

Foothill College Substantive Change Proposal
Baccalaureate Degree in Dental Hygiene

DRAFT

Concise description of the change and request to add a baccalaureate program, including:

Foothill College is proposing that its existing Associates in Science Dental Hygiene program be modified to meet the requirements of a Bachelor of Science Degree in Dental Hygiene as part of the Board of Governors approved pilot program for California Community Colleges.

This modification will be accomplished through the following changes to curriculum:

- 1) Revision of 2 existing capstone courses - Community Dental Health I, II
(DH 58 A, B, Upper Division General Education)
- 2) The addition of a new 3rd capstone course - Community Dental Health III
(DH 58 C, Upper Division General Education)
- 3) New requirement for - Elementary Statistics
(Math, 10 GE Area: Communication & Analytical Thinking)
- 4) New requirement for - Composition, Critical Reading and Thinking
(English 1B, GE Area: Communication and Analytical Thinking)

The new program will begin in fall 2016 and includes 86 General Education quarter units spread across the lower and upper division, and 100 Dental Hygiene major quarter units, totaling 186 quarter units, or 124 semester units.

The new program will replace the existing Associates in Science program and will use existing faculty, learning, and student support resources. Students will continue to take the same National Dental Hygiene Board examination.

Planning is also underway that would allow existing Dental Hygiene Associate Degree holders to complete bachelor level requirements. Students previously completing the Associates program would take an additional 22 units that would include Statistics (Math 10, 5 quarter units), Composition, Critical Reading & Thinking (English 1B, 5 quarter units), Health Communication & Multicultural Issues (3 quarter units), and a Dental Hygiene Research and Capstone course (9 quarter units).

Current Dental Hygiene Students by Ethnicity and Course Success Rates

Distribution by Ethnicity

2013-2014		
	Enr	Percent
African American	3	0%
Asian	214	22%
Decline to State	39	4%
Filipino	108	11%
Latino/a	120	12%
Pacific Islander	19	2%
White	488	49%
Total	991	100%

Targeted Groups						
	2011-2012		2012-2013		2013-2014	
	Grades	Percent	Grades	Percent	Grades	Percent
Success	236	93%	200	91%	208	90%
NonSuccess	10	4%	16	7%	9	4%
Withdrew	8	3%	4	2%	14	6%
Total	254	100%	220	100%	231	100%

Note: Foothill College is targeting its equity efforts on improving the success rates of African American, Latino and Filipino students.

Not Targeted Groups						
	2011-2012		2012-2013		2013-2014	
	Grades	Percent	Grades	Percent	Grades	Percent
Success	764	97%	821	97%	721	95%
NonSuccess	5	1%	12	1%	17	2%
Withdrew	15	2%	11	1%	17	2%
Total	784	100%	844	100%	755	100%

<http://foothill.edu/staff/irs/programplans/docs/2013-2014datasheets/BHS-DH-1314.pdf>

Evidence that the field of study for the degree is consistent with the institutional mission

Foothill College Mission Statement:

Foothill College offers educational excellence to diverse students seeking transfer, career preparation and enhancement, and basic skills mastery. We are committed to innovation, ongoing improvement, accessibility and serving our community.

<http://www.foothill.edu/president/mission.php>

The mission of the Dental Hygiene Program is to educate students to be eligible for licensure as dental hygienists and who will positively impact the oral health status of the community. This education includes courses in basic, social and dental sciences, liberal arts, dental ethics and jurisprudence, and public health with an emphasis on the clinical aspects of dental hygiene practice. This education will provide the students with a foundation to pursue life-long learning.

<http://www.foothill.edu/bio/programs/dentalh/>

The new Dental Hygiene program is consistent with the college mission statement to focus on “career preparation and enhancement.” Foothill College has a long history of serving students for career preparation and enhancement offering a range of Allied Health and other Career and Technical Education programs. The new baccalaureate degree will serve our community by providing career preparation demanded by practitioners in the field.

Rationale for change

The American Dental Hygienists’ Association (ADHA) has been advocating that the Commission on Dental Accreditation revise the Accreditation Standards for Dental Hygiene Education Programs and raise the minimum academic preparation requirement to a baccalaureate degree as the point of entry for dental hygienists. ADHA has had a policy statement since 1986 regarding advancing the educational preparation necessary for entering the dental hygiene profession. The policy “declares [the] intent to establish the baccalaureate degree as the minimum entry level for dental hygiene practice in the future.”

Given the aging population and advances in health care, there is a growing need for Dental Hygienists to be broadly trained on public health issues such as the connection between oral health and overall individual health. There are no public baccalaureate degree programs in Dental Hygiene in California. The cost of Foothill College’s proposed program is estimated to be below \$10,000. This cost will be significantly lower than most other private or out of state options and will allow the new Foothill College program to serve students in our community.

The new program will provide additional pathways appropriate for bachelor degree graduates such as

- Employment in public health, research, and the health care industry
- Clinical supervision,
- Education,
- Master's degree programs.

B. A description of the new program to be offered; level and rigor of upper division courses commonly accepted as appropriate to the baccalaureate degree; program length; identification of delivery mode for the courses

The first two years of the baccalaureate dental hygiene degree will be the general education courses required for the major and the supporting science and social science courses, which include: English, math, chemistry, anatomy and physiology, microbiology, nutrition, pharmacology, health, psychology, sociology, communication and humanities for a total of 86 quarter units for the first two years of the program. The second two years of the dental hygiene bachelor's degree pilot program would be 100 units of dental hygiene courses, inter-professional allied health courses, and upper division general education. This curriculum plan will bring content up to bachelor's degree level.

Upper division general education and writing requirements will be met in the senior year dental hygiene research courses. The dental hygiene curriculum currently has two dental health/research courses. We plan to modify these two courses and add a third research course in the senior year to bring depth to the baccalaureate level.

