Curriculum Evaluation Rubric

Program: EKG Technician Program Date: June 14, 2016

1. EKG Fundamentals

2. EKG Stress Test/Holter Monitor

Reviewer: Kathy Snider, MSN, MA, BSN

The philosophy of the curriculum review process is based on three principles: 1) continuous improvement; 2) professional development; and 3) direct application. There are no pass/fail or minimum scores for a course, provided that all required portfolio components are submitted by the participating college. The focus of the review process is to share best practices and feedback on the work of colleagues.

Instructions: Use one rubric per course.

Begin by reviewing the Syllabus/Course Outline and complete Sections A through F of the Rubric.

For each item, circle the appropriate rating number and place a tally total in the box indicated for each section. Please take time to identify related Strengths and Suggestions for each section; this is an opportunity for you to give specific feedback to the instructor / curriculum designer. There is also a section at the end of the rubric for General or Summary Comments about the course overall. Tally the 6 sections and record the total at the end of the document in the Total Score box.

When you complete the rubric, please save it and send it to: <u>Janice M. Johnston at imjohnston31@actx.edu.</u> Completed rubrics are due no later than June 30, 2016. If you have any questions or problems, contact Janice at 806-467-3110.

fevrewed and Submitted by Drider RN 6/14/16

A. Syllabus & Course Outline: EKG Fundamentals

Scale:

1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A — Not applicable

TOT	ALS	0	2	6	4	12
A4	The Course Outline is appropriately formatted and includes major topics, activities, and length of classes/sessions.	1	2	3	4	N/A
A3	Assessment methods, grading policies and scale, and other student measurement practices are described within the syllabus.	1	2	3	4	N/A
A2	Course texts (required and optional) are listed on syllabus; supplementary materials and resources are provided if appropriate.	1	2	3	4	N/A
A1	Syllabus includes basic elements of the course (e.g., course title and number, credits, goals/objectives, learning outcomes, pre-requisites, course description)	1	2	3	4	N/A

Strengths: The syllabus includes the basic elements of the course. The title is given and the professional expectations, behavioral expectations and the specific course objectives are listed. The required textbook is listed and additional materials needed are deduced from the syllabus, with regard to needing a uniform for the clinical setting.

Suggestions: There is no course number or the number of credits listed, but it may not be a credit awarded course. There are no prerequisites mentioned and I would suggest that these be listed or write "Prerequisites –None". I would believe that because the students will enter into a clinical setting, there would be some prerequisites like immunizations, background check and minimum age.

The student would benefit from a course description; including the description for the course and the learning objectives.

There is no grading policy or grading scale listed, however, there are quizzes, assignments, exams and clinical warnings mentioned. I would recommend that these other assessments be listed out and included in the grading criteria and overall weight be assigned to each. There are opportunities to include additional student measurement practices for this course, as well. Perhaps a checklist for the EKG assessment; clinical checklists (clinical is mentioned as a part of this course), and hand's on practice and training sessions. The syllabus mentions computer assignments, but there is not a rubric for grading, nor is that listed for how those assignments will be grades.

I would recommend that a full calendar, with dates and session/class times be listed. Additionally, I would recommend that the length of the classes and clinical sessions be added in.

B. Learner Objectives & Interaction: EKG Fundamentals						
Scale:						
1: N	ot evident 2: Somewhat evident 3: Mostly evident 4: Completely	evid	ent N/A	4 – Not	applic	able
B1	The learning activities promote the achievement of the stated learning objectives.	1	2	3	4	N/A
B 2	Learning activities provide opportunities for interaction that support active learning.	1	2	3	4	N/A
B3	The course learning objectives are measurable.	1	2	3	4	N/A
B4	All learning objectives are stated clearly and written from the student's perspective.	1	2	3	4	N/A
<i>B5</i>	The learning objectives are appropriately designed for the level of the course.	1	2	3	4	N/A
тот	ALS	0	4	6	4	14

Strengths: The learning activities can be surmised from the syllabus to include: class room time, lab time, computer lab time for assignments, and clinical time. From these descriptors, the learning activities can be inferred. These activities would provide the student with some opportunities for interaction with the instructor, other students and clinical staff.

