



# **Medical Readiness**

*Course of Study*

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2009

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## **Acknowledgements**

Dawn Bleau, RN, Director Knoedler School of Nursing

Cheryl Brecht, LPN, Instructor, Ashtabula County JVS

Jeff Seth, Supervisor, Ashtabula County ABLE 8 Opportunities Program

Lori Slimmer, RN, Instructor, Ashtabula County JVS

Vicki Thompson, MAED, Adult Education Director Trumbull Career and Technical Center

Mia Pannon, Coordinator of Adult Education, Choffin Career Center

Gilda McQuoid, Instruction Coordinator, Ashtabula County Joint Vocational School

## **Philosophy and Principles of ABLE Medical Readiness Programs**

This Medical Readiness Program course of study is designed to facilitate adult transition from high school, work, or unemployment to enrollment in and successful completion of programs in the health care field. The implementation of the course of study presupposes that certain students wishing to enter post-secondary training programs in the health field could be better prepared to succeed if they enroll in a preparation course designed to teach them the following:

- Learning skills (including content area reading skills)
- Study skills
- Vocabulary acquisition
- Basic medical math skills
- General science information
- Program specific technical language/content
- Communications skills/writing skills
- Internet skills

Since students come to post-secondary training with multiple transferable skills, experiences, educational backgrounds, and in some cases, jobs and families, the ABLE preparation course seeks to focus the students' current skills and circumstances in such a way as to increase their ability to balance, school, work and family effectively. In light of this need, the preparation program is designed to empower students with the skills to manage their own education and increase their confidence as adult learners.

## **Medical Readiness Course of Study**

The Medical Readiness course is a transition course designed to assist prospective health career students in two areas: preparation to succeed on entrance exams in various health career programs and practice in the “student” skills needed to successfully complete a health career program.

This course of study outlines competencies that, if achieved, should provide a good foundation for new health career students. The suggested unit topics and subsequent competencies and indicators are designed to be flexible depending on class make-up and financial resources of the facility. A resource list is included to recommend materials to use in development of course materials, exercises, reading passages and handouts.

### **Unit I: Assessing Learning Styles**

#### **Competency 1.1 Determine dominant learning/thinking style**

##### **Descriptors:**

- 1.1.1 Discuss the meaning of learning/thinking styles
- 1.1.2 Complete a meaningful learning style inventory
- 1.1.3 Record results of learning style inventory
- 1.1.4 Discuss and evaluate the ways knowledge of learning style can be used in a school setting
- 1.1.5 Define and list various methods that match each learning/thinking style

*(Spending instructional time on learning styles may help non-traditional, as well as traditional students, to gain some confidence by empowering them with knowledge that will assist them in choosing appropriate study settings, study and reading techniques.)*

### **Unit II: Pre-testing for Entrance Exams**

#### **Competency 2.1 Determine health knowledge status prior to course completion**

##### **Descriptors:**

- 2.1.1 Complete practice entrance exam for appropriate career pathway
- 2.1.2 Record in learning journal areas of difficulty and questions regarding the test.
- 2.1.3 Record a list of vocabulary words from the test unknown to the student.

*(Recommendation is that students keep a learning journal throughout the course so they gain skills in managing their own education. This could include questions for discussion, reflective comments, learning goals. See appendix.)*

## **Unit III: Learning/Study Strategies**

### **Competency 3.1 Create a plan to manage time appropriately**

#### **Descriptors:**

- 3.1.1 Set appropriate goals for completing class work.
- 3.1.2 Describe ways to prioritize tasks.
- 3.1.3 Create a calendar/scheduling system appropriate to the students' needs.
- 3.1.4 List and describe various types of distractions.
- 3.1.5 Discuss ways to eliminate and control distractions.

### **Competency 3.2 Develop active listening skills**

#### **Descriptors:**

- 3.2.1 Recognize the difference between hearing and listening.
- 3.2.2 Evaluate listening habits.
- 3.2.3 Analyze listening habits for areas of improvement.
- 3.2.4 Identify strategies for active listening

*(Instructors should develop materials that help the students practice listening for the main idea, identifying details and summarizing what they have heard.)*

### **Competency 3.3 Develop strategies for reading to learn**

#### **Descriptors:**

- 3.3.1 Identify levels of comprehension
- 3.3.2 Define main idea.
- 3.3.3 Locate the main idea in textbook material
- 3.3.4 Recognize the difference between main ideas and details
- 3.3.5 Locate details in textbook material
- 3.3.6 Recognize various organizational patterns in textbooks
- 3.3.7 Use pattern recognition to mark and underline textual material

*(Instructors should develop materials that teach these skills in context. One strategy to teach marking and underlining is to turn the bold headings for each chapter section into questions. Underline or mark details that answer the questions. See appendix)*

### **Competency 3.4 Reading a textbook**

#### **Descriptors:**

- 3.4.1 Develop skills for surveying the textbook
- 3.4.2 Use pre-reading strategies
- 3.4.3 List and define strategies to use during reading
- 3.4.4 Use summarizing skills.
- 3.4.5 Use graphic organizers while reading a textbook.