The first research course in the series of three emphasizes research methodology and oral health disparities. Course content consists of: research methodology, literature review project, field work with target populations & outreach programs. Target populations for the project are selected from diverse groups, such as under-served children, special needs teens, geriatric patients, cancer patients, pregnant women, limited English populations and others who lack knowledge and access to oral health services.

The second quarter emphasizes development of program proposal, including: assessment, analysis, goals and objectives, lesson plans/program activities and methods of evaluation. Students develop a timeline for implementation and evaluation of program. By end of winter quarter, students submit a literature review and program proposal for their e-portfolio submission. Students contact target groups to set up dates for visits for assessment, implementation and evaluation of groups.

During spring quarter, implementation, evaluation and final analysis of community dental health projects is emphasized. The final addition to the e-portfolio project includes written analysis of results and conclusion of project, including documenting their projects, research papers, patient competencies, community service and professional development. See below for outline of the 3 research courses.

Curriculum changes for Community Dental Health – research project courses

Expand Dental Hygiene research from 2 quarters to 3 quarters

1. First Quarter-emphasis on research methodology and oral health disparities
 - a. expansion of existing content on research methodology
 - b. expansion of existing literature review project
 - c. continuation of Friday outreach programs throughout school year
 - d. removal of career options discussion (move to spring)
 - e. remaining content of first quarter stays same
2. Second Quarter-emphasis on development of program proposal
 - a. emphasis on assessment, analysis, goals and objectives, lesson plans/program activities and methods of evaluation
 - b. development of timeline for implementation and evaluation of program and completion in mid spring (3 visits minimum to complete the implementation phase)
 - c. by end of winter quarter, student will still submit literature review and program proposal for e-portfolio submission. Students will contact target groups to set up dates for visits for assessment, implementation and evaluation of groups)
 - d. main topics need to still be included for both first and second quarters to prepare students to take national board exam.
3. Third Quarter-emphasis on field work. Implementation of program, evaluation and final analysis of success of program.
 - a. First week-orientation and review of timelines to complete programs.
 - b. Students will have weeks 2-5 to assess target group, implement program and evaluate results. Students can schedule meetings with target groups on Tuesday mornings of these weeks. Some Fridays may also be available for them to do this work. Students will have the option to begin implementation of projects over spring break.
 - c. If students do not have scheduled meetings on any of these Tuesdays, they will meet in class with instructor to review their projects and make adjustments as needed.
 - d. Topics for remaining weeks of quarter:
 - week 6: research evaluation
 - week 7: analysis and applying statistical tests
 - week 8: final projects are due-additional section to be added to original submission to project includes analysis of results and conclusions based on findings of project. Dental hygiene professional development (begin discussion)
 - week 9: Dental hygiene professional development
 - weeks 10 and 11: presentation of projects

Bachelor's completion courses (22 quarter units)

- I. Statistics (Math 10, 5 quarter units)**
- II. Composition, Critical Reading & Thinking (English 1B, 5 quarter units)**
- III. Health Communication & Multicultural Issues (3 units)**
 - a. Intercultural Communication, including working with limited English proficient people and interpreters (3 weeks)
 - b. Health Literacy, including plain language, numeracy in healthcare, and the readability of patient education materials (2 weeks)
 - c. Nonverbal Communication, including Listening
 - d. Persuasion
 - e. Electronic Communication in Dentistry
 - f. Interpersonal Communication
 - g. Small Group Communication
 - h. Interviewing (interviewing patients and/or job interviewing)
- IV. Dental Hygiene Research and Capstone course**
(6 semester units/9 quarter)
 - a. First quarter
 - i. Research Design & Evidence based literature
 - 1. Scientific Method and Hypothesis Testing
 - 2. Research Study Design
 - 3. Research Ethics
 - ii. Project: initial proposal and literature search
 - iii. Education
 - 1. Accreditation
 - 2. Teaching Methodology
 - iv. Contemporary Roles for the Dental Hygienist (this could also be the focus of the journal club?)-a short module on each role and then attach a journal article for discussion.
 - 1. Clinical Practice
 - 2. Public Health
 - 3. Education
 - 4. Corporate, sales/marketing
 - 5. Research
 - b. Second quarter
 - i. Project: planning & implementation
 - 1. Program Description and Target Population
 - 2. Assessment of population
 - 3. Program Goals and Objectives
 - 4. Program Activities/Lesson Plans
 - ii. Interprofessional practice
 - iii. Evidence-based research
 - 1. Journal club-focus could be:
Evidence Based Decision Making in the Dental Hygiene or the Oral-Systemic Link or Life-long learning (some ideas)
 - iv. Ethics
 - c. Third quarter
 - i. Project: Completion, evaluation & presentation
 - 1. Program Evaluation/Statistical Analysis of outcomes
 - 2. Scientific Communication

Our students take the same National Dental Hygiene Board examination and the same clinical licensing board exams as students from baccalaureate degree programs. The accrediting body for dental hygiene programs is the Commission on Dental Accreditation (CODA). The CODA standards for associate and baccalaureate degree programs require that the curriculum must deliver the same content. The difference between the associate and baccalaureate programs is (1) the total number of units and (2) the upper division general education courses. Entry to most dental hygiene programs requires approximately 3 semesters of prerequisite course work prior to the mandatory 2-year dental hygiene curriculum. In a recent American Dental Hygienists' Association survey, 79.9% of first year students had already completed at least 2 years of college.

Our dental hygiene curriculum is considered to be bachelor's equivalent in the California Business & Professions Code (1922) for the purposes of obtaining the RDHAP (Registered Dental Hygienist in Alternative Practice) license. The curriculum includes comprehensive courses in basic sciences, oral anatomy, public health, nutrition, clinical Dental Hygiene, periodontics, pathology, and radiology. We are proposing additional coursework in critical thinking, writing and research at the upper division level for the baccalaureate degree. This would include general education consistent with CSU requirements in statistics, and composition, critical reading and thinking, and adding a third research course in the senior year to bring the depth to the baccalaureate level.

