



QUINSIGAMOND
Community College

ALH 136: Phlebotomy/EKG Technician Clinical Co-Operative Externship – Course Description, Topics, Learning Objectives

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2012-2013
 QUINSIGAMOND COMMUNITY COLLEGE
 NEW COURSE PROPOSAL

Course Discipline/Division: Healthcare	
Course Number: ALH 136	
Course Name: Phlebotomy / EKG Technician Clinical Co-Operative Externship	
Prerequisites and/or corequisites (confer with affected department coordinator): ALH 134	
CIP code (check with IRaP Office): 51.1009	
Effective Term/year: Fall 2013	
Give a rationale for the new course. Be sure to indicate whether this course replaces another course. To give students practical experience to enter the workforce.	
Is the course content similar to other courses now offered? Yes ___ No <u>X</u> If yes, attach a statement for the coordinator of the department offering the similar course.	
Please indicate if this course will serve as any of the following types of electives <u>X</u> Elective ___ Discipline specific (name the discipline) ___ Program specific (name the program) ___ Multiple perspective (confer with the Liberal Arts Coordinator)	
Is this course required for a program? If yes, submit a separate Program Revision Proposal or New Program Proposal.	
Expected enrollment per term: 24	Expected enrollment per year: 48
Will any of the following be required: Additional staff <u>X</u> Additional space <u>X</u> Additional equipment <u>X</u>	
Provide a rationale for any needs indicated above and include approximate cost of equipment. New course/co-operative experience need additional instructor. Space allowing for students to practice their newly learned skills. Equipment is listed below:	
1. Sink	11. 2x2 gauze
2. Computer and printer	12. Sharps containers
3. Syringes	13. Waterless hand cleaner
4. Evacuated blood tubes, microtainers	14. Mock arms
5. Blood culture bottles BLD)	15. Phlebotomy chairs (Healthcare
6. Needle adapters	16. Lancets
7. Multisample, hypodermic and butterfly needles	17. Gloves
8. Tourniquets	18. Capillary tubes, clay sealant
9. Alcohol swabs, povidone-iodine swabs	19. Glass slides
10. Tape, coban, bandaids	20. EKG machine, paper, electrodes
Library print and non-print resources in support of this course: \$500	

Course Materials

Course number: ALH 136		
Course name: Phlebotomy/EKG Technician Clinical Co-Operative Externship		
Credits: 6		
Lecture Hours: 72	Lab hours: 45	Clinic Hours: 200-300
<p>General course description and prerequisites (as it will appear in the catalog): The externship prepares students for a career as a phlebotomy/EKG technician. Students learn phlebotomy skills, EKG skills and how to use reference materials. Students then work in a laboratory and learn how to perform as a phlebotomist; they also work in a EKG clinic and learn how to perform as a EKG technician. Students practice their communication skills, familiarize themselves with the layout of the laboratory and its daily and monthly operation; Student's also familiarize themselves with the layout of the EKG clinic and its daily and monthly operation. Students experience data entry and third party billing, inventory and quality control checks. Students also practice writing a resume, interviewing techniques and professional skills. Prerequisite: ALH 134</p>		
<p>All required texts and paperbacks, including information on publisher and edition used (provide a suggested text): Phlebotomy Essentials 5th Edition R. McCall, C. Tankersley Lippincott 2012 ISBN 978-1-605-476377 Rapid Interpretation of EKG's 6th Edition, D. Dubin Cover 2000 ISBN 978-0-912-912066</p>		
<p>Instructional Objectives (list):</p> <ol style="list-style-type: none"> 1. Explain the role of the phlebotomy technician 2. Perform data entry. 3. Demonstrate proper venipuncture and skin puncture techniques. 4. Explain the order of draw protocols. 5. Explain proper specimen handling. 6. Utilize laboratory references. 7. Locate different areas of the laboratory. 8. Have a working knowledge of the most frequently ordered blood tests. 9. Explain the role of the EKG technician. 10. Demonstrate proper lead placement. 11. Obtain a proper EKG tracing. 12. Write a resume. 13. Participate in an interview for clinical placement. 		
<p>Teaching procedures: (provide suggested teaching methodology): Lecture Worksheets Textbook Videos Power Point Class Discussion</p>		
<p>Course topics and/or assignments and/or required and/or supplemental reading (provide a list of suggested course topics): Laboratory setting – read Ch 1 Venipuncture equipment – read Ch 7 Venipuncture technique – read Ch 8 Skin puncture equipment/technique – Ch 10 Preanalytical considerations - read Ch 9 Computer operations – read Ch 12 Basic EKG principles – read Ch 1 Recording the EKG – read Ch 2</p>		

