

**Oklahoma State University Institute of Technology
Spring 2018**

NURS 1113– Basic ECG Interpretation (Online)

This course begins with a discussion of the physiology of cardiac conduction, and then covers the basics of how to read an ECG Strip, and the normal components of the ECG waveform. We will then examine basic cardiac dysrhythmias, including atrial and ventricular dysrhythmias, and blocks. Finally, selected nursing diagnoses for patients with dysrhythmias will be offered, along with suggested associated nursing interventions.

Course Purpose:

To gain a basic understanding of electrocardiogram (ECG) interpretation and appropriate intervention for abnormal rhythms.

Type of course: Theory

Credit Hours: 3; Total hours of theory per semester: 3;

Class length – Full Semester

Class format - Fully Online

Required synchronous meetings: None

Prerequisites: None

Instructor Name: Tina Gordon **Instructor Phone:** (918) 293-4789

Office: *Allied Health Sciences Center, Room 109*

Instructor email: tina.gordon@okstate.edu

Contact: My preferred method of contact is Email. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: *Monday 8:30-12:30; 13:30-16:30 and Tuesday 8:30-11:30 CST*

School Name: *School of Nursing and Health Sciences* **School's Main Phone:** 918-293-5337

REQUIRED TEXT, REFERENCES, AND MATERIALS

Texts: Online ECG Companion for ECGs Made Easy Textbook and Pocket Reference (Access Code, Textbook, and Pocket Reference Package), 5th Edition **ISBN:**9781455759750

References: NA

Materials: Email and internet access

Uniform/Tools: NA

Estimated Cost for Materials: \$100.00

Estimated Cost for Uniform/Tools: NA

Note: please look under your content tab in D2L for getting started in the course.

Upon completion of the course, students should:

Course Objectives	Assessment of Objectives
1. Summarize the anatomy, physiology, and basic cell function of the cardiovascular system.	Module Exams and Final Exam
2. Explain the configuration of the normal electrocardiogram (ECG) wave pattern and its relationship to cardiac function.	Module Exams and Final Exam
3. Discuss the normal ECG tracing and lead placement.	Module Exams and Final Exam
4. Calculate heart rate, rhythm, PR interval, QRS complex, and QT intervals, using standard ECG paper grid.	Module Exams and Final Exam
<p>5. Differentiate among the following rhythms by defining the terms and discussing the etiology.</p> <p>Normal Sinus Rhythm</p> <p>Sinus Dysrhythmias: Sinus Bradycardia; Sinus Tachycardia; Sinus Dysrhythmia; and Sinus Arrest.</p> <p>Atrial Dysrhythmias: Premature Atrial Contraction; Atrial Flutter; Atrial Fibrillation; Supraventricular Tachycardia; Paroxysmal Atrial Tachycardia; Wolff-Parkinson-White Syndrome; Wandering Atrial Pacemaker; and Sick Sinus Syndrome.</p> <p>Junctional Dysrhythmias: Junctional Escape Rhythm; Accelerated Junctional</p>	Module Exams and Final Exam

<p>Rhythm; Premature Junctional Contraction; and Junctional Tachycardia. Heart Blocks: First-Degree; Mobitz I/Wenckebach; Mobitz II; Third-Degree/Complete Heart Block; and Bundle Branch Block. Ventricular Dysrhythmias: Premature Ventricular Contractions: Bigeminy, Trigeminy, Quadrigeminy, Frequent, Multifocal, Paired, and R on T; Ventricular Tachycardia; Ventricular Fibrillation; Torsade's de Pointes; Pulseless Electrical Activity; and Asystole. 12-lead ECG: Changes associated with acute myocardial infarction (MI): Anterior Wall MI, Posterior Wall MI, Lateral Wall MI, and Subendocardial MI. Pacemaker Rhythms: Single chambered pacemaker, dual chambered pacemaker, normal and abnormal pacemaker function.</p>	
<p>6. Compare the clinical manifestations and associated nursing management</p>	<p>Module Exams and Final Exam</p>

Aspects of the course objective assessments may be used in the university's assessment of student learning. If applicable, an asterisk (*) above indicates this course is used in the university assessment program.

COURSE ACTIVITIES

In this course students will:

- Participate in class activities.
- View videos that depict the various concepts.
- Take examinations.
- Complete reading assignments.
- Are required to do quizzes.

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION OF THESE TASKS:

Unit Exams.....	900 points
Self-Introduction....	50 points
Instructor contact.....	150points
Final Exam.....	100 points
Total	1200

OSUIT Grading Scale
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student’s grade for this assignment will be used in the university’s assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student’s course grade.

