student tutors for 5 hours per week for Adjunct Mentoring
- Cost: \$12,750
- Adjunct faculty members require guidance and support in order to be effective and successful
- CTIS relies heavily on adjunct faculty members in the CAST and COIN Departments
- Funds requested for .056 release time to one full-time faculty member for 3 quarters in order to serve as a mentor to adjuncts

## **GLOBAL ACCESS – BAKER**

See powerpoint

Resource Requests:

Etudes course management system

- Online Help Desk hosting
- Verio website hosting and server services
- Surveygizmo online survey/forms services
- Equipment and software for Faculty Media Lab

## **ADAPTIVE LEARNING - GREGORIO**

See powerpoint

Mission:

- To provide equal access to students with disabilities to the college's educational programs.
- To prepare students and provide career programs in the special education and disability-related fields.

### **Students with disabilities:**

§Transfer to 4 year colleges & universities

§Certificate/A.A. and A.S. degree

§Basic skills

§Vocational training

§Older adults

§Veterans

§Re-entry students

Who we are:

- Professionals and paraprofessionals in the Special Education, Adaptive Fitness, and Health & Aging-related fields
- Individuals interested in changing careers
- Parents with disabled children
- K-12 and community college educators
- Individuals who are re-entering the workforce
- Returning students

Resource Requests: See powerpoint

### **ITEM III – OPC UPDATE - PATYK**

See Handout

OPC streamlined/modified “Criteria for Budget Reductions.”

\$3.2 million (or more) in cuts at best case scenario. If Prop 98 and tax extension don't go forward, that number will be higher.

Recommendations included:

- Need to be looking forward depending on needs.
- Combined mission under program mix.
- Included support services under each mission.
- Organization efficiency thinking more strategically with resources. During difficult times important we think outside of FH.
- Reassigned time needs to be accountable.
- Create more of a scientific approach along with qualitative needs.
- Asked, if there was a 10% reduction across the board, how would you go about accomplishing that???

Judy commended the OPC for outstanding work in bringing this forward. We are focusing on core missions. But we must look beyond that as criteria because we will be cutting programs that address core missions. Are there qualitative measures that would be there, i.e. the ability for students to get a job, are we duplicating efforts in some areas and can we address those? The demand will continue to exceed our capacity to fill the needs.

### **ITEM IV - MINER**

QUESTIONS/RUMORS/ANNOUNCEMENTS

Miner – budget info

See handout

What do we apply the principles to?? What is grim around this is 1320 has already been cut and now looking to deleting 210 classes already reflected in the cut. Left with best case scenario, we would need to still reduce/eliminate 34 positions or in dollars - \$2.7 million. If Prop 98 and tax does NOT extend...we are looking at doubling of those numbers perhaps 68 positions and \$5.5 million. We can't eliminate 68 positions. To achieve the cut we would have an ending balance of \$3 million to meet district's 11-12 year with a balanced budget with one time dollars. We are buying time but not eliminating the problem.

By our June meeting, we will ask PaRC for scenarios for the kind of cuts needed to reach \$5.5 million. What would that look like? Will need to describe it very generally without naming names/programs. Instructional side of house we will be looking at 2012-13 programs that will have to be eliminated. We will need to think about that year as the "finish up year" for certain programs. We must warn students that the last sequence of courses will be 12-13 year. March 15 notices would be delivered 2012 for programs going away.

If worst case scenario, this district will run out of dollars March 2012. By State mandates, at least 50% of those dollars must be spent on instruction. PaRC will be looking at some proposals in June of what it would look like if we handle this burden ourselves. FH will not be eliminating 34 positions. But we will be asking at the negotiations table, what can we do to make up that gap? Transparency and confidentiality will be challenging. FH cabinet will meet with DA senior staff focusing on instructional programs. There will be a cabinet retreat April 25 to look at the detail of every category of expenditure and will discuss the "big picture." Every dean and program director will talk with cabinet to review what could or could not happen in their area. Total honesty will be provided at those meetings and then brought to PaRC due to confidentiality and to provide a venue to have open discussion. Unfortunately, we will not be the same institution in 2012-13.

