

Curriculum Committee



New Program or Certificate Proposal

Note: Before completing this proposal, all core courses for a new program or certificate must have already been reviewed (or submitted for the same meeting) by the Curriculum Committee and approved by the Provost. In addition, the complete catalog page must be included at the end of this document.

School or Division	School of Arts, Humanities, and Social Sciences
Proposed by (faculty only)	Prof. Mike Molloy, Dr. Thomas Smith
Presenter (faculty only)	Prof. Mike Molloy
Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and must be submitted for a later date.	
Submission date	10/12/2020

Section I: Important Dates and Endorsements Required

NOTE: Course and Program changes must be submitted by the dates listed on the published Curriculum Committee Calendar. Exceptions to the published submission deadlines must receive approval from the Provost's Office.

Term in which approved action will take place	Fall 2021
Provide an explanation below for the requested exception to the effective date.	
N/A	

Required Endorsements	Type in Name	Select Date
Department Chair or Program Coordinator/Director	Prof. Dana Roes	10/12/2020
Academic Dean or Provost	Dr. Deborah Teed	10/12/2020

Library Review: Has the Libraries' Collection Manager been contacted about the new program or certificate and discussed potential impacts to the libraries' collections?
N/A
List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).
Dr. Thomas Smith, Prof. Mike Molloy, Dr. Ken Puls, Dr. Scott Courtney, Prof. Stuart Brown, Dr. Ryan Wurst, Dr. Ron Doiron, Dr. Anita Rose

Section II, New Program or Certificate Information (must complete all items)

List new program or certificate.	Associate of Science (AS) in Music Production and Technology
Describe (below) the process by which the need for the new program or certificate was identified. Along with the summary, delineate the parties that have endorsed the new program such as	

Advisory Board, Faculty, and/or Ad Hoc Committees. Submit Minutes of meetings and endorsements along with this form.

Many other state colleges in Florida offer workforce training certificates and degrees in the field of Music Production, but there are no Associate of Science or Certificate programs offered at any public institutions between the Tampa vicinity (St. Petersburg State College) and Miami area. We would be filling a geographical niche, as well as meeting a need in our community. Here in southwest Florida, there are many performing arts venues, arenas, television and radio networks, small production companies and churches that employ complex sound systems and require certified technicians to manage their hardware and software.

Florida SouthWestern State College could offer students the opportunity to earn an Associate of Science degree in two years that will prepare them for viable employment in the industry. Fine Arts faculty members Prof. Mike Molloy, Dr. Tom Smith, Dr. Ken Puls, Dr. Ron Doiron, Prof. Stuart Brown, Dr. Scott Courtney, Dr. Anita Rose, and Dr. Ryan Wurst, endorse this new Associate of Science degree in Music Production and Technology.

Provide a summary of the Program needs analysis.

Program needs are based on assessing local and regional business needs.

- Discussions with students who graduated from FSW's College Credit Certificate (CCC) in Audio Technology revealed their desires for further education and certifications in the field.
- Conversations were conducted with local and regional businesses about the need for more qualified music producers and technicians who are experienced with the newest industry standard technology used for producing music in today's professional settings.
- With 25 years of experience working directly in the industry with literally hundreds of big name performers, Prof. Mike Molloy has identified the need for this degree.

It has become apparent that there is a great need for a program of this nature to train our students and provide real life opportunities, utilizing industry standard software and equipment, to best prepare them for entry into the workforce.

Provide a summary of the Salary Levels that graduates of this Program can expect to make.

Music Producers: \$51,020 per year

https://www.payscale.com/research/US/Job=Music_Producer/Salary

Broadcast and Sound Engineering Technicians: \$43,660 per year

<https://www.bls.gov/ooh/media-and-communication/broadcast-and-sound-engineering-technicians.htm>

Music Directors and Composers: \$51,670 per year

<https://www.bls.gov/ooh/entertainment-and-sports/music-directors-and-composers.htm>

Briefly describe the existing resources available needed to implement this new program.