Weekly quizzes are graded immediately and available for review through the online classroom. Introduction and Instructor Contact assignments and similar type projects: Normal return time to students in one (1) to two (2) weeks.

AUTHORIZED TOOLS

Students may use any/all course materials, including books and notes, while participating in classroom activities. All quizzes and written assignments are to be completed independently; no collaboration with classmates is permitted and any instance of such will be considered academic dishonesty.

LATE WORK

*All assignments are due by 11:59pm on the date provided. **Late work is not accepted and will be counted as a zero.** All assignments and quizzes are scheduled in the course syllabus. It is not reasonable to expect that quizzes/posts will be rescheduled except in the case of an **EMERGENCY**, e.g. death in the immediate family or significant illness of the student. In case of an **EMERGENCY**, the student must notify the instructor prior to the time quiz or post is due. Failure to make arrangements (within 24 hours) to complete the assignment will result in a grade of “zero” recorded. Appropriate documentation (e.g., doctor’s statement, obituary) must be provided.*

TESTING

One (1) attempt is allowed for each test.

ONLINE COURSE INTERACTION

OSUIT requires all online courses to include interaction between students, peers and instructors. Our online courses use a variety of tools to build a community of learners and strengthen engagement between students and their peers, as well as between students and the instructor. Communication tools used in courses may include Discussion, News, and Email. Read the syllabus completely to determine which of these methods you, your classmates and your instructor will use for interaction.

General guidelines for student conduct while interacting within an online course include: (1) Use proper language in all communications; (2) Harassment of any type will not be tolerated; (3) No jokes, insults or threats of an offensive nature.

For more information, go to: <http://osuit.edu/center/netiquette>

SYLLABUS ATTACHMENT

View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

Course Schedule			
Course Outline Schedule	Topic	Assignment	Due Date by 11:59pm
Module 1	Self-Introduction	Read Syllabus and complete Self-Introduction	1/11/18
Module 2 Activities: Activities & Videos Review Exercises Summary	Anatomy & Physiology	Read Chapter 1: Anatomy & Physiology (pages 1-28) in your textbook and complete quiz 1.	1/11/18
Module 3 Activities: Activities & Videos Review Exercises Summary	Basic Electrophysiology	Read Chapter 2: Basic Electrophysiology, (pages 29-84) in your textbook and complete quiz 2.	1/18/18
Module 4 Activities: Instructor contact via dropbox	Instructor contact	Instructor contact via dropbox	1/25/18
Module 5 Activities: Activities & Videos Review Exercises Summary	Sinus Mechanisms	Read Chapter 3: Sinus Mechanisms (pages 85-108) in your textbook and complete quiz 3.	2/1/18
Module 6 Activities: Activities & Videos Review Exercises Summary	Atrial Rhythms	Read Chapter 4: Atrial Rhythms (pages 109-153) in your textbook and complete quiz 4.	2/8/18
Module 7 Activities: Activities & Videos Review Exercises Summary	Junctional Rhythms	Read Chapter 5: Junctional Rhythms (pages 154-176) in your textbook and complete quiz 5.	2/15/18

Module 8 Activities: Instructor contact via dropbox	Instructor contact	Instructor contact via dropbox for week 8	2/22/18
Module 9 Activities: Activities & Videos Review Exercises Summary	Ventricular Rhythms	Read Chapter 6: Ventricular Rhythms (pages 177-206) in your textbook and complete quiz 6.	3/1/18
Module 10 Activities: Activities & Videos Review Exercises Summary	Heart Blocks	Read Chapter 7: Heart Blocks (207-238) in your textbook and complete quiz 7.	3/8/18
Module 11 Activities: Activities & Videos Review Exercises Summary	Pacemaker Rhythms	Read Chapter 8: Pacemaker Rhythms (pages 239-256) in your textbook and complete quiz 8.	3/15/18
FALL BREAK!!!			3/19/18- 3/23/18
Module 12 Activities: Instructor contact via dropbox	Instructor contact	Instructor contact via dropbox for week 12	3/29/18
Module 13 Activities: Activities & Videos Review Exercises Summary	12-Lead Electrocardiogram	Read Chapter 9: Introduction to the 12-Lead Electrocardiogram (pages 257-286) in your textbook and complete quiz 9.	4/5/18
Module 14	Review Modules	Comprehensive Review then take final.	4/12/18

Schedule is subject to change at instructor discretion.