Suggestions: The syllabus for this course lists no learning objectives written specifically for the student. If the course objectives are to be considered as the learning outcomes, some of the wording should be changed to reflect application of knowledge and concepts (from a student perspective), rather than knowledge outcomes only (Bloom's taxonomy). Additionally the learning/course objectives are not all measurable, as you cannot measure someone's ability to "interact appropriately".

The outline discusses vital signs and blood pressure, the cardiovascular system and transfers, but no evidence exists in the objectives about vital signs, transfers or the cardiovascular system. I would recommend adding those so as to mirror the course calendar.

The learning objectives are not able to be evaluated as to appropriateness because there are no student learning objectives listed. I would recommend combining the course objectives to reflect student learning outcomes for the course and list out with "student will..." verbiage.

I see where there is a tremendous amount of information on discipline and will not be tolerated with in the course, but really there is not anything about what really will be taught, discussed and learned. I recommend that the instructor put the same effort into the positive outcomes, not just the negative.

C. Instructional Design: EKG Fundamentals

Scale:

1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A – Not applicable

тот	ALS	1	2	6	0	9
C4	The course accommodates a variety of learning styles and ability levels.	1	2	3	4	N/A
C3	The course teaches and uses active learning strategies to engage students and foster understanding.	1	2	3	4	N/A
C2	Concepts and skills build logically and purposefully throughout the course, with transitions to support development and understanding from skill to skill.	1	2	3	4	N/A
C1	The course organization and design is clear, coherent, and structured in a developmentally appropriate way.	1	2	3	4	N/A

Strengths: The information provided in the program information lays out an organizational format that demonstrates that the student will have classroom and clinical experiences; one before the other. This clearly suggests that leveling of knowledge occurs prior to application.

Suggestions: I would recommend that while the course information provides information about the formatting of the course, it would be helpful to include in which order the courses must be completed, the length of time for each section, and if one must be taken before another, or if they can be taken concurrently.

I would also recommend including some specific active learning strategies to help students be engaged in the course, as well as including learning activities that engage a variety of learning styles

The learning strategies and activities should engage students and align with the learning outcomes that you will identify. Most instructors want their students to be capable of more than just rote memorization of facts. In a course such as this, you will want the student to be able to apply, synthesize, and evaluate the course material so they can apply it in the real world setting. This requires more complex cognitive processes that associated with 'deep learning', and ironically, lecture does not do this well. Simulations, case studies, group work (I had my EKG students create their own "EKG for Dummies" book. This demonstrated that they had grasped the concepts and could teach them to someone else), role playing, etc. are all active learning strategies that appeal to all learning styles.

D. Instructional Materials: EKG Fundamentals Scale: 1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A — Not applicable The instructional materials contribute to the achievement of 1 N/A the stated course objectives. The purpose of the instructional materials and how the materials are to be used for learning activities are clearly D2 N/A explained. The instructional materials are current. N/A The instructional materials present a variety of perspectives N/A on the course content. Instructional materials connect students to what they already know and include real-world examples to which the students N/A

Strengths: The instructional materials (textbook) contributes to the achievement of the course objectives, as listed. The material is current, and presents a variety of perspectives that support the student in learning the needed material for success on both testing and real world experiences. The textbook shows the connection to real world examples, but the course could offer some other examples like guest speakers in the field, previous students to come in and talk about their experiences.

0

12

can easily relate.

TOTALS

Suggestions: Instructors should not only be familiar with the teaching content but should also have a rich clinical background, a solid and profound foundation of medical knowledge, and should be good at making vivid, detailed and accurate descriptions. I believe that we as instructors, should also be able to constantly update our teaching ideas to further improve our ability to communicate with students and to stimulate students' interest in EKG learning.