Faculty member, Prof. Mike Molloy, will be primarily responsible for teaching the Music Production Technology (MPT) core courses. Music faculty members Dr. Ken Puls, Dr. Ron Doiron, Prof. Mary Seal, Dr. Scott Courtney and Prof. Julius Davis, will primarily instruct classes in the technical electives. Primary courses will be taught in existing music spaces in the L building: audio labs, class piano labs, ensemble rooms, music theory room and music studio rooms.

Briefly describe the additional resources needed to implement this new program.
Perkins funds were used to successfully launch the certificate programs in Audio Technology several years ago. They have also been utilized to make various upgrades since implementation of the certificate program. For the short term, the needs are minimal and within the scope of the certificate programs already in place.
Briefly describe any Program Accreditation required for this program.
N/A
Briefly describe any Industry Certification available for student to take during or following completion this program.
Professor Molloy is a Certified Avid instructor and is able to provide Avid ProTools certification for our students.
Project (below) the average enrollment for core courses.
The lab allows for 12 students per class, approximately 72 students per academic year.
Describe (below) how this projection was determined.
We examined the average number of students in existing audio tech and music classes and polled students who would be interested in furthering their music production education at FSW. In addition to entering college freshmen and currently enrolled students, we anticipate attracting graduates of our Audio Technology Certificate program, as well as interested members of the community.
List (below) similar programs or certificates at other colleges and universities.
The following Florida 2-year schools offer AS degree tracks in Music Technology/Recording Arts: Northwest Florida State College https://catalog.nwfsc.edu/preview_program.php?catoid=17&pooid=5069 Broward College https://www.broward.edu/academics/_docs/program-maps/2020-2021/ahcd/as-music-technology-2206.pdf Daytona State College https://daytonastate.edu/thearts/musicproductiontechnology.html St. Petersburg State College https://spcollege.edu/future-students/degrees-training/arts-humanities-and-design/music-industry-recording-arts Miami Dade College, Music Business: Creative Performance https://www.mdc.edu/academics/programs/ps/25043.pdf Miami Dade College, Music Business: Creative Production https://www.mdc.edu/musicbusinessproduction/ Valencia State College https://net1.valenciacollege.edu/future-students/degree-options/associates/sound-and-music-technology/

For AS and Certificate Programs: Attach a Copy of the related FLDOE Curriculum Frameworks. Copy and paste the "Standards" from the FLDOE framework (one standard per row). List the FSW course or courses in which that Standard is taught.

Program Title: Music Production Technology	
Career Cluster: Arts, A/V Technology and Communication	
FLDOE Framework Standard	FSW Course
01.0 Demonstrate knowledge of basic musical skills. The student will be able to:	
01.01 Demonstrate knowledge of musical structure.	MUT1111, MUT1112
01.02 Analyze the style, structure, and technical content of selected written and performed music.	MUT 1112
01.03 Apply listening skills for hearing live and recorded music.	MUT 1242, MUT1242
01.04 Identify performance characteristics of musical instruments.	MVx 13xx
02.0 Demonstrate competence in basic keyboard skills. The student will be able to:	
02.01 Demonstrate basic knowledge of scales and chord progressions.	MVK 1111, MUT1112
02.02 Follow basic musical notation.	MVK 1111, MUT1112
02.03 Demonstrate basic knowledge of a keyboard.	MVK 1111, MUT1112
03.0 Demonstrate knowledge of music history. The student will be able to:	
03.01 Contrast stylistic periods of composition and performance through analysis of music scores.	MUT 1112
03.02 Contrast stylistic periods of composition and performance through analysis of live and recorded performances.	MUL 1010
03.03 Identify primary contributions of principal composers from the Renaissance through present.	MUL 1010
03.04 Identify primary forms of music for all performing media.	MUT 1112, MUL 1010
03.05 Identify the components of musical form (motives, phrases, etc.) visually and aurally.	MUT 1112, MUL 1010
03.06 Associate particular forms of music with particular stylistic periods.	MUT 1112, MUL 1010
03.07 List the names of instruments that were prevalent in particular historical periods of music.	MUT 1112, MUL 1010
03.08 Demonstrate knowledge of multicultural (world) music.	MUH 2513
04.00 Demonstrate application of control protocols and their relationship to equipment used in the music industry. The student will be able to:	
04.01 Demonstrate an understanding of MIDI.	MUS2360, MUM2600C, DIG 2251C
04.02 Demonstrate proficiency in using MIDI instruments to record sounds using a digital sampler.	MUS2360, MUM2600C, DIG 2251C

