PROGRAM COMMITTEE NAME:	Computer Information Systems Advisory Committee				
CHAIRPERSON:	Dewayne Higgs				
MEETING DATE:	02/19/2019	**MEETING TIME:**	4:00 pm	**MEETING PLACE:**	Room 321, Byrd Business Building, WSC
RECORDER:	Kathy Davenport			**PREVIOUS MEETING:**	05/04/2018

COMMITTEE MEMBERS
List all members of the committee, then place an X in the box left of name of those present

	NAME	TITLE	EMPLOYER INFO	PHONE	EMAIL
X	Tommy Morrison	Database Technical Lead	Amarillo College		tommy.morrison@actx.edu
X	Alex O'Brien	Owner / President	BOC Bank		alex@bocbanking.com
X	Jennifer Northern	Software Engineer	CSI		jenn.northern@csiweb.com
X	Hunter Witherspoon	Software Engineer	CSI		hunter.witherspoon@csiweb.com
X	Rich Gagnon	Chief Information Officer	City of Amarillo		Rich.Gagnon@amarillo.gov
X	Marshal Homfeld	Programmer / QA Tester	Texas Beef (also works at BOC Bank)		marshal@tbp.com
X	Cailynn White	Intern Programmer	Texas Beef (also works at BOC Bank)		cailynn@tbp.com
	Terry Kleffman				tikleffman@actx.edu
	Duane Crowley				duane.crowley@csiweb.com

EX-OFFICIO MEMBERS

X	Kathy Davenport	Administrative Assistant	Amarillo College		kathy.davenport@actx.edu

AGENDA ITEM	ACTION / DISCUSSION/ INFORMATION	
Old Business:	N/A	
Continuing Business:	NA	
New Business:		
Curriculum Decisions:	Vote on whether or not to present "Coding Academy" to curriculum committee	Advisory Committee
Other:	Open Discussion, Q & A	

KEY DISCUSSION POINTS	DISCUSSION
Continuing Business	
New Business:	The meeting was called to order at 4:05PM by Dewayne Higgs.
	Mr. Higgs started off by having everyone in the room introduce themselves with name and place of employment. He also had each person talk a little bit about what they do where they work.
	Mr. Higgs opened the meeting by explaining that the CIS department is proposing a change to the program. The purpose of the change is to keep up with the competitive nature of the world and make sure that our students have a competitive edge. He said that Amarillo College needs to train our students on how to apply theories and models into actually building working products and solutions. The students currently learn all of the steps to setting up a full stack system, but there is never any training on how to put all of the pieces together. The proposed "Coding Academy" will address that issue and teach the students how to put everything together. There are eight(8) programming courses that were originally the beginning programming courses for C-SHARP, then a few web courses and database courses. This proposal will repurpose all of those courses. The "Coding Academy" structure is going to be similar to that of the Amarillo College Police Academy. The registration process will be completely hands-on conducted by the CIS department. The Amarillo College registrar's office will not be included. Students will start at the beginning course of the academy and will be led by the department through to completion. If students enter the academy, they need to see the courses through to completion. The delivery system for the academy will be the CIS department reaching out to the community and asking for actual projects that the students are able to complete. If a local company has a problem that they need worked out, the training within the academy will adjust to match that particular problem and lesson. Mr. Higgs used the example that if an organization in Amarillo were to approach them and state that they needed a rapid response logging and transcription system, Mr. Higgs would sit down with the organization to acquire the necessary requirements. Once there is a basis set up of what kind of system the organization needs, Mr. Higgs will bring the information back to the academy, and that information will be used to train the students how to create such a system in a full stacking fashion – back-end, front end, and all in between. Mr. Higgs stated that he is looking to add to the negotiation process that the system design be open-source so that the students are able to use the project on their resume without risk of sharing private information.
	Mr. Higgs stated that the idea of the academy is that the courses will all flow together. There will not be specific ending or beginnings to the courses. One will flow into the next. Students will receive the proper number of hours to meet state regulations for class credit, but there will not be specific endings or beginnings to the courses contained within the academy.
	Mr. Higgs took time to let each person at the table talk about their thoughts regarding the academy.
	Tommy Morrison stated he sees the academy as a good idea, and that there are probably some projects that could be done. He stated that Amarillo College has a proprietary programming system, so projects completed through AC might not be anything that would make sense to outside employers.

Alex O'Brien stated that from a real-world perspective, there are a lot of interpersonal dynamics that simply cannot be taught in a classroom. You can teach the students the basics of the information, but there are a lot of skills that come from working together and talking through a solution together that students are unable to learn unless they simply do it. He stated that teaching students how to work together like that while in college before they get into the workforce is very right minded. Mr. O'Brien made a further suggestion of utilizing an advisory board made up of several different sized companies that use different types of systems. They would be able to not only talk to each other, but can train the students to recognize if a particular company may not be using the right resources and might need to change their system to better match their needs. He stated that it appears to him that the academy will make sure that students are taking classes and learning information that will actually be used in the real world.

Mr. Higgs stated that the academy will be putting the students together in groups, so that they will have to learn how to work together in a team-based methodology. He went on to state that one of the programming methodologies that he really likes is Scrum, a part of the Agile methodology. The students will have that type of interaction. Mr. Higgs stated that students will leave the academy knowing how to work in a Scrum environment, so even if they don't use Scrum in the workplace, they will have the adaptability to learn quickly whatever environment is being utilized wherever they go.