Requirements for the B.S. in Dental Hygiene will comprise 180 quarter units distributed over 100 units in major courses, 60 in general education, and 20 in electives. A minimum of 40 units will be upper division. The courses will continue to be offered at the Foothill Campus. None of the courses are taught on-line.

A description of the planning process which led to the request for the change

Planning for the program has been ongoing for many months and is based on the college mission, needs of the field, and needs of the community. Administrator and faculty leaders have been involved with efforts at the state level to authorize a baccalaureate pilot since 2013. Since only one program in the District could apply for the pilot the Chancellor requested programs at Foothill and De Anza to submit a rationale and need statement to her in October 2013. Based on this information, Chancellor Linda Thor selected the Foothill Dental Hygiene program to be the District's submission to the state pilot. The program was selected by a state review committee and received initial Board of Governor's approval in January 2015 with final approval on March 15, 2015.

Beginning in fall 2014 the Dental Hygiene department has been working with other baccalaureate pilot programs around the state. They have also been examining their curriculum and student needs in a series of departmental discussions. Along the way the campus has been kept informed of the process at participatory governance meetings. In addition, the program has sought feedback from its Advisory Board and Division colleagues.

Discussions have begun with financial and business offices to identify needed changes in those areas. The department has begun the process for approval of necessary curricular change. The program director will be on sabbatical leave in Spring 2015 to devote additional time to program planning.

Timeline of Planning Process Leading to a Request a B.S. in Dental Hygiene

Fall 2013

California Community Colleges Baccalaureate Degree Study Group

Chancellor Linda Thor and Associate Vice President of Instruction Andrew LaManque serve on the study group recommending a CC Baccalaureate Degree

http://californiacommunitycolleges.cccco.edu/portals/0/reportsTB/2014_01_BacDegree_StudyGroup_WEB.pdf

March 3, 2014

FHDA Board of Trustees Passes Resolution Supporting CC Baccalaureate

Trustees approved a resolution in support of California community colleges offering baccalaureate degrees in applied and technical fields, citing the need to address critical workforce demands and meet the needs of students by offering degrees at colleges that are convenient, accessible and affordable.

http://www.fhda.edu/_downloads/Highlights03.03.14.pdf

October 15, 2014

Foothill College Planning and Resource Council (PaRC)

President Miner announced that the process to select a baccalaureate pilot program had begun. Miner commented that only one application for each District would be considered. Chancellor Linda Thor would choose between Foothill's Dental Hygiene Program and De Anza's Automotive Management Program.

http://www.foothill.edu/president/parc/minutes/parc2014-15/parc11.19.14/parc_minutes10.15.14.pdf

October 24, 2014

Chancellor's Advisory Council

Chancellor Thor provided an update regarding the recently approved community college baccalaureate degree pilot program. She explained that it was very difficult to choose between the colleges' programs, but after much deliberation, she authorized Foothill College's Dental Hygiene program to proceed with developing a proposal. Linda noted that there is a November 12, 2014, deadline for districts to submit a notice of intent to the state Chancellor's Office; program proposals are due December 19, 2014; and the California Community Colleges Board of Governors is expected to announce pilot colleges on January 21, 2015.

http://www.fhda.edu/_about-us/_participatorygovernance/_CACSum_102414.pdf

January 15, 2015

Board of Governors, California Community Colleges

Program receives initial approval for the pilot program to offer a baccalaureate degree.

http://californiacommunitycolleges.cccco.edu/Portals/0/DocDownloads/PressReleases/JAN2015/PR_4yrDegree-January-20-2015_final.pdf
http://extranet.cccco.edu/Portals/1/ExecutiveOffice/Board/2015_agendas/January/California_Community_Colleges_Baccalaureate_Degree_RECOMMENDED_PILOT_PROGRAMS_final_Jan-2015.pdf

January 21, 2015

Foothill Planning and Resource Council (PaRC)

Dean of Biological & Health Sciences Nanette Solvason announced that the Foothill College Dental Hygiene was one of fifteen programs to participate as a pilot program to offer a baccalaureate degree.

http://www.foothill.edu/president/parc/minutes/parc2014-15/parc2.18.15/parcminutes1.21.15_final.pdf

January 28, 2015

Dental Program Advisory Board Meeting

UCSF Affiliation: Elena Ortega announced that UCSF is very excited about the Bachelor pilot program at Foothill, as the Foothill students in their Masters program are amazing. They have had 4 classes in the Masters program, and have had excellent graduates.

March 13, 2015

Biological and Health Sciences Division Meeting

March 16, 2015

Board of Governors Approves Program for Pilot

The California Community Colleges Board of Governors gave final approval on Monday for 12 community colleges to participate in a landmark pilot program that allows them to offer bachelor's degrees in fields such as respiratory therapy, dental hygiene and aerospace manufacturing technology.

http://californiacommunitycolleges.cccco.edu/Portals/0/DocDownloads/PressReleases/MAR2015/PR_4YearDegreeMarchApp_March-16-2015.pdf

March 18, 2015

Foothill Planning and Resource Council (PaRC)

First read of substantive change proposal.

April 6, 2015

FHDA Board of Trustees

Board of Trustees approves substantive change proposal.

April 15, 2015

Foothill Planning and Resource Council (PaRC)

Second read of substantive change proposal.