## **Course-Level and Institution-Level SLO summary**

### **2009-2010 Submissions Database**

- A total of: 2122 of 2202 (96.41%) Course IDs have Student Learning Outcomes defined.
  - Total Course IDs with SLO #1 defined: 2122 (96.41%)
  - Total Course IDs with SLO #2 defined: 2116 (96.14%)
  - Total Course IDs with SLO #3 defined: 479 (21.76%)
  - Total Course IDs with SLO #4 defined: 229 (10.4%)
  - Total Course IDs with SLO #5 defined: 107 (4.86%)
  - Total Course IDs with SLO #6 defined: 69 (3.13%)
  - Total Course IDs with SLO #7 defined: 50 (2.27%)
  - Total Course IDs with SLO #8 defined: 29 (1.32%)
  - Total Course IDs with SLO #9 defined: 16 (0.73%)
  - Total Course IDs with SLO #10 defined: 7 (0.32%)
- A total of: 1594 of 2202 (73.69%) have Institutional Learning Outcomes (ILO) defined.
  - Total Course IDs with ILO #1 defined: 413 (18.76%)
  - Total Course IDs with ILO #2 defined: 652 (29.62%)
  - Total Course IDs with ILO #3 defined: 265 (12.04%)
  - Total Course IDs with ILO #4 defined: 292 (13.27%)
- A total of: 1349 of 2201 (61.29%) have Strategies defined.
- A total of: 732 of 2201 (33.26%) have Reflections defined.

### **2010-2011 Submissions Database**

- A total of: 768 of 2201 (35.98%) Course IDs have Student Learning Outcomes defined.
  - Total Course IDs with SLO #1 defined: 792 (35.98%)
  - Total Course IDs with SLO #2 defined: 785 (35.67%)
    - Total Course IDs with SLO #3 defined: 196 (8.91%)
    - Total Course IDs with SLO #4 defined: 56 (2.54%)
    - Total Course IDs with SLO #5 defined: 13 (0.59%)
    - Total Course IDs with SLO #6 defined: 7 (0.32%)
    - Total Course IDs with SLO #7 defined: 4 (0.18%)
    - Total Course IDs with SLO #8 defined: 3 (0.14%)
    - Total Course IDs with SLO #9 defined: 1 (0.05%)
    - Total Course IDs with SLO #10 defined: 1 (0.05%)
- A total of: 1594 of 2201 (73.69%) have Institutional Learning Outcomes (ILO) defined.
  - Total Course IDs with ILO #1 defined: 413 (18.12%)
  - Total Course IDs with ILO #2 defined: 652 (28.65%)
  - Total Course IDs with ILO #3 defined: 265 (11.65%)
  - Total Course IDs with ILO #4 defined: 292 (12.72%)
- A total of: 705 of 2201 (32.03%) have Strategies defined.
- A total of: 602 of 2201 (27.35%) have Reflections defined.

## 2010-2011 Foothill College Program-Level Student Learning Outcomes

Program	PL-SLO 1	PL-SLO 2
Accounting	Students will be able to explain accounting terminology, concepts, principles, and frameworks.	Students will be able to perform accounting-related calculations and demonstrate the ability to use methods and /or procedures to solve accounting problems.
Adaptive Aquatics	Upon completion of the program the student will demonstrate basic water exercise skills and apply them to individuals with disabilities.	Upon completion of Adaptive Aquatics Program, the student will be able confidently apply the principles of water exercise in a fitness setting.
	Upon completion of program, the student will be able to practice the standards of professional and ethical conduct approved by the local educational agency and/ or place of employment.	
Adaptive Fitness Therapy	Upon successful completion of the AFT program the student will be able to demonstrate and explain basic adaptive fitness skills and concepts to older adults and individuals with disabilities	Upon successful completion of the AFT program the student will be able to recognize basic pathophysiology of chronic conditions seen in adults and provide accommodations appropriate to the disabling conditions
American Studies	Upon successful completion of the American Studies program, students will be able to compare and contrast the relationships between modern life in the U.S. and major historical and cultural events in our history	Upon successful completion of the American Studies program, students will be able to identify and analyze connections between their own lives and academic experiences by comparing them to the American Experience in literature and contemporary nonfiction.
Anthropology	Students will apply an understanding of cross-cultural realities both past and present.	Students will learn how to critically analyze and interpret anthropological data.
	Students will apply anthropological principles for solving human problems on the local, regional and world scales.	
Apprenticeship - Elevator	In compliance with applicable standards and	In compliance with applicable standards and