*(See appendix for a list of surveying and textbook strategies. Instructors should be prepared to reveal several methods so that the students' individual learning styles are relevant.)*

### **Competency 3.5      Develop note-taking skills**

#### **Descriptors:**

- 3.5.1 List and describe various methods of note-taking
- 3.5.2 Recognize differences in taking reading notes and lecture notes
- 3.5.3 Demonstrate use of various methods of note taking from textbooks.
- 3.5.4 Demonstrate use of various methods of note taking from lectures.

*(See appendix for various types of note taking and resources for each.)*

## **Unit IV      Developing Vocabulary**

### **Competency 4.1      Improve general and medical vocabulary**

#### **Descriptors**

- 4.1.1 Use context clues to determine word meaning
- 4.1.2 Analyze word parts
- 4.1.3 Define common prefixes, roots and suffixes.
- 4.1.4 Demonstrate ability to use the dictionary.
- 4.1.5 Demonstrate ability to use a glossary.
- 4.1.6 Demonstrate ability to use a thesaurus.
- 4.1.7 Use memorizing devices to remember vocabulary
- 4.1.8 Use word cards to study new vocabulary.

## **Unit V      Writing Strategies**

### **Competency 5.1      Use steps in the writing process to write a report**

#### **Descriptors**

- 5.1.1 Practice strategies for pre-writing step in the writing process
- 5.2.1 Define topic, purpose
- 5.2.2 Identify type of organizational pattern to be used
- 5.2.3 Identify audience
- 5.2.4 List details to be included
- 5.2.5 Organize details
- 5.3.1 Write first draft
- 5.3.2 Check for beginning, middle and end
- 5.3.3 Check for errors in sentences, spelling, punctuation and order of ideas
- 5.3.4 Revise and rewrite final draft

*(Given time constraints, instructors should probably limit writing lessons to memos and short reports that may be relevant to work in the health care field See appendix.)*

## **Unit VI     Math Review**

### **Competency 6.1     Review and use computation skills in general math. Descriptors**

- 6.1.1 Review multiplication.
- 6.1.2 Memorize multiplication and division facts
- 6.1.3 Review and use elements of fractions including, lowest term, higher term, adding, subtracting, multiplying and dividing fractions
- 6.1.4 Solve problems with fractions.
- 6.1.5 Review decimals.
- 6.1.6 Review and use elements of decimals including, adding, subtracting, multiplying, dividing and changing decimals to fractions and the reverse.
- 6.1.7 Solve problems with decimals.
- 6.1.8 Review percentages by changing percentages to fractions and the reverse, changing percentages to decimals and the reverse.
- 6.1.9 Solve problems with percentages.
- 6.1.10 Define ratio.
- 6.1.11 Solve problems using ratios.
- 6.1.12 Define proportion.
- 6.1.13 Solve problems using proportions.

### **Competency 6.2     Review basic Algebra**

- 6.2.1 Demonstrate computation using signed numbers.
- 6.2.2 Solve equations using addition, subtraction, multiplication and division

### **Competency 6.3     Review basic Geometry**

- 6.3.1 Define basic geometry terms
- 6.3.2 Recognize types of triangles
- 6.3.3 Find diameter, radius, circumference, and area of a circle.
- 6.3.4 Compute the perimeter and area of squares and rectangles.

### **Competency 6.4     Metric System**

- 6.4.1 Define vocabulary associated with the Metric System and the English System.
- 6.4.2 Use skills to convert from Metric to English and the reverse

### **Competency 6.5     Word Problems**

- 6.5.1 Solve word problems using the above math skills.
- 6.5.2 Learn strategies to use in solving word problems

*(Use of a math diagnostic test, such as the TABE, should give instructors a sense of how basic their math instruction should be. Instructors can then begin with the appropriate competency. Post secondary institutions, such as community colleges, should advise students according to their basic skills assessment test generally administered to enrolling students.)*

## **Unit VII    General Science Review**

### **Competency 7.1    Review scientific background Descriptors**

- 7.1.1 List and describe major scientific findings
- 7.1.2 Identify major contributors to the scientific field

### **Competency 7.2    Review theories of the origin of the universe.**

- 7.2.1 Describe the “big bang theory.”
- 7.2.2 Recognize how stars, galaxies, supernovas, the earth and moon were formed.
- 7.2.3 Recognize the nature of the solar system

### **Competency 7.3    Identify and define the basics of physical science Descriptors**

- 7.3.1 Define laws of motion, gravity and momentum
- 7.3.2 Describe the elements of light, magnetism and electricity
- 7.3.3 Identify the parts of the atom
- 7.3.4 Review the periodic table of elements
- 7.3.5 List and define types of chemical bonds
- 7.3.6 Describe types of chemical reactions
- 7.3.7 Define the various states of matter
- 7.3.8 Differentiate between organic and inorganic molecules
- 7.3.9 Define various types of energy

### **Competency 7.4    Identify and define the basics of life science Descriptors**

- 7.4.1 Describe the evolution of the cell
- 7.4.2 Differentiate between prokaryotic and eukaryotic cells
- 7.4.3 Review the steps in the evolutionary process
- 7.4.4 List and define associated vocabulary.