April 2015

- College and state curriculum review
- Obtain final college approval for revised and new courses.
- Submit curriculum for State approval.
- Host a Program Information Night

2015-2016

- Complete the course development for the revised and new courses (learning objectives, instructional materials and resources).
- Finalize the pilot program Dental Hygiene application
- Hold Applicant Information Nights
- Work with Community College Partners on curriculum alignment

2016-2017 Admit the 1st DH pilot program class, graduation June 2018

2017-2018 Admit the 2nd DH pilot program class, graduation June 2019

Complete curriculum alignment with Community College Partners

2018-2019 Admit the 3rd DH pilot program class, graduation June 2020

	CODA site visit for Foothill College Dental Hygiene Program
	Admit students from Community College Partners
2019-2020	Admit the 4th DH pilot program class, graduation June 2021
2020-2021	Admit the 5th DH pilot program class, graduation June 2022
2021-2022	Admit the 6th DH pilot program class, graduation June 2023
2022-2023	Graduation for the last class in the pilot program June 2023
	Baccalaureate pilot program ends June 30, 2023
	Pilot program participant final report due August 31, 2023

Recurring annual tasks:

- Pilot Program reporting,
- CODA accreditation reports,
- collecting program data & outcomes,
- curriculum review & planning with faculty,
- college program review,
- reporting on Student Learning Outcomes & Program Learning outcomes,
- Advisory Board meeting/consultation.

The program director will receive a sabbatical leave in Spring 2015 to work on baccalaureate curriculum and accreditation processes. Planning and implementation costs will be funded by a combination of CTE Enhancement Funds, Perkins, Chancellor's Circle, President's Innovation Fund, and divisional operating budgets.

D. Evidence that the institution has analyzed, has the capacity, and has provided for adequate human, administrative, financial, and physical resources and processes necessary to initiate, maintain, and monitor the baccalaureate program and to assure that the activities undertaken are accomplished with acceptable quality

Foothill College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC). The most recent reaffirmation of accreditation was January, 2012 and the College enjoys a sanction free history.

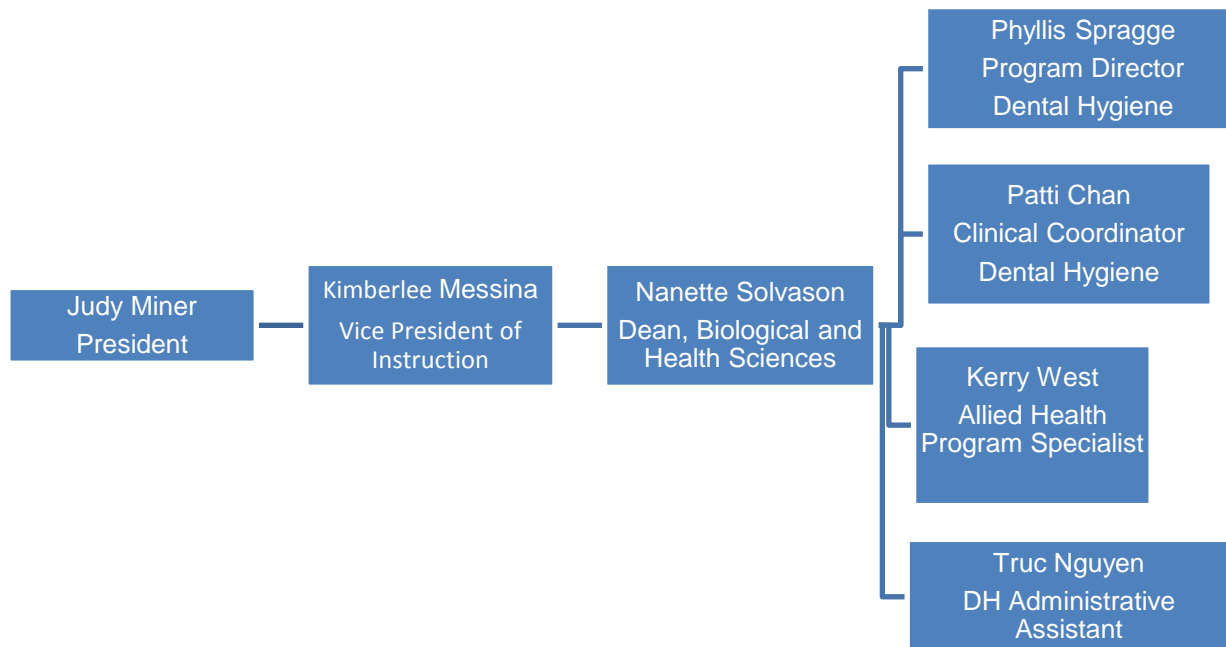
The Foothill College Dental Hygiene program was accredited by the American Dental Association's Council on Dental Education from the inception of the program in 1964 until the Commission on Dental Accreditation (CODA) was established in 1974. The last CODA accreditation site visit was in 2011, with a status of "approval without reporting requirements". The next accreditation site visit will be 2018.

Financially, the district is among the strongest in the state. From fiscal year 2007 through 2014, balances in the general fund have totaled between 20-30% of general fund revenues. Unreserved fund balances have similarly been sound and stable at about 18% over that period. No short-term cash borrowing has been required since 1996. The District has earned AAA and AA ratings by Moody's Investors Service and Standard & Poor's on all or most of its General Obligation bond issues and consecutive refinancing. Sound management of resources and implemented controls resulted in no audit findings for Foothill College in the past three years.

Phyllis Spragge, RDH, MA, was hired as a faculty member in 1998 and appointed Director of the Dental Hygiene Program in 2000. She receives 40% reassigned time for program administration and may receive up to 75% for CODA accreditation site visits. She has been granted a sabbatical leave in Spring 2015 to work on baccalaureate curriculum and accreditation processes if Foothill were to be selected for the pilot.

Patti Walter Chan, RDH, MS, serves as the clinical coordinator of the dental hygiene program. She has an extensive background in research, clinical education and community dental health. She will be working with the program director on the curriculum for the pilot program.

The dental hygiene program has a full-time administrative assistant who provides secretarial and clerical services. Additionally, an allied health program specialist supports the eight allied health programs, including dental hygiene.