The ability to inspire students' imaginations and creativity is also very important. For example, how does one explain the atrioventricular block (AVB)? Here is an example of how I would teach EKG basics in a way that a variety of students could understand and remember:

I would start by letting students know that the PR interval period could be compared with the relationship between two lovers, with P and QRS waves, respectively, representing a man and woman in love. When a I(1st) degree AVB occurs, it could be like a romantic relationship in which some inharmonious ingredients have led to alienation in the relationship, as represented by the extension of the PR interval period in the ECG;

when a II degree and type I AVB happens, it could be understood as similar to a situation when the relationship between the two people has become worse, making them fight with one another, with them sometimes appearing to ignore each other, as represented by the PR interval period extending gradually as they grow farther apart, until an omission of the P wave in the ECG occurs. When a II degree and type II AVB happens, it could be seen as a situation when the relationship between the two people deteriorates further. Although not fighting often, the couple ignore each other, and such a situation can be used to explain the fact that while the PR interval period does not change, the P wave suddenly disappears in the ECG. When a III degree AVB occurs, it could be seen as two people with no relationship, as the relationship has come to an end, similar to the way that the P and QRS waves are completely independent of each other in the ECG. It seems very silly, but the students love it. I go one step further and use my hands to mimic one talking to another and then the talking slows, and stops.

E. Assessment & Measurement: EKG Fundamentals Scale: 1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A – Not applicable The types of assessments selected measure the stated learning outcomes and are consistent with course activities E1 N/A and resources. The course grading policy is stated clearly. N/A Specific and descriptive criteria are provided for the evaluation of students' work and participation, and they are E3 N/A tied to the course grading policy. E4 The assessment instruments selected are varied and N/A appropriate to the student work being assessed. E5 Students have opportunities to measure their own learning N/A progress. Assessment results are used to help students progress. 2 4 N/A E6 The sample Assessments (e.g., test, rubric, performance checklist) include information on administration, scoring, and

Strengths: None

use of results with students.

E7

TOTALS

Suggestions: The syllabus and course description do not list out any assessments that tie back to the course objectives. Mention of quizzes, assignments, exams and clinicals are given, but not related to any course activities or resources. There is not a grading policy listed and there are not criteria listed out for how the students will be evaluated on their work and participation.

2

0

0

7

N/A

7

0

The assessment instruments cannot be evaluated on the ability to give students an opportunity to measure their own learning progress, or to demonstrate how the results will be used to help student profess. I would recommend that examples of the assessments be listed out and included in a grading policy. The items should be described fully, with rubrics or examples given. Additionally, the weight of these items should be listed out for grading, as well. Students need to understand upfront, what is expected of them for successful completion of the course.

Some examples might include: Communication and Professionalism with role play; cardiac terminology with Jeopardy game; Heart Anatomy with poster presentation; Circulation with teaching foldable; Heart conduction using car battery example (blood is gas and heart is fuel pump); CPR with American Heart Course (hand's on and certify them); Vital signs with a lab where they do a clinic for other students; troubleshooting by case studies. All of these can be easily evaluated and measured using a rubric or class room evaluations by students.

F. Industry-Based Application: EKG Fundamentals

Scale:

1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A – Not applicable

<i>F3</i> F3	Course materials, activities, and learning outcomes reflect direct application to the target occupation/industry. Course materials, activities, and learning outcomes reflect	1	2	3	4	N/A N/A
F2 F3	expected to work in the workplace). Course materials, activities, and learning outcomes reflect	1	2	3	4	N/A N/A
	Assessment tools include some authentic measures (e.g., they match or align with ways students would be assessed or				Distance of the second	
F1	The course includes multiple opportunities for students to learn about the target occupations/industry (e.g., clinical application such as HIPAA, documentation, communicating	1	2	3	4	N/A

Strengths: The course describes how the students will attend a clinical component, suggesting a real world application.