04.03 Utilize a computer and multiple MIDI instruments.	MUS2360, MUM2600C, DIG 2251C
04.04 Record a single sound track; add multiple sound tracks, and change MIDI voices using the software.	MUS2360, MUM2600C, DIG 2251C
04.05 Demonstrate an understanding of MIDI and other control protocol in the recording studio.	MUS2360, MUM2600C, DIG 2251C
04.06 Configure MIDI and other show control devices in the studio or live environment.	MUS2360, MUM2600C, DIG 2251C
04.07 Troubleshoot MIDI and control communication problems.	MUS2360, MUM2600C, DIG 2251C
05.00 Demonstrate set-up and configuration of a computer for audio applications. The student will be able to:	
05.01 Install and configure software related to audio programs.	MUS2360, MUM2600C, DIG 2251C, MUM 2601C, MUM 2604C
05.02 Demonstrate basic knowledge of computer system requirements.	MUS2360, MUM2600C, MUM2601C
05.03 Install basic peripheral devices related to audio programs.	MUS2360, MUM2600C
06.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment. The student will be able to:	
06.01 Assess the audio technology needs of a music production (Pre-Production).	MUM 2601C, MUM 2604C
06.02 Appraise musical needs of client (personnel, hardware, software, etc.).	MUM 2601C
06.03 Evaluate available audio resources.	MUM 2601C
06.04 Select and configure appropriate hardware and software.	MUM 2601C, MUM 2604C
06.05 Develop a production plan to meet client needs.	MUM 2601C
06.06 Manage personnel and technical resources for the execution of the project.	MUM 2601C
06.07 Evaluate the final project for quality and appropriateness.	MUM 2601C, MUM 2604C
06.08 Formulate strategies for producing multi-track recording.	MUM2600C, MUM2601C, MUM2604C
06.09 Evaluate production needs for microphone applications.	MUM 2601C
06.10 Demonstrate proficiency with multi-track, multi-channelled mixing consoles.	MUM 2601C
06.11 Formulate strategies for electronic editing.	MUM 2601C, MUM 2604C, DIG2251C
06.12 Formulate strategies for multi-track recording to industry standards.	MUM 2604C
06.13 Configure audio recording systems for optimal and appropriate use of signal processing equipment.	MUM2600C, MUM2604C

06.14	Develop strategies for using MIDI.	MUS2360, DIG2251C
06.15	Engineer a recording session and prepare appropriate documentation.	MUM2601C
06.16	Mix multi-track recording.	MUS2360, MUM2600C, MUM2604C
06.17	Configure audio equipment for optimal musical mix.	MUM2600C, MUM2601C, MUM2604C
06.18	Create a mixing plan.	MUM2604C
06.19	Evaluate the quality of multi-track recording.	MUM2600C, MUM2601C, MUM2604C
06.20	Interpret audio needs for end user.	MUM2604C
06.21	Supervise equipment operator.	MUM2601C
06.22	Evaluate quality of the final mix to industry standards.	MUM2604C
07.00	Demonstrate understanding of requirements for set up and operation of a sound reinforcement system. The student will be able to:	
07.01	Demonstrate basic understanding of audio electronics (head room, biasing, distortion, equalization, frequency response, etc.).	MUS2360, MUM2600C, MUM2601C, MUM2604C
07.02	Demonstrate basic understanding of acoustics.	MUM2601C, MUM2604C
07.03	Demonstrate knowledge of principles of operation of analog/digital devices (block diagram).	MUS2360
07.04	Demonstrate basic understanding of audio signal flow in an analog or digital chain.	MUS2360, MUM2601C
07.05	Formulate strategies for audio reinforcement of music productions.	MUM2601C, MUM2604C
07.06	Evaluate performance needs.	MUM2601C
07.07	Evaluate technical needs as appropriate to given spaces.	MUM2601C
07.08	Configure a sound reinforcement system to meet performance needs.	MUM2601C
07.09	Analyze various audio qualities to achieve proper sound mix.	MUM2601C
07.10	Perform transactions with audio suppliers.	MUM2601C, MUM2604C
07.11	Design a plot for proper microphone and speaker selection and placement.	MUM2601C
08.00	Perform transactions with music industry suppliers. The student will be able to:	
08.01	Research sources for needed equipment, supplies and educational materials.	MUM2700
08.02	Differentiate the levels of quality in the hierarchy of manufacturers, distributors and suppliers.	MUM2700
08.03	Evaluate purchasing agreements including bids, warranties, and maintenance contracts.	MUM2700