The District has passed two bond measures, which have funded state-of-the-art capital improvements, furniture, fixtures, and equipment for the program. The Foothill College community takes great pride in showcasing Dental Hygiene and visitors have come from all over the world to see the program's facilities. Operational funding has been stable during the most volatile economic times to ensure adequate supplies and timely replacement of equipment.

Dental Hygiene has traditionally been a high-unit program with 101-quarter units in major courses. The redesign of courses to meet baccalaureate standards will require a one-time investment, but the faculty load can be drawn from existing FTEF allocations. The current staffing of the program is adequate to launch the pilot program and track the outcomes of the pilot program. Dental hygiene programs have extensive reporting requirements for the Commission on Dental Accreditation and the pilot program would fit in with the data collection, analysis and reporting expected of a dental hygiene program. Foothill College Institutional Research has the staffing to assist with surveys and data analysis. Our current facility meets the needs of the pilot program.

In addition, Foothill College Online Learning has one of the largest offerings of online and hybrid courses in the state. They have the experience and infrastructure to assist the pilot program with course work that might be offered in a hybrid format.

Foothill College academic counselors and financial aid departments are aware of the possible pilot program and are ready to meet the need if Foothill College is chosen to participate.

The Foothill College Dental Hygiene offers you state-of-the-art clinical facilities, experienced, caring faculty, and comprehensive college support services designed to help you succeed. Students are supervised during their clinic experience on patients. Students who successfully complete the program receive a college degree in Dental Hygiene and are qualified to take the Dental Hygiene National Board Examination and state or regional licensing examinations.

Evidence that:

The institution has received all necessary internal and/or external approvals

Many letters of support have come from current and former students, professional organizations, industry partners, and educational institutions. A consistent theme is the need for such a program given the increasingly complex and varying requirements in the practice of dental hygiene. Additionally, graduates would be qualified to apply for jobs outside of private dental practices in the domains of research, education, public health, and corporate/industry jobs.

See program application to the Chancellor's Office for California Community Colleges:
URL:

PaRC Minutes March 18, 2015, April 15, 2015
FHDA Board of Trustee Minutes April 6, 2015

Verification the institution is authorized by its state/government to offer the proposed baccalaureate degree

Approved by the BOG on March 16, 2015
See URL:

There is sufficient demand for the program within the area served by the college

The Employment Development Department (EDD) published “2010-2020 Fastest Growing Occupations” for San Jose-Santa Clara-Sunnyvale, with the projected growth rate for Dental Hygiene at 29 % growth, higher than the projected state wide growth of 23.4%. The economy of the Greater Bay Area is booming and the robust regional economy is an additional reason the Foothill College dental hygiene program is an excellent site for the baccalaureate pilot program.

Foothill College Dental Hygiene program conducts annual graduate surveys, six months post-graduation, to assess program outcomes and employment status of our graduates. Our survey data show that our graduates are successful in gaining employment in the dental hygiene field in the San Francisco Bay Area region. From 2005-2014, Foothill College Dental Hygiene graduates have reported six months post-graduation on the alumni survey that 100% have found employment in the dental field. Some graduates choose to work part-time, but the majority (77%) report working full-time (four days/week). These outcomes are consistent with the labor market information showing high job demand and strong job placement for dental hygienists.

Despite this record of employment, eighteen percent of our graduates have continued their education while working, pursuing a bachelor’s or master’s degree. The primary reasons stated for pursuing a higher-level degree than the AS in Dental Hygiene, is the ability to work in education, corporate, or research fields related to dental hygiene. Furthermore, when Foothill College dental hygiene alumni were polled this October on their interest in a bachelor’s degree, 65% were “highly motivated” and “highly interested” in pursuing a bachelor’s degree if Foothill College were to offer a bachelor’s completion program. Therefore, our internal surveys provide evidence of the underlying appreciation and drive for attaining the baccalaureate degree within our local dental hygienist community.

Policy makers in a number of states are considering the creation of new types of licensed professionals who would work with dentists to deliver primary dental care to children and other underserved patients. A 2010 report Pew Charitable Trusts report, *It Takes a Team: How New Dental Providers Can Benefit Patients and Practices*, examines the impact that hiring new types of providers — dental therapists and hygienist-therapists — would have on the productivity and profits of a private dental practice, where more than 90 percent of the nation's dentists work. The findings include:

1. Allied providers (dental hygienists & dental therapists) can strengthen the productivity and financial stability of dental practices;
2. Allied providers can help practices treat more Medicaid-insured patients in a financially sustainable way;
3. Fully utilizing allied providers is key to realizing productivity and profit gains.

Data from the annual EPSDT Participation Report by the U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, fiscal year 2011, showed that 58.6% of Medicaid-enrolled children did not receive dental care in 2011 in California. In a California Dental Association (CDA) report (2011), “Phased Strategies for Reducing the Barriers to Dental Care in California”, the CDA acknowledged the potential to improve children’s health, and passed a resolution encouraging a study of the safety and effectiveness of mid-level providers to help the underserved. “There is evidence that additional dental providers who provide basic preventive and restorative oral health care to low-income children, in or close to where they live and go to school, have the potential to reduce the disease burden in the population most in need.” A California HealthCare Foundation survey found that 24 percent of children aged 0-11 in the state have never visited a dentist. California children's dental health was ranked third from the bottom in a recent National Survey of Children's Health, above only Arizona and Texas, in a study of all 50 states.

The access to dental care issues in California are enormous and beginning to be addressed. AB 1174 was recently introduced, which expands the scope of practice for all dental hygienists, RDH and RDHAP alike, allowing the placement of Interim Therapeutic Restorations, in the office as well as in other settings with telehealth supervision, with additional education.