<b>Constructors</b>	codes, students will be able to construct people-moving systems to include: elevators, escalators, cranes, dumb waiters, and conveyors.	codes, students will be able to perform routine maintenance and repair on personnel and product handling and movement systems to include: elevators, escalators, cranes, dumb waiters, conveyors and people moving systems.
<b>Apprenticeship - Pipe Trades</b>	In compliance with applicable standards and codes, students will demonstrate ability to install and remove plumbing systems such as drain waste and vent systems, systems for various industrial fluids, public or private water systems and gas piping systems, in compliance with applicable standards and codes.	In compliance with applicable standards and codes, students will demonstrate ability to maintain, extend, and/or alter plumbing systems including drain waste and vent systems, systems for various industrial fluids, public or private water systems and gas piping systems, , in compliance with applicable standards and codes.
<b>Apprenticeship - Sheet Metal</b>	Students will be able to detail a variety of sheet metal products in compliance with applicable standards and codes.	Students will be able to fabricate and install a variety of sheet metal products in compliance with applicable standards and codes.
<b>Apprenticeship - Sound &amp; Communication</b>	In compliance with applicable standards and codes, students will demonstrate the ability to install sound and communication systems such as voice, data, video, fire alarm, data-networking, home-alarm, cabling, and automation systems.	In compliance with applicable standards and codes, students will demonstrate the ability to repair sound and communication systems such as voice, data, video, fire alarm, data-networking, home-alarm, cabling, and automation systems.
<b>Art General</b>	Students will be able to create two-dimensional and three-dimensional artwork and designs using appropriate tools, materials, methods and techniques.	Students will be able to analyze and critically evaluate two-dimensional and three-dimensional creative projects using the current principles and language of art and design.
<b>Art History</b>	Students will be able to collect and assess primary and secondary source information and successfully analyze and comment on that information in the form of a reasoned 8-10 page term paper, complete with a full bibliography (works cited page), utilizing the MLA format.	The student will be able to demonstrate in written form a strong awareness of the political, social, religious, and technological factors that influence cultures and change in those cultures.
<b>Art Studio</b>	Students will be able to create two-dimensional and three-dimensional artwork and designs using appropriate tools,	Students will be able to analyze and critically evaluate two-dimensional and three-dimensional creative projects using the current principles and

<b>Athletic Injury Care – PE</b>	<p>materials, methods and techniques.</p> <p>Upon completion of the Athletic Injury Care AS Degree, students will demonstrate an entry-level of knowledge and skill in a variety of sports medicine disciplines, including athletic training, physical therapy, strength and conditioning and emergency medical care.</p>	<p>language of art and design.</p> <p>Upon completion of the Athletic Injury Care AS Degree, students will provide quality medical care for the Foothill College Intercollegiate Athletic teams.</p>
<b>Biological Sciences</b>	<p>Upon successful completion of the biology program, students will be able to use the scientific method to formulate questions, design experiments to test hypotheses, interpret experimental results to draw conclusions, communicate results both orally and in writing, and critically evaluate the use of the scientific method from published sources.</p>	<p>Upon successful completion of the biology program, students will be able to apply evolutionary theory at the molecular, cellular, organismal and population levels to explain the unity and diversity of living things.</p>
<b>Biotechnology</b>	<p>Upon successful completion of the biotechnology program the students will demonstrate an understanding of cellular, molecular and immunological techniques used in the biotechnology industry and demonstrate proficiency and safety in performing these techniques.</p>	<p>Upon successful completion of the biotechnology program the students will design experiments, maintain an industry-standard laboratory notebook documenting procedures and protocols, interpret and trouble-shoot laboratory results, and critically analyze data.</p>
<b>Business Administration</b>	<p>Students shall develop skills to interpret resource allocation through research in basic financial literacy skills, (computation) (critical thinking skills) by analyzing the data with understanding of communication/leadership local and in the global sphere of the business world. This is accomplished in writing and in their oral presentations.</p>	<p>As a result of these basic business experiences students then can develop strategies on to which area of business they may enter.</p>
<b>Business: International Studies</b> <b>Business Technology: Help Desk/Technical Support</b>	<p>A successful student in this program will be able to use computers to process, organize</p>	<p>A successful student in this program will be able to demonstrate proficiency in using business</p>