08.04	Evaluate the technical specifications of audio related products.	MUS2360, MUM2601C
08.05	Execute the purchase of audio equipment, supplies and educational materials.	MUM2700
09.00	Demonstrate management skills. The student will be able to:	
09.01	Organize scheduling for live music performances.	MUM2700
09.02	Organize scheduling for recording sessions.	MUM2601C
09.03	Develop and manage budgets for musical events (performance sessions and equipment).	MUM2700
09.04	Manage live musical performances.	MUM2700
09.05	Manage music recording sessions.	MUM2601C
09.06	Demonstrate understanding of music production audio personnel hierarchy.	MUM2700
10.00	Demonstrate knowledge of legal issues of copyright and contracts. The student will be able to:	
10.01	Define and implement contractual agreements with unions, agents, managers and other representatives of the commercial music production industry.	MUM2700
10.02	Evaluate and apply copyright and licensing laws.	MUM2700
10.03	Identify potential music marketing areas and manage product distribution.	MUM2700
10.04	Recognize the right of artists and employ successful negotiation of contractual agreements.	MUM2700
11.0	Demonstrate employability skills. The student will be able to:	
11.01	Create and write a résumé and cover letter.	ENC1101
11.02	Prepare and compile a work portfolio/demo or recording.	MUM2600C, MUM2601C, MUM2604C
11.03	Identify acceptable work habits.	MUM2601C, MUM2604C
11.04	Demonstrate competence in job interview techniques.	MUM2700
11.05	Formulate strategy for post-graduation.	MUM2700, ENT2000
11.06	Generate a career plan.	MUM2700
11.07	Demonstrate knowledge of the Federal Hazard Communication regulation 29 CFR 1910.1200.	MUM2700
12.00	Demonstrate an understanding of entrepreneurship. The student will be able to:	
12.01	Define entrepreneurship.	ENT2000
12.02	Describe the importance of entrepreneurship to the American economy.	ENT2000
12.03	List the advantages and disadvantages of business ownership.	ENT2000
12.04	Identify the risks involved in ownership of a business.	ENT2000

12.05 Identify the necessary personal characteristics of a successful entrepreneur.	ENT2000
12.06 Identify the business skills needed to operate a small business efficiently and effectively.	ENT2000

Include complete new catalog page as an attachment. Proposals without the new catalog page will not be reviewed by the committee.

Section III: Personnel and Resources Needed (add rows as necessary)

Faculty position(s) (List discipline)	Full time or adjunct?	Total annual expenses
Music Technology Professor	Full-time	Existing
Future Music Technology Production Professor	Preferably full-time but adjunct can work initially	Perkins Funding: \$49,000
Staff position(s) (List title)	Full time or part time?	Total annual expenses
Instructional Assistant in Music	Full-time	Existing
Describe (below) library resources needed to support this program or certificate. Explain rationale for response, even if answer is none.		
No additional library resources are needed to support this program at this time. Resources will be available online at no additional cost.		
Describe (below) the technology, facilities, laboratory, or other resources needed to support this program or certificate.		
As this program grows, additional resources will be required to fund technology purchases; upgrades and maintenance of existing equipment; and new labs for students to utilize. In order to ensure students complete the Music Business course (MUM 2700) in the program, we will need to enlist an existing FSW Business professor or hire a new adjunct faculty member qualified to teach the course.		
List (below) the estimated annual amount required for educational materials and supplies or other operating expenses for implementation of the new program or certificate.		
Currently, all software and technology needs are met to initiate this program, but future funding will be necessary in order to support needed upgrades and replace equipment as necessary.		
Identify (below) the funding source to be used for personnel and operating expenses.		
Perkins Grant		