Suggestions: The course objectives and outline do not discuss HIPAA, documentation, communication or any mention of NHA/ATI curriculum. I went to the website, but had to pay a fee to register and have access to materials. I would recommend that the information from this site be included in the course description or calendar early on, if students are expected to access.

There are no assessment tools that can be reviewed to evaluate for authenticity, or to match student assessment in the clinical field of work. The course materials and activities are not complete to reflect application to the industry or to the NHA/ATI curriculum. Perhaps pulling that curriculum and using it as a guide for the class format and calendar, including activities and assessments, would help the student know how they will be evaluated, and what is most important for passing the certification exam and being successful in the role of an EKG technician.

A. Syllabus & Course Outline: EKG Stress Test/Holter Monitor

Scale:

1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A — Not applicable

TOT	ALS	0	2	6	4	12
A4	The Course Outline is appropriately formatted and includes major topics, activities, and length of classes/sessions.	1	2	3	4	N/A
A3	Assessment methods, grading policies and scale, and other student measurement practices are described within the syllabus.	1	2	3	4	N/A
A2	Course texts (required and optional) are listed on syllabus; supplementary materials and resources are provided if appropriate.	1	2	3	4	N/A
A1	Syllabus includes basic elements of the course (e.g., course title and number, credits, goals/objectives, learning outcomes, pre-requisites, course description)	1	2	3	4	N/A

Strengths: The syllabus includes the basic elements of the course. The title is given and the professional expectations, behavioral expectations and the specific course objectives are listed. The required textbook is listed and additional materials needed are deduced from the syllabus, with regard to needing a uniform for the clinical setting.

Suggestions: There is no course number or the number of credits listed, but it may not be a credit awarded course. There are no prerequisites mentioned and I would suggest that these be listed or write "Prerequisites –None". I would believe that because the students will enter into a clinical setting, there would be some prerequisites like immunizations, background check and minimum age.

The student would benefit from a course description; including the description for the course and the learning objectives.

There is no grading policy or grading scale listed, however, there are quizzes, assignments, exams and clinical warnings mentioned. I would recommend that these other assessments be listed out and included in the grading criteria and overall weight be assigned to each. There are opportunities to include additional student measurement practices for this course, as well. Perhaps a checklist for the EKG assessment; clinical checklists (clinical is mentioned as a part of this course), and hand's on practice and training sessions. The syllabus mentions computer assignments, but there is not a rubric for grading, nor is that listed for how those assignments will be grades.

would recommend that a full calendar, with dates and session/class times be listed. Additionally, I would recommend that the length of the classes and clinical sessions be added in.

B. Learner Objectives & Interaction: EKG Stress Test/Holter Monitor						
Scal						
1: N B1	The learning activities promote the achievement of the stated learning objectives.	1	ent N/A	3 - NOT	4	N/A
B2	Learning activities provide opportunities for interaction that support active learning.	1	2	3	4	N/A
B3	The course learning objectives are measurable.	1	2	3	4	N/A
В4	All learning objectives are stated clearly and written from the student's perspective.	1	2	3	4	N/A
B5	The learning objectives are appropriately designed for the level of the course.	1	2	3	4	N/A
тот	ALS	3	4	0	0	7

Strengths: It can be deducted that there will be learning experiences that include clinical experiences because the calendar refers to clinical paperwork and simulation EKGs on volunteers. There are not any learning objectives to measure this against.

Suggestions: There are not learning objectives for this course, so I would suggest adding those and tying the learning activities directly back to the learning objectives. I would also recommend that the learning objectives be student focused, clearly written, appropriate for the level of the course and easily measured.