### **Competency 7.5    Identify and define the basics of earth science Descriptors**

- 7.5.1 Describe the basic geological make-up of the earth
- 7.5.2 Demonstrate knowledge of plate tectonics
- 7.5.3 List and define the types of rocks
- 7.5.4 Describe the composition of the atmosphere, ocean and soil.

### **Competency 7.7    Identify and define the basics of environmental science Descriptors**

- 7.7.1 Define species.
- 7.7.2 Demonstrate understanding of the classification system of species.

7.7.3 Review the basic principles of ecological systems.

**Competency 7.8 Define the major principles of heredity and genetics.**

**Descriptors**

7.8.1 Identify major discoveries of Gregor Mendel

7.8.2 Define vocabulary associated with genes and chromosomes.

**Unit VIII Nutrition**

**Competency 8.1 Recognize and identify the components of the food pyramid.**

**Descriptors**

8.1.1 Reproduce and label the food pyramid

8.1.2 List and define the components of the food pyramid.

**Competency 8.2 List and define major nutrients.**

**Descriptors**

8.2.1 Define carbohydrates and state their purpose.

8.2.2 Define protein and its purpose.

8.2.3 Define minerals and their purpose.

8.2.4 Define fats and their effects.

8.2.5 Define vitamins and their effects.

**Unit IX Human Anatomy and Physiology**

*(Competencies in this area reflect minimal instruction in each area. Competencies reflect recognition of systems, vocabulary acquisition and should give students practice in note taking and comprehension)*

**Competency 9.1 Recognize and describe the components of the Digestive System**

**Descriptors**

9.1.1 Define the Digestive system

9.1.2 List and define the characteristics of the Digestive system

9.1.3 Learn and define associated vocabulary

**Competency 9.2 Recognize and describe the components of the Circulatory System**

**Descriptors**

9.2.1 Define the circulatory system

9.2.2 Describe the function of the circulatory system

9.2.3 List and define the components of the circulatory system

9.2.4 Learn and define associated vocabulary

**Competency 9.3 Recognize and describe the components of the Respiratory System**  
**Descriptors**

- 9.3.1 Define the respiratory system.
- 9.3.2 Describe the function of the respiratory system
- 9.3.3 List and define the parts of the respiratory system
- 9.3.4 Learn and define associated vocabulary
- 9.3.5 Define cellular respiration
- 9.3.6 Describe the function of cellular respiration.
- 9.3.7 Learn and define associated vocabulary.

**Competency 9.4 Recognize and describe the components of the Nervous System**  
**Descriptors**

- 9.4.1 Define the nervous system.
- 9.4.2 Describe the function of the nervous system.
- 9.4.3 List and define the parts of the nervous system.
- 9.4.4 Learn and define associated vocabulary.

**Competency 9.5 Recognize and describe the components of the Immunological System.**  
**Descriptors**

- 9.5.1 Define immunological system.
- 9.5.2 Describe the function of the immunological system.
- 9.5.3 List and define the parts of the immunological system.
- 9.5.4 Learn and define associated vocabulary.

**Competency 9.6 Recognize and describe the components of the Musculoskeletal System.**  
**Descriptors**

- 9.6.1 Define the musculoskeletal system.
- 9.6.2 Describe the function of the musculoskeletal system.
- 9.6.3 List and define the parts of the musculoskeletal system.
- 9.6.4 Learn and define associated vocabulary.

**Competency 9.7 Recognize and describe the components of the Endocrine System.**  
**Descriptors**

- 9.7.1 Define the endocrine system.
- 9.7.2 Describe the function of the endocrine system.
- 9.7.3 List and define the parts of the endocrine system.
- 9.7.4 Learn and define associated vocabulary.

**Competency 9.8      Recognize and describe the components of the Renal System.**  
**Descriptors**

- 9.8.1 Define the renal system.
- 9.8.2 Describe the function of the renal system.
- 9.8.3 List and define the parts of the renal system.
- 9.8.4 Learn and define associated vocabulary.

**Competency 9.9      Recognize and describe the components of the senses.**  
**Descriptors**

- 9.9.1 Define each component of the eye.
- 9.9.2 Locate and label the components of the eye.
- 9.9.3 Define each component of the ear.
- 9.9.4 Locate and label the components of the ear.
- 9.9.5 Learn and define associated vocabulary for each.

**Competency 9.10     Recognize and describe the components of the Reproductive System.**  
**Descriptors**

- 9.10.1 Define the reproductive system.
- 9.10.2 Describe the function of the reproduction system.
- 9.10.3 List and define the parts of the reproduction system.
- 9.10.4 Learn and define associated vocabulary.