Section IV: Justification for proposal

Provide justification (below) for this proposed curriculum action.
The field of music production and technology is always expanding and evolving. Industry expectations and demands require personnel who are fully prepared to meet present needs and those projected for the future. The ability to create, edit, and produce new projects utilizing both current and emerging music technologies is essential. From an industry perspective, this program of study will contribute to fulfilling a very real employment need, and students at FSW have expressed great

interest in the prospect. Implementation of the AS degree in Music Production and Technology will serve new students in the program as well as those who have earned their CCC in Audio Technology. Additionally, it will provide supplemental training for persons previously or currently employed in music and entertainment occupations. Through completion of this program of study, graduates may potentially obtain employment as recording technicians/engineers, sound technicians in “live” or studio positions, and as audio editors and sound designers in various other music-related fields. Additional coursework will help prepare students for the business aspects of a career in music, including the study of legal issues involving copyrights and contracts, management skills with an introduction to entrepreneurship, and the importance of fostering working relationships throughout their careers within the music industry.

AS, Music Production and Technology

Purpose

The purpose of this program is to prepare students for employment in music production occupations or to provide supplemental professional training for persons previously or currently employed in this field. The content includes, but is not limited to, instruction that prepares individuals for positions such as music directors, singers, composers, sound engineers, producers, programmers, salespeople (retail), manufacturer's representatives, consultants, music editors, sound designers, sound systems designers, audio assistants, audio technicians, a/v technicians, studio managers/supervisors, archivists and related workers. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Music Production Technology industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

Learning Outcomes

After successfully completing this program, the student will be able to perform the following:

1. Demonstrate knowledge of basic musical skills.
2. Demonstrate competence in basic keyboard skills.
3. Demonstrate knowledge of music history.
4. Demonstrate application of control protocols and their relationship to equipment used in the music industry.
5. Demonstrate set-up and configuration of a computer for audio applications.
6. Understand the operation of basic reproduction, reinforcement and recording audio equipment.
7. Demonstrate understanding of requirements for set up and operation of a sound reinforcement system.
8. Perform transactions with music industry suppliers.
9. Demonstrate management skills.
10. Demonstrate knowledge of the legal issues of copyright and contracts.
11. Demonstrate employability skills.
12. Demonstrate an understanding of entrepreneurship.

Program Structure

This program is a planned sequence of instruction consisting of 64 credit hours in the following areas: 15 credit hours of General Education Requirement, 15 credit hours of Core Courses; 22 credit hours of Technical Electives (including SLS 1515); 12 credit hours of Additional Electives

Course Prerequisites

Many courses require prerequisites. Check the description of each course in the list below to check for prerequisites, minimum grade requirements, and other restrictions related to the course. Students must complete all prerequisites for a course prior to registering for it.

Graduation

Students must fulfill all requirements of their program major in order to be eligible for graduation. Students must indicate their intention to attend commencement ceremony, by completing the Commencement Form by the published deadline.

General Education Requirements: 15 Credit Hours

ENC 1101 – English Composition I **3 credits**

MUL 1010 – Music Appreciation **3 credits**

General Education Math – *Recommended:* MGF 1106 – Math for Liberal Arts I or MGF 1107 – Math for Liberal Arts II or STA 2023 - Statistics **3 credits**

General Education Natural Science **3 credits**

General Education Social Science – *Recommended:* POS 2041 - American National Government or AMH 2020 – History of the United States Since 1877 **3 credits***

*These courses meet the State Civics requirement.