<b>Business Technology: Help Desk/Technical Support</b>	<p>A successful student in this program will be able to use computers to process, organize and present data and information and create basic business documents proofed with no errors.</p> <p>A successful student in this program will be able to communicate effectively via spoken word, print and media; Work collaboratively and ethically in teams, projects, etc.; Work effectively with others from diverse and different backgrounds.</p>	<p>A successful student in this program will be able to demonstrate proficiency in using business office applications and technologies</p>
<b>Business Technology: Office Administration</b>	<p>A successful student in this program will be able to use computers to process, organize and present data and information and create basic business documents proofed with no errors.</p> <p>A successful student in this program will be able to communicate effectively via spoken word, print and media; Work collaboratively and ethically in teams, projects, etc.; Work effectively with others from diverse and different backgrounds.</p>	<p>A successful student in this program will demonstrate proficiency in using business office applications and technologies</p>
<b>Chemistry</b>	<p>Knowledge of current theories and applications in the field of chemistry</p> <p>An enhanced ability to research, assess and comprehend topics of interest, both for matriculation and professional success</p> <p>An enhanced ability to communicate effectively, both orally and in writing, for the purpose of conveying information.</p>	<p>Skill in problem solving and critical thinking</p> <p>Facility in the safe handling of chemicals and the execution of common laboratory techniques</p>
<b>Child Development</b>	<p>Students who successfully complete a certificate or degree in Child Development will demonstrate understanding of the needs and characteristics of children birth through middle childhood and the multiple influences on their development as related</p>	<p>Students who successfully complete a certificate or degree in Child Development will be demonstrate ethical standards and professional behaviors that deepen knowledge and commitment to the field of early care and education as related to NAEYC Code of Ethical</p>

<b>Chinese</b>	<p>The student will be able to communicate with native speakers of Chinese, using the appropriate language for any given situation.</p>	<p>The student will, by presenting research, demonstrate knowledge of Chinese society, culture, and politics.</p>
<b>Communication Studies</b>	<p>Identify patterns of communication in a variety of contexts.</p>	<p>Utilize appropriate methods of communication in critical thinking and/or communication situations.</p>
<b>Computer Science</b>	<p>Based on a given set of guidelines for a product or application, produce program specifications, a successful student in this program will be able to create and debug code for those specifications and write comprehensible documentation.</p>	<p>A successful student in this program will be able to demonstrate a comprehensive understanding of language tools by synthesizing and integrating multiple language constructs in a single project.</p>
	<p>A successful student in this program will look at a problem and zero-in on the best architecture for the job based on the intended use of the program.</p>	<p>A successful student in this program will demonstrate proficiency in using data analysis, visualization and knowledge management tools, utilize systems design and analysis approaches to problem-solving, apply scientific method to research design and analysis, design and construct appropriate databases, select and use appropriate statistical methods, communicate effectively via spoken word, print and media and work collaboratively and ethically in teams, projects, etc.</p>
<b>Computer Software Development</b>	<p>Based on a given set of guidelines for a product or application, produce program specifications, a successful student in this program will be able to create and debug code for those specifications and write comprehensible documentation.</p>	<p>A successful student in this program will be able to demonstrate a comprehensive understanding of language tools by synthesizing and integrating multiple language constructs in a single project.</p>