**Unit X      Bacteria and Viruses**

**Competency 10.1     Describe the components and effects of bacteria.**  
**Descriptors**

- 10.1.1 Define bacteria.
- 10.1.2 Trace the life cycle of bacteria.
- 10.1.3 Classify bacteria
- 10.1.4 Identify diseases caused by bacteria
- 10.1.5 Learn and define associated vocabulary.

**Competency 10.2     Describe the components and effects of viruses.**  
**Descriptors**

- 10.2.1 Define virus.
- 10.2.2 Trace the life cycle of viruses.
- 10.2.3 Classify viruses.
- 10.2.4 Identify diseases caused by viruses.
- 10.2.5 Learn and define associated vocabulary

## **Unit XI Introduction to the Internet**

### **Competency 11.1 Define and explain the Internet**

11.1.1 List and define terminology associated with the Internet

11.1.2 Define World Wide Web

### **Competency 11.2 Learn the function of web browsers**

11.2.1 Locate various web browsers

11.2.2 Define features of browsers

11.2.3 Practice using various web browsers

### **Competency 11.3 Learn how to search the net.**

11.3.1 List processes for locating information of the Internet.

11.3.2 Describe practices that make searches focused.

### **Competency 11.4 Learn the basics of using the Internet for research.**

11.4.1 Practice locating information on a given topic.

11.4.2 Practice using hyperlinks to located more specific information

11.4.3 Print a page from the Internet.

## **Unit XII Skills for Taking Tests-**

### **Competency 12.1 Learn methods to improve test scores**

#### **Descriptors**

12.1.1 Use strategies to improve test-taking preparation

12.1.2 Use test-taking strategies to answer, multiple choice questions, short-answer questions, matching questions and true-false questions.

12.1.3 Learn strategies to answer essay questions

12.1.4 Apply various test-taking strategies.

*(See appendix for resources.)*

## **Unit XIII Post test**

### **Competency 13.1 Complete a practice entrance exam.**

#### **Descriptors**

- 13.1.1 Apply study skills
- 13.1.2 Apply reading comprehension skills.
- 13.1.3 Apply vocabulary skills.
- 13.1.4 Apply math skills.
- 13.1.5 Apply science and health knowledge
- 13.1.6 Review test results.
- 13.1.7 Compare pre-test with post-test results

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## *Appendix*

## How to Use the Medical Readiness Course of Study

### What is the purpose of the Medical Readiness Course of Study?

- This Medical Readiness Course of Study is designed to provide a guide to instructors regarding topics of learning to prepare students *to pass a health career entrance exam and to teach prospective students learning strategies* necessary for success should they become enrolled in a health career class.
- **These classes could include, but not be limited to, Medical Assistant, Dental Assistant, LPN/LVN, RN, EMT, Phlebotomy, STNA and Dental Hygienist.**

### Who should take a Medical Readiness course?

- Prospective students that intend to enroll in a health career class.
- Students with a high school degree or a GED.
- Prospective students that have applied to a health career class, but through **testing**, have *shown themselves to be under-prepared to succeed without specific preparation for a health career class.*
- Prospective students shown to be under-prepared, but who have at least scored *between the 8<sup>th</sup> and 9<sup>th</sup> grade math and reading levels.*
- Students, who through interview and transcript review, show appropriate background in science courses, but need to update their science knowledge.

### What happens to students that test lower than 8<sup>th</sup> grade level in math and/or reading or that do not have at least a GED?

- Students that, through testing, show they are unprepared in math and reading should be directed to an ABLE math or reading class.
- Students should be directed to an ABLE GED prep class if they do not have the GED.

### How does the Medical Readiness course of study guide a medical readiness course?

- The Medical Readiness course reflects topics identified in health career entrance exams, practice texts and health career courses learning strategies texts.
- The MR course combines both entrance exam preparation and learning strategies preparation.
- The course reflects the need for adult students to understand and use knowledge related to their learning style and organizational style that can lead them to become independent learners.
- The course relies on a pre and post-test model using a health career practice entrance exam.
- The course relies on a model that teaches students generally accepted methods of learning and studying *using health content*, such as readings from health texts and health related vocabulary.

### **What materials should be used with the course?**

- Best advice is to use a learning strategies text that applies mainly to health careers students. Recommended text is Learning Strategies for Health Careers Students written by Susan Marcus Palau, MA and Marilyn Meltzer, MA. (2007) This text includes reading, writing, math and study strategies for health careers students using health content.
- A recommended text is Health Occupations Entrance Exams: The Core Review You Need (2005). This text includes review in biology, chemistry and general science that is not included in the “learning strategies” text. This book can be purchased used and in good condition on-line. Many others are available.
- Human Anatomy and Physiology content can be researched by using a health careers textbook and created by an instructor through original lecture and teacher made materials.
- Websites offer many free materials associated with the elements of the course that instructors can easily access and reproduce without copyright infringement. See appendix for some suggestions.