C. Instructional Design: EKG Stress Test/Holter Monitor

Scale:

1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A – Not applicable

C1	The course organization and design is clear, coherent, and	1	2	3	4	N/A
	structured in a developmentally appropriate way.					
	Concepts and skills build logically and purposefully					
	throughout the course, with transitions to support					
C2	development and understanding from skill to skill.	1	2	3	4	N/A
C3	The course teaches and uses active learning strategies to	1	2	3	4	N/A
,	engage students and foster understanding.				-	
C4	The course accommodates a variety of learning styles and	1	2	3	4	N/A
	ability levels.			1		
TOT	ALS	1	2	6	0	9
SELLING			b tales to	The second	U 1000	

Strengths: The information provided in the program information lays out an organizational format that demonstrates that the student will have classroom and clinical experiences; one before the other. This clearly suggests that leveling of knowledge occurs prior to application.

Suggestions: I would recommend that while the course information provides information about the formatting of the course, it would be helpful to include in which order the courses must be completed, the length of time for each section, and if one must be taken before another, or if they can be taken concurrently.

I would also recommend including some specific active learning strategies to help students be engaged in the course, as well as including learning activities that engage a variety of learning styles

The learning strategies and activities should engage students and align with the learning outcomes that you will identify. Most instructors want their students to be capable of more than just rote memorization of facts. In a course such as this, you will want the student to be able to apply, synthesize, and evaluate the course material so they can apply it in the real world setting. This requires more complex cognitive processes that associated with 'deep learning', and ironically, lecture does not do this well. Simulations, case studies, group work (I had my EKG students create their own "EKG for Dummies" book. This demonstrated that they had grasped the concepts and could teach them to someone else), role playing, etc. are all active learning strategies that appeal to all learning styles.

ly evi	dent N	I/A – No	ot appl	icable
1	2	3	4	N/A
1	2	3	4	N/A
1	2	3	4	N/A
1	2	3	4	N/A
·	2	3	4	N/A
	1 1 1 1	1 2 1 2 1 2 y	1 2 3 1 2 3 1 2 3	1 2 3 4 1 2 3 4 1 2 3 4

Strengths: Going with the assumption that the textbook listed in the program handout is the required book for this course, the textbook material is current, and presents a variety of perspectives that support the student in learning the needed material for success on both testing and real world experiences. The textbook shows the connection to real world examples, but the course could offer some other examples like guest speakers in the field, previous students to come in and talk about their experiences.

Suggestions: There is no evidence that the textbook contributes to the achievement of the stated course objectives, because there are no objectives listed. This should be done, and align with the textbook. The calendar lists a study guide, but no information is given up front, for the student to know what this is for and where to find it. I would recommend including that. Overall, more information should be given as to what makes this course different from the fundamentals course and what will be learned in this course, that is not available in the other. If it is listed as a standalone course, it should look like a standalone course in every way.

E. Assessment & Measurement: EKG Stress Test/Holter Monitor Scale: 1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A – Not applicable The types of assessments selected measure the stated learning outcomes and are consistent with course activities and resources. 1 2 3 4 N/A E2 The course grading policy is stated clearly. Specific and descriptive criteria are provided for the evaluation of students' work and participation, and they are tied to the course grading policy.

N/A

N/A

N/A

3

checklist) include information on administration, scoring, and use of results with students.

TOTALS

Checklist) include information on administration, scoring, and use of results with students.

7 0 0 7

The assessment instruments selected are varied and

Students have opportunities to measure their own learning

Assessment results are used to help students progress.

The sample Assessments (e.g., test, rubric, performance

appropriate to the student work being assessed.

E4

E6

progress.

Strengths: A practice test #1 and practice test #2 are described, as well as clinical paperwork and a study guide. These are all suggestive of some type of student work that will be measured and graded.

Suggestions: The syllabus and course description do not list out any assessments that tie back to the course objectives. Mention of quizzes, assignments, exams and clinicals are given, but not related to any course activities or resources. There is not a grading policy listed and there are not criteria listed out for how the students will be evaluated on their work and participation.