Music Production Technology Core Courses: 15 Credit Hours

MUS 2360 - Introduction to Technology in Music **3 credits**

MUM 2600C – Recording Techniques I **3 credits**

DIG 2251C - Digital Audio I **3 credits**

MUM 2601C - Recording Techniques II **3 credits**

MUM 2604C - Multi-Track Mixdown Techniques **3 credits**

Required Technical Electives: 22 Credit Hours

MUM 2700 – Music Business **3 credits**

MUT 1111 - Music Theory I **3 credits**

MUT 1112 - Music Theory II **3 credits**

MUT 1241 – Sight Singing and Ear Training I **1 credit**

MUT 1242 - Sight Singing and Ear Training II **1 credit**

MVK 1111 - Class Piano I **1 credit**

MVK 1112 - Class Piano II **1 credit**

ENT 2000 – Introduction to Entrepreneurship **3 credits**

MVx 13xx - Applied Lessons **2 credits** (2 semesters required for a total of 4 credits)

MUS 1010 - Recital Attendance **0 credits** (2 semesters required)

MUN xxxx - Ensembles **1 credit** (2 semesters required for a total of 2 credits)

Additional Technical Electives: 12 Credit Hours

(Choose a minimum of 12 additional Credit Hours)

SLS 1515 – Cornerstone Experience **3 credits****

MVK 2121 – Class Piano III **1 credit**

MVK 2122 – Class Piano IV **1 credit**

MUC 2601 – Introduction to Song Writing I/II **2 credits** (may repeat one time for a total of 4 credits)

MUH 2513 – Introduction to World Music **3 credits**

MUN 2022 – Laptop and Electronic Arts Ensemble **1 credit** (may repeat eight times for a total of 8 credits)

DIG 2100C – Web Design I **3 credits**

DIG 2118C – Digital Graphic Design **3 credits**

DIG 2280C – Digital Video and Sound **3 credits**

TPA 1252C – Introduction to Audiovisual Technology **3 credits**

*** College required course for First Time in College (FTIC) students and transfer students with less than 30 credit hours.*

Total Degree Requirements: 64 Credit Hours

Suggested Course Sequence for AS Music Production & Technology

1st Term:		
SLS 1515	Cornerstone Experience	3
ENC 1101	English Composition I	3
MUS 2360	Introduction to Technology in Music	3
MUM 2600C	Recording Techniques I	3
MVK 1111	Class Piano I	1
MVx 13xx	Applied Lesson	2
MUN xxxx	Ensemble	1
	Total Semester Hours	16
2nd Term:		
DIG 2251C	Digital Audio I	3
MUM 2700	Music Business	3
MUL 1010	Music Appreciation	3
Gen-Ed Math	Recommended: STA 2023 or MGF 1106 or MGF 1107	3
MVK 1112	Class Piano II	1
MVx 13xx	Applied Lesson	2
MUN xxxx	Ensemble	1
	Total Semester Hours	16
3rd Term:		

MUM 2601C	Recording Techniques II	3
MUM 2604C	Multi-track Mixdown Techniques	3
MUT 1111	Music Theory I	3
MUT 1241	Sight Singing and Ear Training I	1
ENT 2000	Introduction to Entrepreneurship	3
Gen-Ed Social Science	Recommended: POS 2041 or AMH 2020	3
	Total Semester Hours	16
4th Term:		
Gen-Ed Natural Science		3
MUT 1112	Music Theory II	3
MUT 1242	Sight Singing and Ear Training II	1
Additional Technical Electives	Students choose 9 credits from specified list of additional technical elective courses	9
	Total Semester Hours	16
	Total Degree Hours	64

2020-2021Florida Department of Education
Curriculum Framework

Program Title: Music Production Technology
 Career Cluster: Arts, A/V Technology and Communication

AS	
CIP Number	1650091300
Program Type	College Credit
Standard Length	64 credit hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4011- Audio and Video Equipment Technicians 27-2041- Music Directors and Composers 13-1011- Agents and Business Managers of Artists, Performers, and Athletes 27-4014 - Sound Engineering Technicians 27-4012 - Broadcast Technicians
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml

Purpose

The purpose of this program is to prepare students for employment in music production occupations or to provide supplemental professional training for persons previously or currently employed in this field. The content includes, but is not limited to, instruction that prepares individuals for positions such as music directors, singers, composers, sound engineers, producers, programmers, salespeople (retail), manufacturer’s representatives, consultants, music editors, sound designers, sound systems designers, audio assistants, audio technicians, a/v technicians, studio managers/supervisors, archivists and related workers. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Music Production Technology industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Program Structure

This program is a planned sequence of instruction consisting of 64 credit hours.