Dr. Paul Glassman, professor and director of Community Oral Health at the Arthur A. Dugoni School of Dentistry, and co-director of the Pacific Center for Special Care, has spearheaded the Virtual Dental Home project, approved by the Office of Statewide Health Planning and Development under the Health Workforce Pilot Project application #172. The Virtual Dental Home creates a community-based oral health delivery system in which people receive preventive and simple therapeutic services in community settings where they live or receive educational, social or general health services. It utilizes the latest technology to link practitioners in the community with dentists at remote office sites. The goal is to demonstrate that registered dental hygienists in alternative practice (RDHAP), registered dental hygienists working in public health programs (RDH) and registered dental assistants (RDA) can keep people healthy in community settings by providing education, preventive care, interim therapeutic restorations triage, and case management. Where more complex dental treatment is needed, the Virtual Dental Home connects patients with dentists in the area.

The Foothill College Dental Hygiene began in 1964, with the first graduating class in 1966, and has a long history of excellence. During the years dental hygiene programs were ranked based on Dental Hygiene National Board Examination scores, Foothill College ranked among the top ten schools in the United States consistently, and was often anywhere in the top 1 to 5 scoring institutions in the US, and frequently out scored four-year bachelor’s degree programs.

The Foothill College Dental Hygiene program has a 100% pass rate on Dental Hygiene National Board Examination for the history of the program. This is a remarkable achievement, particularly given that the average failure rates on the Dental Hygiene National Board Examination range from 2 – 6%, depending on the year cited. In 2008 the Joint Commission on National Dental Examinations (JCND) discontinued program ranks based on Dental Hygiene National Board Examination results. However, the JCND continues to report data on Dental Hygiene National Board Examination results and dental hygiene programs receive data on their students' performance in each of the fourteen subject matter areas compared to the national average. Foothill College has consistently scored above the national average in every one of the subject matter areas on the Dental Hygiene National Board Examination. The program admits twenty-four students each year. The academic rigor and success of the Foothill College Dental Hygiene program make it an ideal candidate for the development of a bachelor's degree under the pilot program.

The chart below summarizes our enrollment projections based on potential partnerships with Bay Area community colleges offering Dental Hygiene:

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Foothill	50	50	50	50	50	50
Partnering CCs*	0	0	20	40	60	80
TOTAL	50	50	70	90	110	130

* Partnering Community Colleges: Cabrillo College, Chabot College, Diablo Valley College, Santa Rosa Junior College

A survey of current DH students (Class of 2015 & 2016) was conducted in fall 2015. 100% of the students (n=46) were strongly supportive of bachelor's degree program. Both DH Classes also wrote letters of support to Dr. Brice Harris.

Alumni were surveyed at our October 2014 Continuing Education/Alumni Day and 123 completed a survey on the CE course, with one question on the need for a bachelor's degree in dental hygiene at Foothill College. Eighty-four percent indicated they strongly agreed that a bachelor's degree in dental hygiene needed, 14% agreed that a bachelor's degree was needed in dental hygiene, and 2% had no opinion.

Evidence that each Eligibility Requirement will still be fulfilled, specifically related to the change

Evidence that each Accreditation Standard will still be fulfilled specifically related to the change and that all relevant Commission policies are addressed

The new program is consistent with the college mission. Student achievement and learning outcomes assessments are up to date. The program recently completed a comprehensive program review examining both student learning outcomes and achievement. Program review data is examined by the Program Review Committee as part of an integrated planning and resource allocation process.

http://www.foothill.fhda.edu/cms/slo.download.php?act=downipr&rec_id=305
<http://foothill.edu/staff/irs/programplans/docs/2013-2014datasheets/BHS-DH-1314.pdf>
<http://foothill.edu/staff/irs/programplans/docs/2013-2014datasheets/WorkforceDentalHygiene.docx>

The program monitors degree completion, licensure passage rates and job placement on a continuous basis. The department engages in a continuous dialogue about student learning and program improvement within the colleges and with its advisory board. These practices will continue with the move to the baccalaureate degree program.

Pursuant to the College's 3SP and Student Equity plans, Foothill College has robust outreach and retention programs to increase the enrollment and success of underrepresented populations, including but not limited to Latinos, African-Americans, and Filipinos. The baccalaureate pilot will have focused strategies to ensure broad diversity of participants to fulfill the college mission and Educational Master Plan goals.

The program has four full-time faculty members:

1. a program director/instructor/first year clinic coordinator,
2. a radiology instructor/coordinator,
3. second year clinic coordinator,
4. classroom lecturer.

All have master's degrees or higher and qualify to teach at the baccalaureate level. They have experience with research, curriculum development, educational methodology, and program evaluation. An additional nine part-time faculty are qualified to teach baccalaureate students.

Comprehensive student services are available including but not limited to: academic counseling, financial aid, library services, health services, psychological services, legal services, tutoring, veteran's services, disability resource center, ride sharing, transfer services, and transition to work. Pursuant to 3SP and Student Equity plans, Foothill College has robust outreach and retention programs to increase the enrollment and success of underrepresented populations, including but not limited to Latinos, African-Americans, and Filipinos. The baccalaureate pilot will have focused strategies to ensure broad diversity of participants.

Evidence that the baccalaureate program meets the minimum requirements for the degree (120 semester units or equivalent)

Evidence that the baccalaureate program meets the minimum baccalaureate level General Education requirements:

- 1. 36 semester units or equivalent**
- 2. Distributed across the major areas for General Education (arts/humanities, natural science, mathematics, social science, and oral/written communication)**
- 3. Integrated throughout the curriculum (distributed to both lower and upper division courses)**

The CSU pattern for general education can be met with the courses that are required support courses for a degree in dental hygiene.