		<p>research design and analysis, design and construct appropriate databases, select and use appropriate statistical methods, communicate effectively via spoken word, print and media and work collaboratively and ethically in teams, projects, etc.</p>
<b>Creative Writing</b>	<p>Student will write poetry and/or fiction at a publishable level demonstrated by their portfolio review.</p>	<p>Student will demonstrate analytical ability in evaluating and critiquing the work of peers and professionals.</p>
<b>Database Management</b>	<p>Based on a given set of guidelines for a product or application, produce program specifications, a successful student in this program will be able to create and debug code for those specifications and write comprehensible documentation.</p>	<p>A successful student in this program will demonstrate comprehensive understanding of language tools by synthesizing and integrating multiple language constructs in a single project.</p>
	<p>A successful student in this program will look at a problem and zero-in on the best architecture for the job based on the intended use of the program.</p>	<p>A successful student in this program will demonstrate proficiency in using data analysis, visualization and knowledge management tools, utilize systems design and analysis approaches to problem-solving, apply scientific method to research design and analysis, design and construct appropriate databases, select and use appropriate statistical methods, communicate effectively via spoken word, print and media and work collaboratively and ethically in teams, projects, etc.</p>
<b>Dental Assisting</b>	<p>Upon completion of the Dental Assisting Program graduates will demonstrate entry-level competency skills mandated by the Commission on Dental Accreditation and the Dental Board of California.</p>	<p>Upon completion of the Dental Assisting Program graduates will value and implement proper radiation safety for patients, self, and others.</p>
<b>Dental Hygiene</b>	<p>Students will demonstrate the necessary knowledge, skills, and values for the practice of dental hygiene.</p>	<p>Students will demonstrate the necessary knowledge and values in legal regulations and ethical issues for the practice of dental hygiene.</p>
<b>Diagnostic Medical Sonography</b>	<p>Students will demonstrate the necessary knowledge, technical skills, analytical skills,</p>	<p>Students will demonstrate the necessary knowledge and values pertaining to professional</p>

Economics	<p>interpersonal skills and diagnostic ability within the Scope of Practice for Diagnostic Medical Sonography.</p> <p>Have a working understanding of the role of prices in a market economy, the benefits of trade, economic growth and stability, market structures and competition, market failures and the economic role of government.</p>	<p>demeanor including the implementation of confidentiality and privacy for the practice of Diagnostic Medical Sonography.</p> <p>Employ economic reasoning to explain the world around them and make objective decisions based on assessments of costs and benefits.</p>
Emergency Medical Technician	<p>Upon completion of the program the graduate will demonstrate outstanding clinical abilities and will provide a high level of compassionate patient care that is thoughtful and intelligent in its approach.</p>	<p>Graduates will perform as competent entry-level EMT-Paramedics.</p>
Engineering	<p>Formulate logical problem solving approaches, generate solutions, and assess the reasonableness of the solutions for engineering type analysis problems.</p> <p>Demonstrated understanding of the fundamental knowledge necessary for the practice of, or for advanced study in, engineering, including scientific principles, rigorous analysis, and problem solving.</p> <p>Demonstrated a preparation for the complex work environment and continuous learning.</p>	<p>Design, construct, and produce creative solutions to engineering problems by applying the engineering design process and identifying pertinent design parameters based on the fundamental physics governing a system.</p> <p>Demonstrated clear communication skills, responsible teamwork, professional attitudes and ethics.</p>
English	<p>Upon completion of this program, students will be able to compose a thesis-based essay that clearly communicates a logical, evidence-supported argument.</p>	<p>Upon completion of this program, students will demonstrate, in writing, comprehension and critical analysis of college-level texts.</p>
Enterprise Networking	<p>A successful student in this program will be able to design a network infrastructure to support specific user and business requirements.</p> <p>A successful student in this program will be</p>	<p>A successful student in this program will be able to select the appropriate operating system, and operating system features and services to support to support specific user and business requirements.</p> <p>A successful student in this program will be able</p>

<b>Environmental Horticulture</b>	<p>able to optimize the performance, reliability, and availability of network services.</p> <p>Students will demonstrate skills necessary to design residential landscapes.</p>	<p>to design, implement, and maintain appropriate security services for network systems.</p> <p>Students will be able to identify plant material.</p>
<b>General Electrician</b>		
<b>General Studies - Humanities</b>	The student will have a heightened knowledge of cultural diversity in the world, and will be able to communicate how this diversity is reflected through the artistic and intellectual creations of humanity from the dawn of civilization to the present.	The student will gain increased knowledge of how the enduring questions of humanity center on the meaning and experience of human life, and communicate how this meaning and experience is demonstrated through a continuity of thought through the changing artistic conventions of history. They will have the knowledge and skill to articulate orally or in writing the world of common meanings that unite humanity across time.
<b>General Studies - Science</b>	Upon successful completion of the General Studies – Science program, students will be able to integrate the various fields of science in order to critically evaluate and interpret scientific information	Upon successful completion of the General Studies – Science program, students will be able to assess how relevant scientific information could be used to inform their own personal economic, political and social decisions
<b>General Studies - Social Science</b>		
<b>Geography</b>	Interpret spatially distributed data and draw valid conclusions by using maps, graphs and/or Geographic Information Systems (GIS)	Evaluate core concepts in cultural and physical geography and apply them to contemporary events and issues.
<b>Gerontology</b>	Upon completion of the Gerontology Certificate Program students will demonstrate competency in the necessary knowledge, skills and values required for entry level Gerontology professional practice.	Upon completion of the Gerontology Certificate Program graduates will demonstrate competency according to the Association for Gerontology and Higher Education (AGHE) Standards and Guidelines.
<b>Graphic and Interactive Design</b>	Students will understand the design process from sketching to final comprehensive.	Students will be able to create unique graphic designs that communicate ideas to others.
<b>History</b>	Identify connections between specific people, groups, events and ideas and larger	Critically analyze a variety of primary and secondary sources and draw valid historical