Other information:

- Suggested basis for student grading and criteria for evaluating student performance

Quizzes 33%

Externship 33%

Final 33%

- Suggested attendance policy

Missing 3 classes requires a conference to continue

Missing 5 classes is an automatic dismissal

Please submit a syllabus for this new course to your dean.

List the Student Learning Outcomes for this course in the table below. Recommendations for writing SLOs can be found in the *General Information for Academic Affairs Proposals* document that is available on the QCC's Intranet under Frequently Used Forms (Academic Governance Forms).

COURSE STUDENT LEARNING OUTCOMES FOR (ALH136 Phlebotomy/EKG Technician Clinical Co-Operative Externship) Upon completion of the course, students will be able to:	
1	Explain the role of the phlebotomy technician.
2	Perform data entry.
3	Demonstrate proper venipuncture and skin puncture techniques.
4	Explain the order of draw protocols.
5	Explain proper specimen handling.
6	Utilize laboratory references.
7	Locate different areas of the laboratory.
8	Have a working knowledge of the most frequently ordered blood tests.
9	Explain the role of the EKG technician.
10	Demonstrate proper EKG lead placement.
11	Obtain a proper EKG tracing.
12	Write a resume.
13	Participate in an interview for clinical placement.

How does the course support general education? Using the chart below, indicate the degree or level of connection between the course and outcome as indicated here.

I – Introductory/Background – There is an indirect relationship between the course and the outcome. The outcome itself is not the focus of the course but at least one element of the course serves as a building block to the achievement of the final outcome. For example, course elements may provide the knowledge, skills or attitudes necessary for the ultimate achievement of the outcome.

M – Intermediate/Transitional - There is more of a direct relationship between the course and the outcome than Introductory. A mixture of course elements supports the final achievement of the outcome, but the final integration of knowledge, skills and attitudes necessary for its achievement is not accomplished in this course. For example, knowledge, skills and/or attitudes (at least 2 of the 3) required for achievement of the outcome may be the focus of the course or course element, but the integration of all three is not.

E – Emphasized – There is a direct relationship between the course and the outcome. At least one element of the course focuses specifically on the complex integration of knowledge, skills and attitudes necessary to perform the outcome.

CONNECTION OF (insert course number and name) TO GENERAL EDUCATION STUDENT LEARNING OUTCOMES	I,M,E
Communication Skills: Students will write and speak effectively.	E
Information Literacy: Students will locate, evaluate and apply reliable and appropriate information.	E
Quantitative Reasoning: Students will apply the concepts and methods of mathematics to solve problems.	I
Scientific Reasoning: Students will relate scientific methods of inquiry to the acquisition of knowledge.	M
Technical Literacy: Students will utilize computer and emerging technologies effectively.	E
Aesthetics: Students will appreciate the variety of human experiences as expressed through the arts.	E
Multiple Perspectives: Students will demonstrate knowledge and appreciation of diverse cultures.	E
Ethics: Students will develop an awareness of personal obligations and responsibilities in one's community of influence.	E
Impact of Technology: Students will reflect on the impact of scientific and technological advances on the individual, society and the environment.	E
Civic Literacy: Students will demonstrate awareness of the responsibilities of local, national and international citizenship.	M

ALH 136 Phlebotomy / EKG Technician Clinical Co-Operative Externship -6 credits

Course Description

The externship prepares students for a career as a phlebotomy/EKG technician. Students learn phlebotomy skills, EKG skills and how to use reference materials. Students then work in a laboratory and learn how to perform as a phlebotomist; they also work in a EKG clinic and learn how to perform as a EKG technician. Students practice their communication skills, familiarize themselves with the layout of the laboratory and its daily and monthly operation; Student's also familiarize themselves with the layout of the EKG clinic and its daily and monthly operation. Students experience data entry and third party billing, inventory and quality control checks. Students also practice writing a resume, interviewing techniques and professional skills.