CSU GE	Subject matter	Foothill course	Number of required units
Area A-1	Oral Communication	COMM 1A	Area A 12-15 quarter units
Area A-2	Written Communication	ENGL 1A	
Area A-3	Critical Thinking	ENG 1B	
Area B-1	Physical Science	CHEM 30A	Area B 12-15 quarter units
Area B-2	Life Science	BIO 40A	
Area B-3	Laboratory Activity	BIO 41	
Area B-4	Math	MATH 10	
Area C-1	Arts	Elective	Area C 12-15 quarter units
Area C-2	Humanities	Elective	
Area D-0	Sociology	SOC 1A	Area D 12-15 quarter units
Area D-3	Ethnic studies	COMM 12	
Area D-2	Psychology	PSYCH 1A	
Area E	Lifelong development	HLTH 21	

This demonstrates that the General Education requirements are consistent with levels of quality and rigor appropriate to higher education (ER 12, Standard II.A.12 and II.A.5)

We had 2 existing research courses (DH 63C & DH 63D), we have revised in addition to adding a new course in the series. The series is a yearlong and will be numbered DH 58 A, B, C. It has been approved at the division level and will go to college curriculum committee approval in spring 2015.

DH Program Summary (detail on following pages)

Dental Hygiene Baccalaureate Program Curriculum			
Freshman Year		Junior Year	
		Summer (1 units)	
		Recommended courses	Quarter units
		DH 50 Orientation to Dental Hygiene	1
Fall (14 units)		Fall (14.5 units)	
Recommended courses	Quarter units	Recommended courses	Quarter units
ENGL 1A (GE II) Composition & Reading	5	D H 52A Oral Biology I	3
PSYCH 1 (GE IV) General Psychology	5	D H 53 Assessment Procedures in the Dental Hygiene Process	3
HLTH 21 (GE VII) Contemporary Health Concerns	4	D H 54 Pre-Clinical Dental Hygiene	4
		D H 59 Survey of Dentistry	1
		D H 60A Introduction to Dental Radiography I	2
		AHS 50 Introduction to Allied Health Programs	1.5
Winter (16 units)		Winter (17.5 units)	
Recommended courses	Quarter units	Recommended courses	Quarter units
ENGL 1B (GE V) Composition, Critical Reading & Thinking	5	D H 52B Oral Biology II	3
MATH 10 Elementary Statistics	5	D H 60B Dental Radiography II	1
CHEM 30A (GE III) Survey of Inorganic & Organic Chemistry	5	D H 61A Clinical Technique	6
Lifelong learning elective (GE VII) – 2nd req for this section	1	D H 71 Office Emergency Procedures	2
		D H 72 Dental Materials	3
		D H 73 Dental Health Education	2
		AHS 50B Interprofessional Patient Competencies	0.5
Spring (15 units)		Spring (14 units)	
Recommended courses	Quarter units	Recommended courses	Quarter units
COMM 1A	5	D H 55A Fundamentals of Pathology I	2
SOC 1 Introduction to Sociology	5	D H 56 Applied Pharmacology in Dentistry	2
CHEM 30B Survey of Organic & Biochemistry	5	D H 57A Periodontics I	3
		D H 61B Introduction to Clinic	5
		D H 68A Radiographic Interpretation	2
Sophomore Year		Senior Year	
		Summer (5.5 units)	
		Recommended courses	Quarter units
		D H 62A Clinical Dental Hygiene I	3
		D H 65 Clinical Local Anesthesia	2.5
Fall (13 units)		Fall (17.5 units)	
Recommended courses	Quarter units	Recommended courses	Quarter units
BIO 40A Human Anatomy & Physiology I	5	D H 55B Fundamentals of Pathology II	2
BIO 45 Introduction to Human Nutrition	4	D H 57B Periodontics II	2
AHS 200 Introduction to Allied Health Programs	3	D H 58A Community Dental Health I	2
DH 200L Introduction to Dental Hygiene	1	D H 60C Dental Radiography III	1
		D H 62B Clinical Dental Hygiene II	8.5
		D H 75A Clinical Dental Hygiene Theory I	2
Winter (15 units)		Winter (14.5 units)	
Recommended courses	Quarter units	Recommended courses	Quarter units
BIO 40B Human Anatomy & Physiology II	5	D H 58B Community Dental Health II	2
BIO 41 Microbiology	6	D H 60D Dental Radiography IV	1
Humanities elective (GE I) – student choice	4	D H 62C Clinical Dental Hygiene III	8.5
		D H 67 Nitrous Oxide/Oxygen Analgesia	1
		D H 75B Clinical Dental Hygiene Theory II	2
Spring (13 units)		Spring (14.5 units)	
Recommended courses	Quarter units	Recommended courses	Quarter units
BIO 40C Human Anatomy & Physiology III	5	D H 58B Community Dental Health III	2
BIO 58 Fundamentals of Pharmacology	4	D H 62D Clinical Dental Hygiene IV	8.5
US Cultures & Communities elective (GE VI)	4	D H 64 Ethics, Law & Dental Office Practices*	2
		D H 75C Clinical Dental Hygiene Theory III	2
		Total Quarter Units	185

Freshman Year

Fall (14 units)

Recommended courses	Quarter units
ENGL 1A (GE II) Composition & Reading	5
PSYCH 1 (GE IV) General Psychology	5
HLTH 21 (GE VII) Contemporary Health Concerns	4

Winter (16 units)

Recommended courses	Quarter units
ENGL 1B (GE V) Composition, Critical Reading & Thinking	5
MATH 10 Elementary Statistics	5
CHEM 30A (GE III) Survey of Inorganic & Organic Chemistry	5
Lifelong learning elective (GE VII) – second requirement for this section	1

Spring (15 units)

Recommended courses	Quarter units
COMM 1A	5
SOC 1 Introduction to Sociology	5
CHEM 30B Survey of Organic & Biochemistry	5

Sophomore Year

Fall (13 units)

Recommended courses	Quarter units
BIO 40A Human Anatomy & Physiology I	5
BIO 45 Introduction to Human Nutrition	4
AHS 200 Introduction to Allied Health Programs	3
DH 200L Introduction to Dental Hygiene	1