<b>History</b>	Identify connections between specific people, groups, events and ideas and larger historical themes, developments and topics.	Critically analyze a variety of primary and secondary sources and draw valid historical interpretations from them.
<b>Informatics</b>	Based on a given set of guidelines for a product or application, produce program specifications, a successful student in this program will be able to create and debug code for those specifications and write comprehensible documentation.	A successful student in this program will be able to demonstrate a comprehensive understanding of language tools by synthesizing and integrating multiple language constructs in a single project.
	A successful student in this program will look at a problem and zero-in on the best architecture for the job based on the intended use of the program.	A successful student in this program will demonstrate proficiency in using data analysis, visualization and knowledge management tools, utilize systems design and analysis approaches to problem-solving, apply scientific method to research design and analysis, design and construct appropriate databases, select and use appropriate statistical methods, communicate effectively via spoken word, print and media and work collaboratively and ethically in teams, projects, etc.
<b>Interactive and Multimedia Technologies</b>	A successful student in this program will demonstrate proficiency using basic interactive and multimedia applications and technologies.	A successful student in this program will select and use appropriate interactive and multimedia design approaches, complete projects that communicate specific ideas in a coherent manner and communicate effectively via spoken word, print and media.
<b>Internet Technology</b>	A successful student in this program will be able to use current developmental standards, technologies and software to create and deploy media to web applications and devices for business and other applications.	A successful student in this program will be able to develop and deploy functional and secure business applications technologies.
<b>Japanese</b>	The student will be able to communicate with native speakers of Japanese, using the appropriate language for any given	The student will, by presenting research, demonstrate knowledge of Japanese society, culture, and politics.

Leadership and Service		
<b>Mathematics</b>	Students completing the math program (A.S. degree) at Foothill College will be able to clearly communicate mathematical ideas through graphs, tables of data, equations, and verbal descriptions.	Students completing the math program (A.S. degree) at Foothill College will be able to construct appropriate mathematical models of natural phenomena, develop those models with appropriate mathematical techniques, and interpret results of those models
<b>Music Technology</b>	Students who complete the traditional transfer course sequence will be able to demonstrate knowledge, skills, and understanding in the three emphases identified by the National Association of Schools of Music (NASM): music history/literature, composition/theory, and performance.	Students who complete the vocational program will also be able to demonstrate knowledge, skills and understanding in the areas of music business, technology, and contemporary popular music literature and composition/engineering identified by the program's board of advisors.
<b>Music: General</b>	Students who complete the traditional transfer course sequence will be able to demonstrate knowledge, skills, and understanding in the three emphases identified by the National Association of Schools of Music (NASM): music history/literature, composition/theory, and performance.	Students who complete the vocational program will also be able to demonstrate knowledge, skills and understanding in the areas of music business, technology, and contemporary popular music literature and composition/engineering identified by the program's board of advisors.
<b>Nanotechnology</b>	Technicians will apply foundational nanoscience principles to understanding and further learning about nanostructures, properties, and engineering solutions (read and apply literature, seminars, and webinars). Demonstrate through written assignments (diagrams etc.), term papers, and class presentations. Use PNPA as a way to read and learn from technical writing articles	Technicians will develop effective engineering plans for developing materials engineering solutions for industrial applications (using PNPA). These include applying characterization skills to elucidating structure=> property relationships, process optimization (for desired properties) and consistent material manufacturing. Demonstrate through term projects (diagrams etc.), engineering lab experiments, and class presentations,
	Technicians will support fundamental R&D, process development, characterization	