### **What if the health careers course does not require an entrance exam?**

- In the case of a course that does not require an entrance exam, students will gain valuable test-taking skills by taking a readiness course that includes a pre and post-test model.
- Students will gain valuable learning strategies to help them succeed if they enroll in a prep course that emphasizes reading, math, study skills, note-taking skills, organizational and time management skills.

## Tips by Topic-

The Medical Readiness Course of Study is not a curriculum. A curriculum is the actual activity that is performed in the classroom for instruction. It's what the teacher and students do. The course of study outlines learning outcomes; the instructor decides what she/he and the students must do to reach the outcome. So, in using this course of study, instructors will need to build curriculum. This means finding resources and materials that if used, will help students meet the learning outcomes. Following are some "tips" relating to several of the topics in the course of study.

### Learning Journals:

Learning journals are student-made journals in which the student records important concepts they have learned and reflects upon their impact on the student. They also record questions to ask in class. They can list words they have difficulty remembering. At the end of each class the students should write for about 3-5 minutes about what they learned in the class session.

### Learning Styles:

**Of what value might it be to administer a learning styles inventory to Medical Readiness students?** Many students do not know that they do not know their own methods of learning and working. Knowing this information will help students evaluate why they seem more comfortable in some learning situations than in others. This information will empower them to take control of their own learning strategies instead of being the proverbial "empty vessel" waiting for the instructor to "pour in" the facts. They can take control of the type of notes they take. They can take control of the strategies they use to study and organize. Finally, this gives students a sense that they **fit** in the world of learning.

**There are many learning styles inventories available.** Preferred inventories assess more than sensory styles (kinesthetic, visual, auditory, tactile) alone. They also assess organizational and temperament styles. Some learning styles inventories may be downloaded for free. If your budget permits, an excellent choice can be purchased at [www.plsweb.com](http://www.plsweb.com). Performance Learning Systems, Inc. publishes a complete inventory with instructions for administration for a reasonable price per student.

**Administering the learning styles inventory is a good way to get students started on a personal learning log.** This is a notebook in which students note their learning progress, jot questions, write reflective statements regarding learning, list important new vocabulary and so on. Asking students to refer to their learning logs can assist students in class discussions and give them a sense of empowerment.

### Pre-testing:

**Handle pre-testing carefully.** Use a practice pre-test for a specific health career, such as LPN/LVN, or a general entrance exam for allied health or health careers. Explain to students that the test is to give them a sense of their goals for the class, note their strengths and weaknesses, and to focus their purpose for learning in the course. Make sure students understand that under most circumstances, they won't know too much. One teaching strategy is to ask students to comment about the test in their learning logs. Then later compare the comments with those the students write after the post-test.

### Learning/Study Strategies:

**Both traditional and non-traditional students generally show a lack of *deliberate learning and study skills.*** Sometimes students learn well in spite of their learning strategies instead of because of them. These types of students will become stronger students if they are taught specific methods from which they can choose. Students that have been marginally successful in learning situations will have an opportunity to become stronger students when presented with appropriate tools. A caution: like any other skill, using learning and study skills requires practice. This will feel unfamiliar to students and they may want to revert to old, ineffective, yet comfortable methods. Again, the recommended text, Learning Strategies for Health Careers Students is well suited for teaching this area. However, there are many resources for this type of material. Text material in the health field should be used for teaching these strategies. Then students will become familiar with the paragraph organizations generally used in health texts.

### **Guidelines for Teaching Textbook Reading Skills**

- Teach purpose for reading.
- Teach chapter survey skills by surveying text material with the students. (A popular survey method is called SQ3R, which was developed by Francis P. Robinson and published in his publication, Effective Study, (4<sup>th</sup> ed.) first copyrighted in 1941 by Harper and Row, then in 1970 by Francis P. Robinson. You can find this method in almost any text or handbook that teaches study skills.
- Ask them to survey a chapter or portion of a chapter on their own and use their learning logs to reflect on how this activity could aid in comprehension.
- Teach use of bold print either to take notes or underline details. Pay a little extra attention to teaching how to turn bold print into questions and then finding the answers in the text. Should the question be a who, what, where, how or why question?
- Teach use of summaries at the end of a chapter as a reading comprehension tool. These should be read first.

Getting students to *believe* that they should **not** read a textbook in the same way as they read material for recreational purposes is critical to improve comprehension. The purpose for reading text material is to **get specific information and remember it.** So, reading from the first word until the end of the assignment is **not** the preferred method in textbook reading.

Explain to students that if they read their text using preferred methods, they'll be *learning as they read*, instead of simply reading the words to get through the material and "learning it later." Some research shows that students forget half of what they have read if tested immediately after reading. (Adams, 1989) So, learning how to study/read, that is, using a survey method, taking

notes, marking and underlining, questioning and self-testing, help students succeed in their *purpose for reading*. Test preparation should become easier and more focused because the student has already begun the learning process.

**Note-taking:**

There are many accepted methods for note taking. Clearly, in a health careers course, students will need to read, research, and listen to lectures to get the information they need. The following outlines three methods that can be easily combined to meet note-taking requirements throughout a course.