Mr. O'Brien went on to state that he believes that if the program is successful and is producing students that really know what they are doing, Amarillo could become known as the premier hub of programming and businesses would be more interested in coming to Amarillo in search of these trained programmers. As AC graduates more students with these abilities, more businesses – both local and outside – will take interest in our students. As we produce more students, more businesses will want to be involved in deciding how they are trained.

Hunter Witherspoon spoke next and asked if the courses would still translate into credit with Amarillo College and will they transfer to 4-year universities. Mr. Higgs confirmed that the courses will translate into AC credit and will be part of the Associate of Applied Sciences degree. He stated that most universities will consider an AAS degree as a technical degree and will not accept that. However, he is planning to discuss with some of the regional universities a change to the articulation agreements to update said agreements to accept this degree. He stated that right now, WT currently will accept up to 39 credit hours, and they will continue to accept that 39 credit hours with this new program. He stated that it is still considered a technical degree, and therefore, still has limited transferability.

Mr. Higgs stated that there will still be other certificates available to the non-programming students, so all students will have a program that will meet their needs. The academy will target the programming students specifically.

Mr. Higgs went over the courses that will be included in the academy. The academy will provide them with 24 credit hours, which is just over 1/3 of a degree. There will also be a certificate option for those that do not wish to continue to a degree. He stated that current students that are already enrolled will continue through their current educational options. Any new students that come into the programming program will automatically be enrolled in the academy. Eventually, all students not a part of the academy will graduate, meaning that all remaining and new students will be academy students.

Jennifer Northern asked how the students will be meeting for class time. Will they have class time and academy time separate? Mr. Higgs stated that the students will meet at a regular time, the same as a traditional class would meet. The subject matter will flow from problem to method used to fix the problem to the implementation of the solution. The logic and methodology that the students learn while building the first component will carry through to the next component, allowing the students to build the next component more easily.

The classes are already part of the curriculum – this change is more to bring the classes together to target the programming students. New students will be automatically enrolled in the academy and will eventually weed out others that aren't necessary. Jenn - Academy is a class in and of itself. Students will learn the process of breaking down a problem and building the system to fix it. First few will be analysis. Then will discuss required systems. Then will look at which specific code is actually needed. In the process, explaining the basics of programming, etc... the students will learn as they go. Teaching the students the logic of the component so even if new components or new coding, they will retain the logics and be able to adapt more easily. Grading will be based on milestones throughout the courses and academy.

Rich Gagnon stated that he loves the concept. He stated that he will give his project team a business problem and the team will discuss what steps to take to solve the problem. He stated that new people will come in and while they will have technical knowledge of three languages, but they do not know how to apply those to building a solution to a problem. The academy looks to build a skill set that usually isn't seen in fresh out of college students.

Mr. Higgs stated that it could possibly take up to a full year before deployment of this program. He is hoping for Spring 2020, but there will be time to get through all of the various issues that will come up with the changes that this program will bring.

It was again discussed the desire to have input from our community business leaders. With their support and backing of the program, it will help push the program forward.

Tommy Morrison asked Computer Sciences degree. Mr. Higgs stated that the academy will still flow into C.I.S. degree. Students will be able to sign up for the remaining needed classes for whatever degree they want to pursue after completion of the academy.

Marshall Homfeld stated that he was confused about pre-academy classes vs. post academy classes. Mr. Higgs explained we want to make sure that students are really interesting in the programming before putting through the academy. Mr. Homfeld stated that he likes the idea of differing methodologies. He stated that it was something he didn't really know upon graduation, and giving this knowledge to the academy students would give them an advantage. Students know the tools, but academy will also teach them how to actually build something with the tools.

Mr. Homfeld asked what will happen if open-source isn't available to the students; how will they be able to show off their work? Mr. Higgs stated that part of the overall negotiation with businesses, etc, will be allowing students access to information after graduation so the students can show off their work when they are in the work world. Employers want proof of what the

students know. Students just saying "I know this" doesn't mean much. They need to be able to show their work and what they actually did.

Mr. Higgs stated that there might also be some room for multi-year projects that carry over from one class to the next. Mr. Homfeld brought up how difficult it can be to come into a work place and try to work on code that someone else has written. Mr. O'Brien stated that part of real world work is coming into a work environment where the students are breaking down code that someone else has already written or started on and they have to figure out how to make it work. If the academy has already taught them how to do that, they would have a working advantage.

Mr. Higgs went on to state that the academy would be good for creating sociability with other students – build friendships and network contacts. Past students have said they have no idea who the person is beside them. The academy will have them working together and learning how to build relationships with those around them.

Cailynn White likes the idea of learning more than just textbook information. It's one thing to know the textbook problem and textbook answer versus putting it into real world practice. She stated that so much of the classroom felt like memorizing the textbook, but the actual work place was more about implementing the material.

Mr. Higgs stated that the logics will be the same no matter where you go. The technologies will be different, but the logics will be the same, so the student will be able to work out adaptabilities.

Miss. White stated again that knowing the logics makes it easier. She doesn't know the old code she works with, but knowing the logics makes it easier to break down what she's looking at and update it to something that makes sense.

Mr. Higgs asked if there were other questions or comments regarding the program. There were none, so he asked for a vote. Should the CIS department implement this program? It was voted yes by unanimous vote to present the program to the curriculum committee.

Mr. Higgs adjourned the meeting.

Curriculum Decisions:	Unanimous vote yes to present "Coding Academy" curriculum to curriculum committee
Other:	

Recorder Signature: Kathy Davenport	Date: 2-27-19	Next Meeting: To be announced