	(including QA/QC FA etc.) and consistent / good manufacturing practice (in all sizes of high technology firms). Demonstrate through internship and work experience.	
<b>Non-Credit: Geriatric Home Aide</b>		
<b>Non-Credit: Job Readiness</b>		
<b>Non-Credit: Mathematical Foundations</b>		
<b>Paramedic</b>	Upon completion of the program the graduate will be a paramedic with outstanding clinical abilities who will provide a high level of compassionate patient care that is thoughtful and intelligent in its approach.	Graduates will perform as competent, entry-level EMT-Paramedics.
<b>Pharmacy Technician</b>	Upon completion of the Pharmacy Technician Program, students will demonstrate pharmaceutical knowledge, clinical skills and values necessary to practice as a competent pharmacy technician in both retail and hospital pharmacy settings.	Upon completion of the Pharmacy Technology Program, graduates will demonstrate competency with entry-level clinical skills in accordance with ASHP Accreditation requirements.
<b>Philosophy</b>	Students will be able to critically analyze and evaluate arguments regarding issues of metaphysics and epistemology.	Students will be able to critically analyze and evaluate arguments regarding issues of ethics and political philosophy.
<b>Photography</b>	The student will be able to produce images that demonstrate knowledge of photography's visual and expressive elements (light, color, and composition), using standard professional equipment and production processes.	Students will be able to analyze how images reflect and shape our culture and assess the contributions made in the field by people from diverse cultures and backgrounds.
<b>Physical Education</b>	A successful student will complete this program with the ability to communicate the components of a Physical Education program to their professional staff	A successful student will demonstrate the necessary knowledge, skills, and values of a multi-disciplinary program, which satisfy core requirements for many physical education

<b>Physical Education</b>	A successful student will complete this program with the ability to communicate the components of a Physical Education program to their professional staff	A successful student will demonstrate the necessary knowledge, skills, and values of a multi-disciplinary program, which satisfy core requirements for many physical education transfer majors including the traditional concentrations in teaching and contemporary choices of fitness, dance and athletic emphasis.
<b>Physics</b>	Students know basic physics principles	Students can apply their knowledge to practical, theoretical and experimental problems
	Students are prepared to advance to the next step in careers in science, industry and education.	
<b>Political Science</b>	Students will be able to demonstrate critical, analytical, research and writing skills in political science and its sub-fields using basic scientific tools underlying modern social science.	Students will be able to Analyze the major theoretical formulations and concepts of political science and its sub-fields and the philosophical basis of those formulations.
<b>Popular Culture</b>	Students will be able to interpret and analyze the values, assumptions, and constituent cultural/sociological phenomena housed within--and underneath—artifacts of popular culture.	Students will be able to synthesize popular culture's historical, social, economic, and ethical/philosophical currents as a window into understanding contemporary American society.
<b>Primary Care Associate</b>	Upon completion of the Primary Care Associate Program the student will be able to demonstrate competency skills to practice primary care services with physician supervision.	Upon completion of the Primary Care Associate Program the student will demonstrate knowledge of the national and state regulations for the practice of the physician assistant profession.
<b>Psychology</b>	Upon completing the classes within the program, students will be able to recognize the diversity of behavior of various populations and be able to explain, interpret, apply, and evaluate a broad based of concepts in the different fields of psychology.	Upon completing the classes within the program, students will be able to apply critical thinking skills and psychological theories to real world situations, and to be able to apply research methodology and data analysis in the process of answering questions about human behavior.
<b>Radio Broadcasting</b>	Students will demonstrate ability to perform	Students will demonstrate ability to script, voice,