**Graphic Organizers.**

Graphic organizers are simply pre-made patterns in which students insert needed information. They are generally created to correspond to the organization used in many texts and lectures. For example, in some lectures the purpose is to teach the cause of an event and show its effects. In this case, an organizer such as shown below, would guide students into filling in information in the best order for that lecture or reading material.

<i>Date-</i>	<b>Topic: <i>Infection</i></b>
<i>Causes</i>	<i>Effects</i>
<ol style="list-style-type: none"> <li><i>1. Virulence</i></li> <li><i>2. High number of micro-organisms</i></li> <li><i>3. Susceptible host</i></li> </ol>	<ol style="list-style-type: none"> <li><i>1. Body must react to level of virulence</i></li> <li><i>2. Infection may occur</i></li> <li><i>3. Weakened body may become infected</i></li> </ol>

This type of organizer is also good for comparing and contrasting. There are others that lend themselves to recording parts of a system, or steps in a process. Having an array of these organizers present in the classroom gives students effective aides to taking notes. It's easy to make your own and students should explore the types they are most comfortable with to use when they enroll in a health class. (*See appendix for websites and samples of graphic organizers*)

## Two-Column Notes

Taking notes by using notebook paper in two columns is a highly regarded method used in many college classrooms, particularly in some medical schools. This method allows for an effective way to record the many new terms, systems, and processes health careers courses include. Once method, called Cornell Notes (Forget, 2004) asks the student to fold notebook paper vertically with a fold one third of the way from the left edge of the paper. This gives the student room to write terms and main ideas on the left and write details and definitions on the right two thirds of the paper. This is very useful as a study tool since the page can be folded for self-questioning.

*Example:*

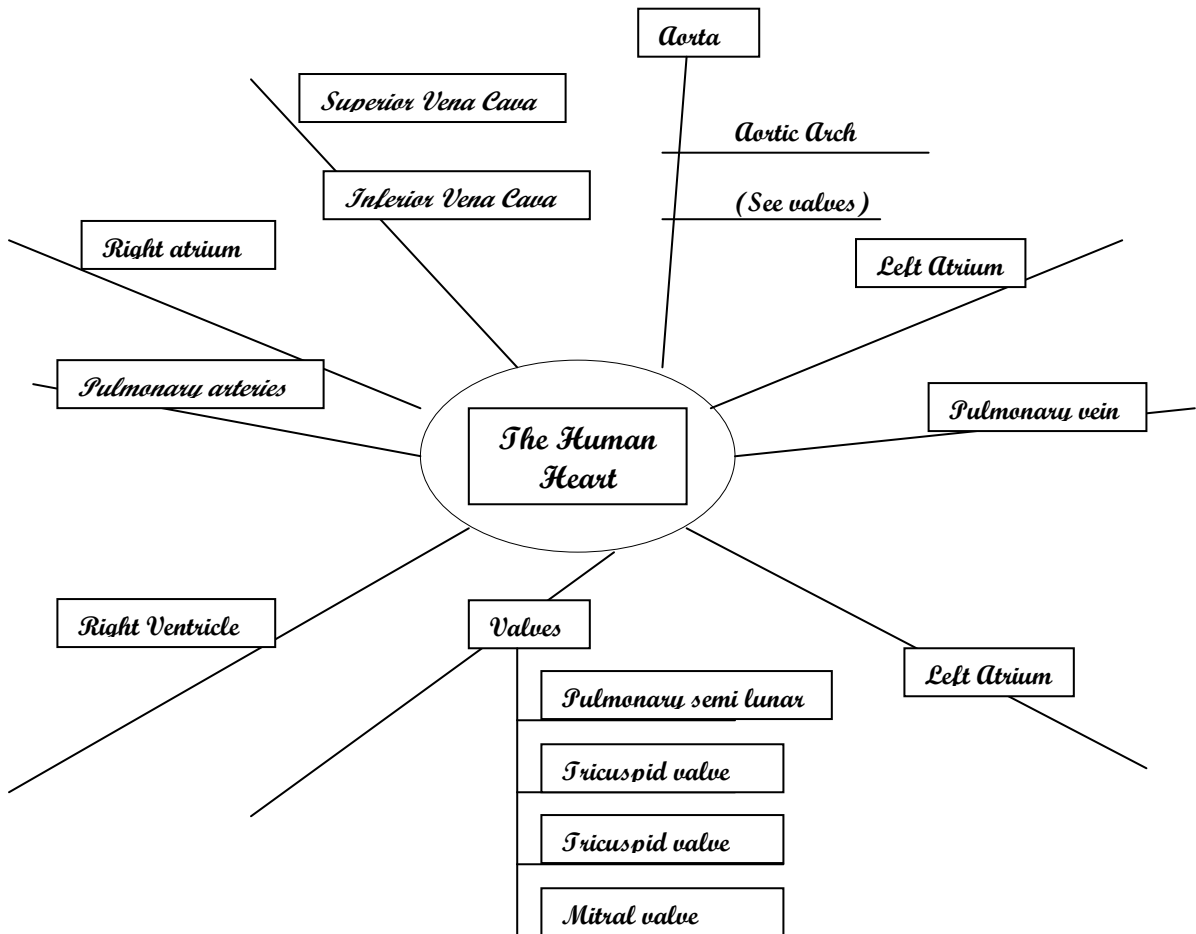
<i>Objective/Topics</i>	<ol style="list-style-type: none"> <li>1. <i>Learning how to take notes.</i></li> <li>2. <i>Learning how to use notes to study</i></li> </ol>
<i>How to make two-column notes.</i>	<p><i>Fold notebook paper in 1/3 to 2/3 proportion</i></p> <p><i>Write main topics and ideas on the left. Write in details on the left. Leave enough room for 6 or 7 ideas under each topic.</i></p>
<i>How to use notes to study.</i>	<p><i>Fold back the left side of the paper. Turn the page over.</i></p> <p><i>Left column will now be on the right. Self quiz each topic and check the answers on the reverse side.</i></p>