The assessment instruments cannot be evaluated on the ability to give students an opportunity to measure their own learning progress, or to demonstrate how the results will be used to help student profess. I would recommend that examples of the assessments be listed out and included in a grading policy. The items should be described fully, with rubrics or examples given. Additionally, the weight of these items should be listed out for grading, as well. Students need to understand upfront, what is expected of them for successful completion of the course.

Some examples might include: Communication and Professionalism with role play; cardiac terminology with Jeopardy game; Heart Anatomy with poster presentation; Circulation with teaching foldable; Heart conduction using car battery example (blood is gas and heart is fuel pump); stress test done using YouTube videos created to include how the patient is attached to the ECG machine and, rather than lying down, the patient exercises by walking on a treadmill or pedaling a stationary bicycle while the ECG is recorded. This test is done to assess changes in the ECG during stress such as exercise; Holter monitor could be brought in and attached to a student or two and they are asked to keep the journal and share with the class; Troubleshooting by case studies. All of these can be easily evaluated and measured using a rubric or class room evaluations by students.

F. Industry-Based Application: EKG Stress Test/Holter Monitor

Scale:

1: Not evident 2: Somewhat evident 3: Mostly evident 4: Completely evident N/A – Not applicable

F2	Assessment tools include some authentic measures (e.g., they match or align with ways students would be assessed or expected to work in the workplace).	1	2	3	4	N/A
F3	Course materials, activities, and learning outcomes reflect direct application to the target occupation/industry.	1	2	3	4	N/A
F3	Course materials, activities, and learning outcomes reflect direct application to the NHA/ATI curriculum.	1	2	3	4	N/A
TOT	ALS	3	2	0	0	5

Strengths: The course describes how the students will attend a clinical component, suggesting a real world application.

Suggestions: The course objectives and outline do not discuss HIPAA, documentation, communication or any mention of NHA/ATI curriculum. I went to the website, but had to pay a fee to register and have access to materials. I would recommend that the information from this site be included in the course description or calendar early on, if students are expected to access.

There are no assessment tools that can be reviewed to evaluate for authenticity, or to match student assessment in the clinical field of work. The course materials and activities are not complete to reflect application to the industry or to the NHA/ATI curriculum. Perhaps pulling that curriculum and using it as a guide for the class format and calendar, including activities and assessments, would help the student know how they will be evaluated, and what is most important for passing the certification exam and being successful in the role of an EKG technician who performs stress tests and applies Holter monitors.

Sec	tions	Fundamentals S		Total
Α	Syllabus & Course Outline	11	11	22
В	Learner Objectives & Interaction	14	7	21
С	Instructional Design	9	9	18
D	Instructional Materials	18	18	36
E	Assessment & Measurement	7	7	14
 F	Industry-Based Application	5	5	10
FIN	AL TOTAL	64	57	121

General / Summary Comments:

Overall, the general guidelines for program and courses gives very good and very detailed information about the college, the ACconnect, Blackboard, professional expectations and dress code. It gives good information about student support and patient safety (suggesting clinicals) and clinical expectations. The behavioral expectations are listed out for the class and the clinical experiences. All the way through the written warnings information, this information is clearly written to explain what is expected for any clinical continuing education courses offered through AC.

When the courses themselves, are described, the details seem to disappear, yet the courses are the highlights. They are why the student is coming to AC for further education. I believe that the courses, their course numbers, and very detailed descriptions should be provided for each course, or list as Part I and Part II. The course objectives should be different or else they should all be the same course. Little to no information exists to help the student understand what the expectations are related to their learning activities or how they will be graded. And, nothing is said about how the certification is achieved.

The only place I found this information was on the acknowledgement of understanding (grade of 70 must be achieved in order to take the certification exam). More description about the EKG courses was found in the Acknowledgement of Understanding than in the actual syllabi for the courses.

Adapted by Marissa M. Cochran, M.Ed., Amarillo College, from a rubric developed by Eileen Casey White, Ed.D., Connections Consulting Inc.

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