<b>Radiologic Technology</b>	Upon completion of the Radiologic Technology Program graduates will demonstrate entry-level competency skills in accordance with national and state regulatory agencies.	Upon completion of the Radiologic Technology Program graduates will value and implement proper radiation safety for patients, self, and others.
<b>Real Estate</b>	Explain the functions of real estate markets, real estate practices, and real estate institutions, and recommend choices for common real estate situations,	Calculate the time value of money and evaluate various financing alternatives for real estate investment strategies,
	Evaluate real estate development opportunities in the commercial real estate markets for residential, warehouse, retail, and industrial properties	Research and analyze specific case problems related to real estate investment and present solutions.
<b>Respiratory Therapy</b>	Upon successful completion of the curriculum for the Respiratory Therapy Program the student will have acquired the necessary knowledge, skills and values for the practice of Respiratory Therapy.	At the completion of this program students will be able to demonstrate appropriate critical thinking skills, time management skills, communication skills and technical skills necessary to provide competent respiratory care in multidisciplinary care settings.
<b>Sociology</b>	Students completing an A.A. in Sociology will be able to demonstrate a working knowledge of the core concepts of sociology (social structure; culture; social stratification and inequality; race, ethnicity, and gender; and globalization).	Students completing an A.A. in Sociology will be able to apply their understanding of sociology to their professional, personal and civic lives.
<b>Spanish</b>	The student will be able to communicate with native speakers of Spanish, using the appropriate language for any given situation.	The student will, by presenting research, demonstrate knowledge of Hispanic society, culture, and politics.
<b>Special Education</b>	Upon completion of the program the student will demonstrate basic technologies and assessment tools appropriate to individuals with disabilities.	Upon completion of SPED program, the student will be able confidently identify persons with disabilities and assess their needs.
	Upon completion of program, the student will be able to recognize and respect the	Upon completion of program, the student will be able to practice the standards of professional and

	<p>difference in the roles of teachers, other professional practitioners and paraeducators.</p>	<p>ethical conduct approved by the local educational agency and/ or place of employment.</p>
	<p>Upon completion of the program the graduate will be able to prepare and organize materials to support instruction and learning as directed.</p>	
<b>Theatre Arts</b>	<p>Students will be able to seamlessly and integrally contribute to any further educational or workforce experience in their prescribed area of the performing arts with minimal fundamental adjustment period. Matriculating students will be able to critically assess his or her role in prescribed performing arts circumstance and promote its furtherance appropriately with creative solutions.</p>	<p>Students will progress and be able to employ skill sets of collaboration relevant to multiple arenas of alliance or teamwork. The matchless demands of developing collaborative art provides students germane insights applicable to interpreting personal dynamics in conjunction with content assessment, promoting students engagement skills of unique perspective and critical assessment.</p>
<b>Theatre Technology</b>	<p>Students will be able to seamlessly and integrally contribute to any further educational or workforce experience in their prescribed area of the performing arts with minimal fundamental adjustment period. Matriculating students will be able to critically assess his or her role in prescribed technical production areas with respect to further educational or workforce experience or continued advanced training.</p>	<p>Students will progress and be able to employ skill sets of collaboration relevant to multiple arenas of alliance or teamwork. The matchless demands of developing collaborative art provide students important and relevant insights applicable to interpreting personal dynamics in conjunction with content assessment.</p>
	<p>Students will develop skills for evaluating their own and others contributions to successful outcomes in a high-pressure, collaborative environment.</p>	
<b>Transfer Studies - CSU GE</b>		
<b>Transfer Studies - IGETC</b>		
<b>Veterinary Technology</b>	<p>Upon completion of the Veterinary Technology Program the students will</p>	<p>Upon completion of the Veterinary Technology Program graduates will demonstrate entry-level</p>

<b>Veterinary Technology</b>	Upon completion of the Veterinary Technology Program the students will demonstrate competency in the necessary knowledge, skills, and values required for the practice of veterinary technology in a wide scope of practice settings.	Upon completion of the Veterinary Technology Program graduates will demonstrate entry-level clinical skills competency in accordance with accreditation requirements.
<b>Video Arts - Media Studies</b>	Students will demonstrate the ability to analyze and synthesize the language of moving image media.	Students will correctly identify and apply appropriate technologies in the creation of moving image media.
<b>Video Arts - Production</b>	Students will demonstrate the ability to analyze and synthesize the language of moving image media.	Students will correctly identify and apply appropriate technologies in the creation of moving image media.
<b>Women's Studies</b>	Identify connections between specific people, groups, events and ideas and larger sociological, psychological, historical and gender studies specific themes,	Critically analyze a variety of primary and secondary sources and draw valid sociological, psychological, historical, and gender studies interpretations from them.