Using two column notes is an effective way for students to stay organized since the notebook paper can be kept in a three-ring binder. Writing on one side only helps turn the page into a good study tool.

# Mapping

Differentiating between main ideas and details is one of the most important learning and comprehension skills. Some students, probably visual learners, find that making a map of the information helps them connect details to the main idea graphically. Kinesthetic learners find that “making something” often cements information more easily. Some areas of the health field would easily fit into the mapping strategy. This is a good strategy to use when taking reading notes.

## Example:



Students would be doing these maps by hand by writing *on* the lines. Then they could write in additional information. The use of text boxes to create this example caused me to keep this map fairly simple. However, I think I could pass a little quiz just by creating this example for you.

*Students should use a specific or several specific methods of note taking throughout your course. They may even create their own method as long as it meets some qualifications you set.*

### Vocabulary Acquisition:

**Understanding technical language is critical to success in any class.** Health careers courses abound with new language for the student to learn. Fortunately for the students, much of health related vocabulary is based in Greek and Latin roots, as well as specific prefixes and affixes.

**Flashcards remain a tried and true method for learning vocabulary.** Students should be exposed to and quizzed on Greek and Latin roots and prefixes and affixes as well as actual medical terminology. Those students in dental programs will need to focus additionally on dental terminology. (*See appendix for a website*)

**Vocabulary acquisition should be reviewed at the start of each class, quizzing on words assigned in between classes.**

**Aside from technical vocabulary, lack of general vocabulary knowledge causes students to do poorly on tests and in learning activities because they don't understand the question.** The recommended textbook for this course of study includes general vocabulary exercises in each chapter. I recommend a ten to twenty word general vocabulary assignment and quiz each week.

### Writing Strategies:

**Students in health occupations will need writing skills.** However, in a preparation course your time is limited. My recommendation is to work with students on *short report writing* using resources that ask the students to report incidents, write up directions, and summarize situations and to write memos. Most writing strategies texts will include the “five steps of the writing process,” pre-writing, writing first draft, revising, editing and proofreading and final draft writing. This process is time-consuming and may need to be shortened. Most important in this type of course, I believe, is getting students to understand the following:

**Audience-** Who will be reading the report or memo?

**Purpose-** What is the purpose of the writing? To give directions, list steps, report an event?

**Format-** What is the best form to use for the writing?

**Main Idea-** What is the main idea of the writing piece?

**Details-** What details will be needed to support the main idea?

**Proofreading-** Students be conscious of spelling, punctuation, sentences

## Lesson Planning

**Good lesson planning and good teaching go hand in hand.** Your plan should guide you through the class step by step. In classes, such as a preparation course, that may be taught in a block of time once per week, the plan becomes as much a schedule of activities as it is a lesson plan in the form that elementary and secondary teachers use.

Because students are not receiving a grade or “credit” for this type of course, assessment and evaluation become teaching tools that are valued only by the individual student. Evaluation and assessment give the instructor information about what students are learning and can be used to guide further instruction. But, in many cases, at this level, instructors must move on and rely on the student to complete additional activities at home to practice skills they did not meet at the time of the assessment.

A best practice in teaching is to list the activities for the class on the board so that as you complete each step you can check it off. This helps you stay on topic and gives students a sense of accomplishment. So, what should be listed on the board and in your plan?

- **Review:** briefly review what was accomplished in the previous class and answer questions
- **List goals for the class for that day.** These are broader than objectives you’ll list to help the students reach the goal.

For example: Students will understand the significance of their personal learning style.

- **Activities that both the student and the teacher do to reach the goal.**

For example: (1) Students will participate in an introductory discussion about learning styles. (2) Students will complete a learning style inventory. (3) Instructor will discuss the meaning of each of the areas scored. (4) Students will record their scores and reflect on each in their learning journals. These are formally written, but you can shorten them considerably to post them. For example: Discuss learning styles, complete inventory, discuss inventory, and write in learning journal.