Prerequisite: ALH 134

Course Objectives

Upon completion the student should be able to:

1. Explain the role of the phlebotomy technician.
2. Perform data entry.
3. Demonstrate proper venipuncture and skin puncture techniques.
4. Explain the order of draw protocols.
5. Explain proper specimen handling.
6. Utilize laboratory references.
7. Locate different areas of the laboratory.
8. Have a working knowledge of the most frequently ordered lab tests.
9. Explain the role of the EKG technician.
10. Demonstrate proper EKG lead placement.
11. Obtain an acceptable EKG tracing.
12. Write a resume.
13. Participate in an interview for clinical placement.

Course Outline

Laboratory (30 hours) 3 hours week times 10 weeks

Externship (Maximum of 200 hours) Weeks 11, 12, 13, 14, 15

40 hours per week to meet the requirements of both EKG Technician and Phlebotomy Technician.

Week 1	Introduction - overview <i>Chapter 1 - Phlebotomy: Past and Present and the Healthcare Setting</i> Serum, Plasma, Whole Blood & Tubes & Lab Panels Worksheets: Blood, Order of Draw <i>Chapter 7 - Blood Collection Equipment, Additives and Order of Draw</i> VIDEO: Lab Safety
Week 2	<i>Chapter 8 - Venipuncture Procedures</i> Palpating Veins Serum, Plasma, Whole Blood & Tubes & Lab Panels VIDEO: Venipuncture technique Quiz #1 (Ch 7 & 8) <i>Chapter 3 - Infection Control, Safety, First Aid and Personal Wellness</i> VIDEO: Infection Control & Safety Quiz #2 (Ch 3)
Week 3	Lab: Handwashing Serum, Plasma, Whole Blood & Tubes & Lab Panels

	Worksheets
	VIDEO: Nova 1 & 2
Week 4	Quiz #2: (Ch 1 & 4)
	Quiz #3: (Ch 5)
	<i>Chapter 9 – Analyzing Lab Value Considerations</i>
	VIDEO: Lab Safety
	<i>Chapter 10 - Capillary Puncture Equipment and Procedures</i>
	<i>Chapter 11 - Special Considerations and Point-of-Care Testing</i>
Week 5	Quiz #4: (Ch 9 & 11)
	<i>Chapter 14 - Computers and Specimen Handling and Processing</i>
	VIDEO: Nova 4
	Barcodes
	<i>Chapter 13 - Nonblood Specimens and Tests</i>
	VIDEO: Bloodborne Pathogen Standard
Week 6	Interviewing Techniques and Begin selecting sites for clinical placement
	<i>Chapter 12 - Arterial Puncture Procedures</i>
	Quiz #5 (Self Test on Tubes)
	Interviewing Techniques and Practice Interviewing continued
	Resume Writing
Week 7	Quiz #6
	Syringe Procedure on Mock Arm, Target Practice
	Lab: Target Practice Continues, VP on Mock Arm
	Lab: VP, Skin Punctures, Blood Cultures, Butterflies
	Lab: VP, POCT Review prior to going to clinical site
Week 8	Lab Practical Exam on Phlebotomy Procedures
	Written Exam on Phlebotomy
Week 9	Introduction to EKG's and Course Material Review
	Review of electrocardiography machine and practice session
	Miscellaneous Effects: Pulmonary, Electrolytes, Medications, Artificial
	Pacemakers, Heart Transplants
Week 10	Lead Placement, Introduction to EKG machine, Preparing the Patient
	Performing an EKG
	EKG Final Exam
Week 11-15	Placement in both an EKG and Clinical Laboratory (200 Hours)

Methods of Instruction

Lecture
Worksheets
Textbook
Videos
Power Points
Class discussion

Attendance Policy

Attendance in the laboratory/ work experience is mandatory. Excessive absence may result in failure of class due to management of mandatory clinical hours of training.

Method of Evaluation

Quizzes 33%

Externship 33%

Final 33%

Required Texts

Phlebotomy Essentials 5th Edition R. McCall, C. Tankersley Lippincott 2012
ISBN 978-1-605-476377

Rapid Interpretation of EKG's 6th Edition, D. Dubin Cover 2000
ISBN 978-0-912-912066