Standards

After successfully completing this program, the student will be able to perform the following:

- 01.0 Demonstrate knowledge of basic musical skills.
- 02.0 Demonstrate competence in basic keyboard skills.
- 03.0 Demonstrate knowledge of music history.
- 04.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry.
- 05.0 Demonstrate set-up and configuration of a computer for audio applications.
- 06.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment.
- 07.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system.
- 08.0 Perform transactions with music industry suppliers.
- 09.0 Demonstrate management skills.
- 10.0 Demonstrate knowledge of the legal issues of copyright and contracts.
- 11.0 Demonstrate employability skills.
- 12.0 Demonstrate an understanding of entrepreneurship.

Florida Department of Education
Student Performance Standards

Program Title: Music Production Technology
 CIP Number: 1650091300
 Program Length: 64 credit hours
 SOC Code(s): 27-4011; 27-2041; 13-1011; 27-4014; 27-4012

Refer to Rule 6A-14.030 (4), F.A.C., for the minimum amount of general education coursework required in the Associate of Science (AS) degree. At the completion of this program, the student will be able to:	
01.0	Demonstrate knowledge of basic musical skills. The student will be able to:
01.01	Demonstrate knowledge of musical structure.
01.02	Analyze the style, structure, and technical content of selected written and performed music.
01.03	Apply listening skills for hearing live and recorded music.
01.04	Identify performance characteristics of musical instruments.
02.0	Demonstrate competence in basic keyboard skills. The student will be able to:
02.01	Demonstrate basic knowledge of scales and chord progressions.
02.02	Follow basic musical notation.
02.03	Demonstrate basic knowledge of a keyboard.
03.0	Demonstrate knowledge of music history. The student will be able to:
03.01	Contrast stylistic periods of composition and performance through analysis of music scores.
03.02	Contrast stylistic periods of composition and performance through analysis of live and recorded performances.
03.03	Identify primary contributions of principal composers from the Renaissance through present.
03.04	Identify primary forms of music for all performing media.
03.05	Identify the components of musical form (motives, phrases, etc.) visually and aurally.
03.06	Associate particular forms of music with particular stylistic periods.
03.07	List the names of instruments that were prevalent in particular historical periods of music.
03.08	Demonstrate knowledge of multicultural (world) music.
04.0	Demonstrate application of control protocols and their relationship to equipment used in the music industry. The student will be able to:
04.01	Demonstrate an understanding of MIDI.

04.02	Demonstrate proficiency in using MIDI instruments to record sounds using a digital sampler.
04.03	Utilize a computer and multiple MIDI instruments.
04.04	Record a single sound track; add multiple sound tracks, and change MIDI voices using the software.
04.05	Demonstrate an understanding of MIDI and other control protocol in the recording studio.
04.06	Configure MIDI and other show control devices in the studio or live environment.
04.07	Troubleshoot MIDI and control communication problems.
05.0	Demonstrate set-up and configuration of a computer for audio applications. The student will be able to:
05.01	Install and configure software related to audio programs.
05.02	Demonstrate basic knowledge of computer system requirements.
05.03	Install basic peripheral devices related to audio programs.
06.0	Understand the operation of basic reproduction, reinforcement and recording audio equipment. The student will be able to:
06.01	Assess the audio technology needs of a music production (Pre-Production).
06.02	Appraise musical needs of client (personnel, hardware, software, etc.).
06.03	Evaluate available audio resources.
06.04	Select and configure appropriate hardware and software.
06.05	Develop a production plan to meet client needs.
06.06	Manage personnel and technical resources for the execution of the project.
06.07	Evaluate the final project for quality and appropriateness.
06.08	Formulate strategies for producing multi-track recording.
06.09	Evaluate production needs for microphone applications.
06.10	Demonstrate proficiency with multi-track, multi-channeled mixing consoles.
06.11	Formulate strategies for electronic editing.
06.12	Formulate strategies for multi-track recording to industry standards.
06.13	Configure audio recording systems for optimal and appropriate use of signal processing equipment.
06.14	Develop strategies for using MIDI.
06.15	Engineer a recording session and prepare appropriate documentation.
06.16	Mix multi-track recording.