This is a plan that would take about 90 minutes to be thorough. If you were teaching in a three-hour block then you would have a second unit prepared. The most important elements of planning are:

- That the instructor knows what the students should accomplish (goals).
- Knowing what the teacher will do (lecture, show video, show overhead transparencies) to help students accomplish the goal.
- Knowing what the students will do to accomplish the goal (take notes, participate in discussions, complete practice sheets and so on). (Objectives)
- A process for assessing whether the students met the goal.

## Sample Planning Format

<b>Date:</b>	<b>Topic(s):</b>
<b>Goals:</b>	
<b>Objectives:</b>	
<b>Teacher Activities</b>	
<b>Student Activities</b>	
<b>Assessment Activities</b>	
<b>Home Practice Activities</b>	

## Resources/Web Sites

**Math Review-** [www.lessonplancentral.com](http://www.lessonplancentral.com) is a website that offers free worksheets with answer keys as well as a subscription offer.

**General Science Review-** [www.ohioc.org/standards\\_first/](http://www.ohioc.org/standards_first/) is a website that offers links to science review sheets. See sample, Comparing the Cell to a Factory, and Heartifacts in the following section. The Ohio Department of Education web site is a good resource for more comprehensive lesson plans. As an ABLE or Workforce Development instructor you probably won't have time to use the full plans, but you may find good ideas and worksheets for free. Use the Google search engine to search *Ohio Department of Education* and type "lesson plans" in the search blank on the ODE home page. This will take you to Ohio's Instructional Management System where you will find lesson plans in all academic areas.

**Nutrition Terminology** – [www.nutritiondata.com/help/glossary](http://www.nutritiondata.com/help/glossary) This glossary includes definitions of common nutritional terms as well as those specific to the Nutrition Data website.

**Dental Terminology-** If students are preparing specifically for a dental assisting program, then you can find dental terminology at [www.bracesinfo.com/gendent/](http://www.bracesinfo.com/gendent/).

**SQ3R Study Strategy-** This is a time-tested way to study while reading chapter material. Find a copy of this method at [www.frontiernet.net/~jlkeefe/sq3r.htm](http://www.frontiernet.net/~jlkeefe/sq3r.htm).

**Report Writing Guidelines-** This is a PDF from ACT College The Allied Health School. It is a simple guideline for healthcare profession reports.  
[www.actcollege.edu/cs/pdf/tut\\_writing\\_guidelines.pdf](http://www.actcollege.edu/cs/pdf/tut_writing_guidelines.pdf)

**Graphic Organizers-** [www.edhelper.com](http://www.edhelper.com) offers a tutorial for an instructor and free examples of various graphic organizers. Although a subscription is required for some of the organizers, many are free. See samples in following sections.

**Internet Tutorials-** [www.refdesk.com/factbeg.html](http://www.refdesk.com/factbeg.html) is a site that offers an array of links to on-line tutorials and [www.internet101.org/](http://www.internet101.org/) offers a long list of links on specific Internet topics.

**Test Taking Tips-** [www.testtakingtips.com](http://www.testtakingtips.com) offers PDF print outs of the elements of test taking giving tips for each type of test question the student might encounter, as well as test preparation guidelines.

**Stress Management Tips-** [www.StressManagementTips.com](http://www.StressManagementTips.com) is a helpful web site to give students some hints about how to deal with the stress they may feel when starting a course.

**Time Management Tips-** Time management is critical to student success. This web site cites practical tips for handling time for the new student. [www.TimeManagementHelp.com](http://www.TimeManagementHelp.com)

*These web sites can be used to copy materials for in-class practice or if you have a computer lab in some cases students can navigate the steps on line. Being able to use a computer lab would get students needed practice with the computer. Samples of the pages are included.*

## **Books**

**Learning Strategies for Health Careers Students** by Susan Marcus Palau, MA and Marilyn Meltzer, MA. Published by Saunders Elsevier- [www.elsevier.com](http://www.elsevier.com). This softbound text focuses on reading, writing, math and study strategies. All reading selections are from the health field, including dental assisting.

**Health Occupations Entrance Exams: The Core Review You Need to Succeed.** Published by LearningExpress. [www.learnatest.com](http://www.learnatest.com). This book is a great source for vocabulary preparation, pre and post-tests and science review material.

**LPN/LVN Pre-Entrance Exam.** Mary E. McDonald editor. Published by Jones and Bartlett- [www.jbpub.com](http://www.jbpub.com). This book has an excellent review of human anatomy and physiology as well as math and science reviews. It does not include learning/study strategies specifically.

**Math for Health Care Professionals Quick Review, Mike** Kennamer, EMT-P, MPA. Published by Delmar Cengage Learning [www.delmar.cengage.com](http://www.delmar.cengage.com). This book is a small softbound text of 192 pages and is written as a refresher at a reading level appropriate for secondary and post secondary readers.