Winter (15 units)

Recommended courses	Quarter units
BIO 40B Human Anatomy & Physiology II	5
BIO 41 Microbiology	6
Humanities elective (GE I) – student choice	4

Spring (13 units)

Recommended courses	Quarter units
BIO 40C Human Anatomy & Physiology III	5
BIO 58 Fundamentals of Pharmacology	4
US Cultures & Communities elective (GE VI)	4

Junior Year

Summer (1 units)

Recommended courses	Quarter units
DH 50 Orientation to Dental Hygiene	1

Fall (14.5 units)

Recommended courses	Quarter units
D H 52A Oral Biology I	3
D H 53 Assessment Procedures in the Dental Hygiene Process	3
D H 54 Pre-Clinical Dental Hygiene	4
D H 59 Survey of Dentistry	1
D H 60A Introduction to Dental Radiography I	2
AHS 50 Introduction to Allied Health Programs	1.5

Winter (17.5 units)

Recommended courses	Quarter units
D H 52B Oral Biology II	3
D H 60B Dental Radiography II	1
D H 61A Clinical Technique	6
D H 71 Office Emergency Procedures	2
D H 72 Dental Materials	3
D H 73 Dental Health Education	2
AHS 50B Interprofessional Patient Competencies	.5

Spring (14 units)

Recommended courses	Quarter units
D H 55A Fundamentals of Pathology I	2
D H 56 Applied Pharmacology in Dentistry	2
D H 57A Periodontics I	3
D H 61B Introduction to Clinic	5
D H 68A Radiographic Interpretation	2

Senior Year

Summer (5.5 units)

Recommended courses	Quarter units
D H 62A Clinical Dental Hygiene I	3
D H 65 Clinical Local Anesthesia	2.5

Fall (17.5 units)

Recommended courses	Quarter units
D H 55B Fundamentals of Pathology II	2
D H 57B Periodontics II	2
D H 58A Community Dental Health I	2
D H 60C Dental Radiography III	1
D H 62B Clinical Dental Hygiene II	8.5
D H 75A Clinical Dental Hygiene Theory I	2

Winter (14.5 units)

Recommended courses	Quarter units
D H 58B Community Dental Health II	2
D H 60D Dental Radiography IV	1
D H 62C Clinical Dental Hygiene III	8.5
D H 67 Nitrous Oxide/Oxygen Analgesia	1
D H 75B Clinical Dental Hygiene Theory II	2

Spring (14.5 units)

Recommended courses	Quarter units
D H 58B Community Dental Health III	2
D H 62D Clinical Dental Hygiene IV	8.5
D H 64 Ethics, Law & Dental Office Practices*	2
D H 75C Clinical Dental Hygiene Theory III	2

Evidence that library and learning resources are sufficient in quality, currency, variety, quantity, and depth to support the baccalaureate program

The Foothill College Learning Resources Center (Library) maintains access to a collection of learning resources appropriate for Dental Hygiene. Students currently access the library to support research papers. These services will continue to satisfy the needs of the new program.

Summary of Foothill Library Resources & Services for Dental Hygiene

The Foothill Library offers a rich collection of information resources in print and online to support Dental Hygiene students and faculty. Resources on site include core reference titles, books, and print periodicals in dentistry. In addition to providing access to the library's online catalog, the library website (www.foothill.edu/library) is the gateway to the library's growing and robust collection of e-books, online dental and medical encyclopedias, streaming educational videos, and more than 300 dental periodicals in full-text via the library's periodical databases. These databases include:

- **Dentistry & Oral Sciences Source:** The premier database in the field, it covers all areas of dentistry including dental public health, endodontics, facial pain & surgery, odontology, oral & maxillofacial pathology/surgery/radiology, orthodontology, pediatric dentistry, periodontology, and prosthodontics. Includes more than 255 full-text journals, including many of the top-ranked titles in the discipline.
- **Elsevier ScienceDirect Health & Life Sciences College Edition:** Although originally targeted to research universities, this database is an essential resource for the most current research in the allied-health fields. It provides access to more than 900 peer-reviewed scientific journals, including the full-text of more than 50 peer-reviewed dental journals. As an example, it offers the full-text of *the Journal of the American Dental Association* from 1995 to the present.
- **Health Source: Nursing/Academic Edition:** nearly 550 scholarly full-text journals focusing on many medical disciplines, with especially strong coverage of nursing and allied health.

Online resources are available 24/7 to faculty and students from off campus using their employee or student IDs to authenticate. An online guide to library resources on dental hygiene introduces students to our offerings, and reference assistance is available to students in person, by phone, or online via the "Ask a Librarian" service. Research assistance is also provided through specialized library orientations and workshops.

Evidence that faculty qualifications are rigorous and appropriate in regard to:

- 1. Discipline expertise**
- 2. Level of assignment (at least one degree level above the baccalaureate degree for faculty assigned to baccalaureate degree courses or equivalent)**

Phyllis Spragge, RDH, MA, was hired as a faculty member in 1998 and appointed Director of the Dental Hygiene Program in 2000. She receives 40% reassigned time for program administration and may receive up to 75% for CODA accreditation site visits. She has been granted a sabbatical leave in Spring 2015 to work on baccalaureate curriculum and accreditation processes if Foothill were to be selected for the pilot.

Patti Walter Chan, RDH, MS, serves as the clinical coordinator of the dental hygiene program. She has an extensive background in research, clinical education and community dental health. She will be working with the program director on the curriculum for the pilot program.

The program has four full-time faculty: (1) a program director/instructor/first year clinic coordinator, (2) a radiology instructor/coordinator, (3) second year clinic coordinator, (4) classroom lecturer. All have master's degrees or higher and qualify to teach at the baccalaureate level. They have experience with research, curriculum development, educational methodology, and program evaluation. An additional nine part-time faculty are qualified to teach baccalaureate students.