06.17	Configure audio equipment for optimal musical mix.
06.18	Create a mixing plan.
06.19	Evaluate the quality of multi-track recording.
06.20	Interpret audio needs for end user.
06.21	Supervise equipment operator.
06.22	Evaluate quality of the final mix to industry standards.
07.0	Demonstrate understanding of requirements for set up and operation of a sound reinforcement system. The student will be able to:
07.01	Demonstrate basic understanding of audio electronics (head room, biasing, distortion, equalization, frequency response, etc.).
07.02	Demonstrate basic understanding of acoustics.
07.03	Demonstrate knowledge of principles of operation of analog/digital devices (block diagram).
07.04	Demonstrate basic understanding of audio signal flow in an analog or digital chain.
07.05	Formulate strategies for audio reinforcement of music productions.
07.06	Evaluate performance needs.
07.07	Evaluate technical needs as appropriate to given spaces.
07.08	Configure a sound reinforcement system to meet performance needs.
07.09	Analyze various audio qualities to achieve proper sound mix.
07.10	Perform transactions with audio suppliers.
07.11	Design a plot for proper microphone and speaker selection and placement.
08.0	Perform transactions with music industry suppliers. The student will be able to:
08.01	Research sources for needed equipment, supplies and educational materials.
08.02	Differentiate the levels of quality in the hierarchy of manufacturers, distributors and suppliers.
08.03	Evaluate purchasing agreements including bids, warranties, and maintenance contracts.
08.04	Evaluate the technical specifications of audio related products.
08.05	Execute the purchase of audio equipment, supplies and educational materials.
09.0	Demonstrate management skills. The student will be able to:
09.01	Organize scheduling for live music performances.
09.02	Organize scheduling for recording sessions.

09.03	Develop and manage budgets for musical events (performance sessions and equipment).
09.04	Manage live musical performances.
09.05	Manage music recording sessions.
09.06	Demonstrate understanding of music production audio personnel hierarchy.
10.0	Demonstrate knowledge of legal issues of copyright and contracts. The student will be able to:
10.01	Define and implement contractual agreements with unions, agents, managers and other representatives of the commercial music production industry.
10.02	Evaluate and apply copyright and licensing laws.
10.03	Identify potential music marketing areas and manage product distribution.
10.04	Recognize the right of artists and employ successful negotiation of contractual agreements.
11.0	Demonstrate employability skills. The student will be able to:
11.01	Create and write a résumé and cover letter.
11.02	Prepare and compile a work portfolio/demo or recording.
11.03	Identify acceptable work habits.
11.04	Demonstrate competence in job interview techniques.
11.05	Formulate strategy for post-graduation.
11.06	Generate a career plan.
11.07	Demonstrate knowledge of the Federal Hazard Communication regulation 29 CFR 1910.1200.
12.0	Demonstrate an understanding of entrepreneurship. The student will be able to:
12.01	Define entrepreneurship.
12.02	Describe the importance of entrepreneurship to the American economy.
12.03	List the advantages and disadvantages of business ownership.
12.04	Identify the risks involved in ownership of a business.
12.05	Identify the necessary personal characteristics of a successful entrepreneur.
12.06	Identify the business skills needed to operate a small business efficiently and effectively.

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Career and Technical Student Organization (CTSO)

SkillsUSA is the intercurricular career and technical student organization(s) providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their counselor and/or instructors. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS degree program includes the following College Credit Certificates:

Audio Technology (0650060209) – 15 credit hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Additional Resources

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to:

<http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml>