

Basic Program Information

Department Name:

Music:Music Technology

Division Name:

Fine Arts and Communication

Program Mission(s):

The mission of the Music Technology Program is to provide an innovative educational program that 1) prepares students for transfer to 4-year institutions to pursue a baccalaureate degree and 2) prepares students for careers in the commercial music, audio post-production, and game audio fields with vocational training in music business, technology, contemporary music production and sound design. The Music Technology Program offers certificates and an associate of arts degree with cutting edge curriculum and instruction in the areas of media studies, recording arts and audio production based on real world industry standards. It is the workforce element of the Music Department.

The Music Technology Program's mission is in alignment with the college's mission to provide outstanding educational opportunities for all students through high quality transfer programs and career preparation. On a secondary level, the department mission is in alignment with the college mission to offer an associate of arts degree as well as serving our community.

Please list all Program Review team members who participated in this Program Review:

Name	Department	Position
Bruce Tambling	Music Technology	Co-Director, Music Technology Program
Eric Kuehnl	Music Technology	Co-Director, Music Technology Program

Total number of Full Time Faculty:	2
Total number of Part Time Faculty:	10

Please list all existing Classified positions:

Lab Manager – Al Ruffinelli

List all Programs* covered by this review & check the appropriate column for program type:

Program Name	Certificate of Achievement Program	Associate Degree Program	Pathway Program
Music Technology Associate of Arts Degree		X	
Certificate of Achievement in Music Technology	X		
Certificate of Achievement in Pro Tools	X		

*If you have a supporting program or pathway in your area for which you will be making resource requests, please analyze it within this program review (i.e. Integrated Reading and Writing, Math My Way, etc.) You will only need to address those data elements that apply.

Section 1: Data and Trend Analysis

a. Program Data:

Data will be posted on <http://foothill.edu/staff/irs/programplans/programreviewdata.php> for all measures except non-transcriptable completion. You must manually copy data in the boxes below for every degree or certificate of achievement covered by this program review.

Transcriptable Programs	2010-2011	2011-2012	2012-2013	% Change
A.A. in Music Technology	11	16	12	9%
C.A. in Music Technology	2	3	4	100%
C.A. in Pro Tools	NA	5	4	-20%

b. Department Level Data:

	2010-2011	2011-2012	2012-2013	% Change
Enrollment	5,804	5,595	5,476	-2.1%
Productivity (College Goal 2013-14: 535)	694	649	569	-12.3%
Success	80%	76%	75%	-1%
Full-time FTEF	13.6	14.7	16.3	11%
Part-time FTEF	8.8	9	10.6	20%

c. Associate Degree Transfer (ADT)

There is a fall 2014 legislated deadline for approval of ADTs (AA-T/AS/T degrees). **If there is a Transfer Model Curriculum (TMC) available in your program, you are required to offer an approved AA-T/AS-T.** Indicate the status of your program's ADT:

Check one	Associate Degree Transfer Status
	State Approved
	Submitted to CCCC
	Submitted to Office of Instruction
	In Progress with Articulation
	Planning Stage with Department
X	Not Applicable

If you are required to offer an approved ADT and it has not been state-approved, please comment on the program's progress/anticipated approval date.

Using the prompts and the data from the tables above, provide a short, concise narrative analysis for each of the following indicators. If additional data is cited (beyond program review data sheet), please indicate your data source(s).

d. Enrollment trends: Over the last three years, is the enrollment in your program holding steady, or is there a noticeable increase or decline? Please comment on the data and analyze the trends.

Enrollment in Music Technology has seen a modest decrease over the past 3 years. This may be attributable to increases in tuition and repeatability limits.

Foothill College created one of the first music technology programs in the country. Over recent years many other colleges and universities have launched similar music technology programs. This has created some competition and has influenced lower enrollment numbers at Foothill. Compared to other schools, Foothill College remains one of the best programs offering the most courses with high caliber instructors and professional quality studio facilities.

The Music Technology Program would benefit from more marketing and advertising. Many student prospects in the Bay Area, who are considering other schools, are not yet aware of Foothill College. By expanding our marketing and advertising efforts we can educate Bay Area students so they are well informed regarding the Foothill College Music Technology Program. Additionally, there is great potential to expand our student enrollment with out-of-state students. Even with the out-of-state fees the Foothill College Music Technology Program offers a very competitive cost-efficient option to students considering private schools and local universities. There is no music technology program in the country that offers such a large selection of courses as Foothill College. By expanding our advertising and outreach efforts on the national level we should be able to increase the overall productivity of our music tech program.

e. **Student Demographics:** Please comment on the enrollment data, comparing the program-level data with the college-level data. Discuss any noticeable differences in areas such as ethnicity, gender, age and highest degree.

The Music Program has very similar Distribution by Ethnicity statistics as the Foothill College general enrollment trends. For example Asian students comprised 26% of total student body in 2012-2013 and Asian students comprised 27% of the Music Department.

f. **Productivity:** Although the college productivity goal is 535, there are many factors that affect productivity, i.e. seat count/facilities/accreditation restrictions. Please evaluate and discuss the productivity trends in *your program*, relative to the college goal and any additional factors that impact productivity. If your productivity is experiencing a declining trend, please address strategies that your program could adopt to increase productivity.

Although Productivity has dropped to 569 we are still above the target of 535. Many of the music technology classes are limited in size because they require significant equipment configurations for students to succeed with hands-on workforce related learning objectives. For example in the Idea Center computer lab there are only 30 stations and the Foothill recording studio facility can only accommodate 25 face-to-face students. To help balance our productivity goals we continue to develop and teach rich online and hybrid course content including new courses on Ableton Live and Apple Logic. These new courses, combined with recently approved additions to our Game Audio and Electronic Music curriculum, should gradually increase productivity back to historic levels.

As part of an accreditation requirement, the college has established institution-set standards across specific indicators that are annual targets to be met and exceeded. Please comment on how these indicators compare at your program level and at the college level. (For a complete description of the institutional standard, please see the instructional cover sheet)

a. **Institutional Standard for Course Completion Rate: 55%**

Please comment on your program's course success data, including any differences in completion rates by student demographics as well as efforts to address these differences.

Our course completion data indicate over 80% of enrolled students successfully complete the music technology classes. With a very diverse roster of students including all ages and many ethnic backgrounds, we do not see any problems or shortcomings in any specific student demographic.

b. Institutional Standard for Degree Completion Number: 450

Has the number of students completing degrees in your program held steady or increased/declined in the last three years? Please comment on the data, analyze the trends, including any differences in completion rates by student demographics.

For the 2012-2013 academic year the number of degrees has decreased slightly while the number of certifications has increased. Although our degree and certification completion rates are good compared to other programs and divisions, the music technology completion rates can be improved. Considering the number of students that go through our program every year, and successfully complete required classes, we should be able to increase the number of degrees awarded. Many students are eligible for degrees and certificates but they do not manage to apply for them. By encouraging and assisting students to apply for these degrees and certifications, and by educating them regarding the value of these credentials, the total number of degree completions will increase.

c. Institutional Standard for Certificate Completion Number (Transcriptable): 325

Has the number of students completing certificates in your program held steady, or increased/declines in the last three years? Please comment on the data, analyze the trends, including any differences in completion rates by student demographics.

Certificates have increased 33%, AA degrees have decreased 25%. Music Technology teaches courses that lead to professional certifications (meaning professional certifications from industry, not the state, such as those created by technology companies like Avid and Waves). These professional certifications have increased over the past 3 years and continue to draw students into our program.

d. Institutional Standard for Transfer to four-year colleges/universities: 775

Based on the transfer data provided, what role does your program play in the overall transfer rates? Please comment on any notable trends or data elements related to your program's role in transfer.

Although transfer data is not currently captured by Foothill College data administrative systems, we recognize the importance of overall transfer rates. In an effort to gather this information in the future we plan to deploy surveys directly to our currently enrolled music technology students and alumni. This will give us the opportunity to gather specific transfer data information. In all of our classes, and with all of our students, we continue to emphasize the value of transferring to and completing a four year degree. We help students choose classes and develop strategies so classes at Foothill College will most efficiently transfer to the four-year degree programs they aspire to complete.

Section 3: Core Mission and Support

The College's Core Missions are reflected below. Please respond to each mission using the prompts below.

a. Basic Skills: (English, ESLL and Math): For more information about the Core Mission of Basic Skills, see the Basic Skills Workgroup website: <http://foothill.edu/president/basicskills.php>
If your program is categorized as a basic skills program, please discuss current outcomes or initiatives related to this core mission and analyze student success through the core mission pathway.

If your program is NOT categorized primarily as a basic skills program, comment about how your program/classes supports Foothill's basic skills mission and students.

Although our program is not categorized as a basic skills program, Music Technology courses support the development of foundation skills in several ways. First, Music Technology courses help students to develop basic skills in reading and writing through research papers, technical documentation, discussion forum posts, and essay questions. Second, Music Technology courses help students to develop math skills through the application of music theory, acoustical analysis, and professional audio engineering signal processing concepts. Finally, Music Technology courses help students learn to achieve success in college-level courses through the rigorous pursuit of both academic and creative excellence.

If your program is classified as a transfer program, please discuss current outcomes or initiatives related to this core mission and analyze student success through the core mission pathway.

The Music Technology program maintains a wide array of courses that are eligible for transfer to UCs and CSUs. The Foothill College Music Technology Program has more transferable classes than any other Music Technology program in the California Community College System, including several classes that qualify for general education for both Foothill College and Transfer. This commitment to Transfer courses serves a wide range of students in addition to Music Technology majors.

If your program is NOT categorized primarily as a transfer program, please comment about how your program/classes support Foothill's transfer mission and students.

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c. Workforce: For more information about the Core Mission of Workforce, see the Workforce Workgroup website: <http://www.foothill.edu/president/workforce.php>

If your program is classified as a workforce program, please discuss current outcomes or initiatives related to this core mission and analyze student success through the core mission pathway.

The Music Technology program provides instruction in both traditional studio recording practices, and modern digital audio production techniques. Music Technology alumni have achieved success in the workforce in a variety of vocations including software and hardware development, music production, audio engineering, and sound design for visual media. Recent graduates are currently employed with several industry-leading employers including Antares Audio Technologies and Avid Technology.

If your program is NOT categorized as a workforce program, please comment about how your program/classes support Foothill's workforce mission and students.

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Section 4: Learning Outcomes Assessment Summary

a. Attach 2012-2013 Course-Level – Four Column Report for CL-SLO Assessment from TracDat, please contact the Office of Instruction to assist you with this step if needed.

b. Attach 2012-2013 Program Level – Four Column Report for PL-SLO Assessment from TracDat, please contact the Office of Instruction to assist you with this step if needed.

Section 5: SLO Assessment and Reflection

Based on your assessment data and reflections, please respond to the following prompts.

a. **What curricular, pedagogical or other changes have you made as a result of your CL-SLO assessments?**

Based on our comprehensive SLO reflections, major curricular or pedagogical changes are not indicated. As a general trend, we strive to develop a wide range of learning options for our students. We recognize that students prefer a range of mechanisms for learning. Some students are more visually oriented, while some do better with concrete written instructions. Our assessment methods include hands-on creative project-based assignments to best support our work force focused students and written exams for students focusing on the academic transfer path of our program.

b. **How do the objectives and outcomes in your courses relate to the program-level student learning outcomes and to the college mission?**

In alignment with the Foothill College Mission Statement, the Music Technology department provides students with skills needed for transfer, entry into the workplace, and creative expression. In addition, the Music Technology department is committed to developing and maintaining an innovative curriculum, providing access to all students, and serving as a creative incubator for the media arts community.

c. **How has assessment of program-level student learning outcomes led to certificate/degree program improvements? Have you made any changes to your program based on the findings?**

Our program level student learning outcomes are well-defined and adequately support degree and certificate objectives. No major changes or actions have been indicated based on program level SLO reflections.

d. **If your program has other outcomes assessments at the program level, comment on the findings.**

e. What do faculty in your program do to ensure that meaningful dialogue takes place in both shaping and evaluating/assessing your program's student learning outcomes?

Music Technology faculty communicate on a daily basis discussing all aspects of the program. We are constantly engaged exchanging emails, phone calls, face-to-face office meetings and web conferencing when from remote locations. We creatively collaborate together striving to improve our program. This includes addressing technical issues such as updating to the latest software and discussing the details of individual classes and related assignments. Adjunct faculty actively participate in these discussions as well. We recognize one of our greatest assets is the collective talent and experience of our instructors. Leveraging combined suggestions and reflections has been a powerful contributor to the success of the program.

Section 6: Program Goals and Rationale

Program goals address broad issues and concerns that incorporate some sort of measurable action and connect to Foothill's core missions, [Educational & Strategic Master Plan \(ESMP\)](#), the division plan, and SLOs. Goals are not resource requests.

List Previous Program Goals from last academic year: check the appropriate status box & provide explanation in the comment box.

Goal/Outcome (This is NOT a resource request)	Completed? (Y/N)	In Progress? (Y/N)	Comment on Status
1 Improve acoustics in studio 1101	4 years	New designs and acoustical measurements have been created.	Met/ongoing
2 Continue developing original course materials applicable to our program needs.	5 years	3 new classes completed.	Met/ongoing
3 Continue producing professional quality recordings	5 years	50+ recordings have been completed in 2011/2012	Met/ongoing

New Goals: Goals can be multi-year (in Section 7 you will detail resources needed)

Goal/Outcome (This is NOT a resource request)	Timeline (long/short-term)	How will this goal improve student success or respond to other key college initiatives?	How will progress toward this goal be measured?
1 Improve acoustics in studio 1101	5 years	Improve student success by creating a professional level acoustic recording space.	Research room modifications and acoustical design. Initiate fund raising activities to raise required capital.
2 Continue developing original course materials applicable to our program needs.	5 years	New, state of the art cutting edge classes will be created and offered.	Instructors will create new courses and update existing courses with new material.
3 Continue producing professional quality recordings	5 years	Offers hands-on experience and real-world training, as well as portfolio development.	Student-released CD and downloadable album projects. Student online portfolios and resumes used in job placement efforts.

Section 7: Program Resources and Support

Using the tables below, summarize your program's unfunded resource requests. Refer to the Operations Planning Committee website: <http://foothill.edu/president/operations.php> for current guiding principles, rubrics and resource allocation information.

Full Time Faculty and/or Staff Positions

Position	\$ Amount	Related Goal from Table in section 6 and how this resource request supports this goal.	Was position previously approved in last 3 years? (y/n)
Studio Manager	\$10,000.00	1/3	
Lab Assistant	\$6000.00	3	

Unbudgeted Reassigned Time (calculate by % reassign time x salary/benefits of FT)

Has the program received college funding for reassign time in the last three years? (no)	If yes, indicate percent of time.
Has the program used division or department B-budget to fund reassign time? (no)	

Indicate duties covered by requested reassign time:

Responsibility	Estimated \$	Related Goal from Table in section 6 and how this resource request supports this goal.	Est hours per month	% Time

One Time B Budget Augmentation

Description	\$ Amount	Related Goal from Table in section 6 and how this resource request supports this goal.	Previously funded in last 3 years? (y/n)

Ongoing B Budget Augmentation

Description	\$ Amount	Related Goal from Table in section 6 and how this resource request supports this goal.	Previously funded in last 3 years? (y/n)

Facilities and Equipment

Facilities/Equipment Description	\$ Amount	Related Goal from Table in section 6 and how this resource request supports this goal.	Previously funded in last 3 years? (y/n)
Studio C Renovation	\$100,000	Convert one of the building 1100 office rooms into an Editing, Mixing, and Media Screening room. This will help accommodate the growing number of students that need access to professional equipment and production experience. It will also serve as a destination production facility to help all video projects at Foothill College. Any department or instructor that needs support producing professional quality videos for online class material will benefit from this facility.	
Studio A Mixing Console	\$100,000	The current Avid D-Command mixing console is obsolete. It has been discontinued and will no longer be supported. We should make plans to exchange the current console for a new model.	
Building 1100 Live Webcast Capability	\$100,000	By permanently installing video broadcast and video streaming equipment, we can turn	

		building 1100 into a broadcast quality Internet Streaming TV studio. This can be a premier destination for all departments at Foothill and also the general community. Will give students the opportunity to build portfolios and acquire practical experience with professional equipment and workflows.	
IDEA Center HVAC	\$75,000	Upgrade the air conditioner system. Creativity requires fresh air. With all of the computer equipment generating heat, the IDEA Center's ventilation system is extremely inadequate. The IDEA Center HVAC system is also an acoustical problem because the noise floor generated makes it difficult for students to hear the music or the instructor.	
IDEA Center Computers	\$70,000	iMacs in the IDEA Lab are in desperate need of a refresh.	
Mobile Video Production Equipment	\$50,000	A portable video production system would benefit all programs. Students could be trained to shoot videos of live events, lectures, meetings, concerts and graduation commencements. Foothill College has fantastic instructors but we are behind the curve with video production and delivering high quality HD videos of our lectures and special events. With YouTube,	

		iTunes, Vimeo, Facebook etc. there has never been greater opportunity for educational digital media content creation. We have the talent and the facilities. We just need the video production equipment to capture, edit and broadcast the content.	
IDEA Center Web Video Broadcast Equipment	\$25,000	By installing video cameras, wireless microphones and Internet compression hardware, the IDEA Center could produce videos of class lectures and stream the face-to-face classes live to our online students live in real time.	
Advertising	\$12,000	With additional Music Technology Programs opening all around the country, Foothill College has more competition. We need to maintain a presence with consistent online advertising and marketing efforts. Search Engine Optimization, Google Ads, Craigslist Ads, Banner Ads on music tech related forums should all be utilized to help drive students to our websites.	
Additional Ribbon Mic	\$3000	A second AEA R44CEX ribbon microphone to facilitate stereo ensemble recording.	
Microphone Storage Locker	\$1,000	Protect and secure microphone collection.	
Promotional Videos	\$2,000 - \$10,000	All of our programs need promotional videos.	

Facilities/Equipment Description	\$ Amount	Related Goal from Table in section 6 and how this resource request supports this goal.	Previously funded in last 3 years? (y/n)
Appreciation Hall Sound System	\$150,000	The current loudspeaker system is obsolete and broken beyond repair. With an upgraded sound system, Appreciation Hall could be used for lectures, special events and concerts. Installing a functional sound system in Appreciation Hall functional would be of great benefit to all programs.	Funding has been approved and renovation is in progress.
Smithwick Theatre Audio Renovation		By installing an Avid Venue digital mixing console in Smithwick Theatre , we can teach students about live sound reinforcement and concert sound for large auditoriums. Live sound is one of the fastest growing sectors in the entertainment and audio engineering industry. An Avid Venue mixing console would also elevate the quality of services offered by Smithwick Theatre and can be rented to the general public.	This request has been approved and we have submitted purchase requisitions.
Live Field Recorder	\$6,000	A portable multitrack audio field recorder would be of great benefit to the entire school. It could be used to record panel discussions, committee meetings and special events, This audio recorder could be used to support video crews	Four track Field Recorder have been purchased for sound design classes. A professional portable eight track system can be acquired after video equipment upgrades are complete.

		and would also provide students with hands on experience directly related to workforce opportunities and the professional industry.	
Building 1100 Acoustical Upgrade	\$50,000 - \$200,000	Building 1100 was not designed with professional acoustics required for a recording studio. There is no sound isolation between the walls, and the frequency response (sound quality) of all the rooms needs acoustical treatment. The HVAC system is totally inadequate for producing professional quality recordings. By upgrading the acoustics of building 1100 students would have the opportunity to develop core competencies required for success in the workforce and we could generate additional revenue by renting out the facility. A professional recording studio would be an asset that would serve the entire campus.	Partially funded in 2013 with initial \$25,000 budget.

Section 8: Program Review Summary

Address the concerns or recommendations that were made in prior program review cycles, including any feedback from Dean/VP, Program Review Committee, etc.

Recommendation	Comments
1.	

a. After reviewing the data, what would you like to highlight about your program?

	INTERNAL FACTORS	EXTERNAL FACTORS
Strengths	<p>The Music Technology Program considers its greatest strengths to be its</p> <ul style="list-style-type: none"> • broad-based, comprehensive curriculum; • award-winning, innovative, creative faculty; and • state-of-the-art equipment and software applications that prepare students to successfully enter the work force. 	The Music Technology Program has an excellent reputation in the professional music community and the graduates of the program are placed easily in the music industry.
Weaknesses	The lack of an Applied Music program and the restrictions on our performance program due to repeatability issues.	The general economic downturn and the perception that the music business does not lead to a viable career along with the impact of the repeatability restrictions.
Opportunities	To be in the forefront both in terms of curricular offerings and delivery systems.	To continue to work with music business and industry to identify supplementary funding sources.
Threats	<ul style="list-style-type: none"> • The state of the budget and declining enrollment trends district-wide. • Impact of repeatability restrictions. 	Proprietary Schools that offer music technology programs.

Section 9: Feedback and Follow Up

This section is for the Dean to provide feedback.

a. Strengths and successes of the program as evidenced by the data and analysis:

The Music Technology Program is very successful and is the workforce arm of Music. The curriculum is unique and includes professional certification courses from both AVID (Pro Tools, Media Composer, Sibelius) and Waves (software plug ins). The facilities are excellent, particularly with the funding that was approved from the 2012-1013 cycle and is slowly being implemented. Both full time instructors are nationally recognized as among the top of their profession, and the adjunct faculty are very impressive as well. All of the classes can be offered online, and the A.A. Degree and Certificates of Achievement can be completed 100% online, which is noteworthy and adds to the program's distinction.

A big success in the part year was the AVID Instructor Summit and Certification courses offered in August. Having the nationally recognized event move to Foothill from the USC

Thornton School of Music is a testament to the high regard Foothill's Music Technology Program is held by industry partners.

Areas of concern, if any:

The college does not break out data for Music & Music Technology separately. This means that the numbers are combined, and so for clarity, I think we should talk about combining the 2 program reviews as they do in Theatre/Theatre Tech. This would give the college a much clearer look at what is happening in these 2 areas, even though they are very different in scope and approach.

As mentioned in this review, the proliferation of Music Technology Programs statewide and nationally is unprecedented. The number of "Pro Schools" such as X'Pression Center for New Media in the area means we must increase our profile if we are to continue to grow.

b. Recommendations for improvement:

The program can benefit by offering short courses, particularly on weekends. This will also serve the needs of former students who need refresher courses to get up to date with current software packages.

Continue to offer new classes, such as Pro Tools and Game Audio, Producing with Ableton Live, etc. The new courses in the History Of Electronic Music set to come online in Summer 2014 promise to add to the distinction of the program and also grow it substantially.

Offer more face to face sections of recording arts. This is still the bread and butter of the program and is a tremendous source of new students.

Participate more in college recruiting activities such as Day On The Hill. Music Tech. has never had a table at this very well attended event and this could substantially increase awareness and enrollment in this very popular program.

Develop contemporary marketing materials through the marketing office and develop a strategy to offset the impact of the increased competition from outside sources mentioned above.

d. Recommended next steps:

- X_ Proceed as planned on program review schedule
- _____ Further review/Out of cycle in-depth review

Upon completion of section 9, the Program Review should be returned to department faculty and staff for review, then submitted to the Office of Instruction and Institutional Research for public posting. See timeline on Program Review Cover Sheet.