**Health Science Technology II**

****

**Battery Creek High School**

**2014-2015**

**Instructor:** Ms. Lydia Williams M.Ed., ATC/L

**Phone:** 322-5633

**Email:** lydia.williams@beaufort.k12.sc.us

**Purpose: Health Science 2 applies the knowledge and skills that were learned in Health Science 1 while further challenging the students to learn more about the healthcare field. Health Science 2, will continue teaching in more detail, the units of study that include advanced study of infection control. They will learn about “Transmission Based Precautions” and become more familiar with OSHA, HIPPA, and the CDC. Students in Health Science 2 will learn how to take vital signs, record them and learn what the data means. Students will learn about the stages of life and Maslow’s Hierarchy of needs. Students will learn how law and ethics are applied in the healthcare setting. This course will introduce students to basic patient care skills. Medical terminology, medical math and pharmacology are incorporated throughout the lessons being taught. Students will be certified in First Aid and CPR in this course. Career pathways and scenarios are introduced through each section. Students in this course should further their knowledge of healthcare careers and future goals by participating in a job shadowing experiences. This course provides a foundation for further advancement in Health Science. It is recommended that students should score an 80% or higher in this course to advance to Clinical Study.**

**Textbook: *Diversified Health Occupations* by Louise Simmers, 7th edition.** Textbooks were not distributed prior to the start of the school year. Because of that, textbooks will issued in class the second week of school. You will be responsible for bringing you book to class each period. In the event that you do not have your textbook when it is needed in class you will lose 10 points from your bi-weekly participation grade. You will be responsible for turning this textbook back into the book room at the end of the school year. Failing to do so may result in financial charges for the price of the textbook.

**Teacher Expectations:**

* Students are expected to follow the Student Handbook.
* Students are expected to bring appropriate materials to the classroom and complete all class assignments; not doing so can and will affect their biweekly participation grade.
* Students are expected to show respect toward themselves, their fellow classmates, and their teacher.
* Students are expected to be in class on time.

**Grading Policy: Grading Scale:**

Unit Test = 15% 93%-100% A – exceeds expectation

Projects = 20% 92%-85% B – meets Health Science Standards & expectations

Participation/Class Assignments = 25% 84%-77% C – passing grade but does not meet all standards

Quizzes = 10% 76%-70% D – passing but only meets minimum standards

Homework = 10% Below 70% F – failing, does not meet minimum standards

Semester Exam = 20%

**Projects/Assignment Schedule:**

**#1 ~ Current Health/Medical Event Article (Due every other Monday ~ Homework Grade)**

The current event will include a 100 word or greater report that includes a summary (in the student’s *own words*—plagiarism will receive a grade of a “zero”) and the student’s *developed* opinion. The health/medical article must also be included and may come from a newspaper, current magazine (<6 months old) or one of the following acceptable websites:

* http://www.sciencenewsforkids.com
* <http://www.time.com/time/>
* <http://www.newsweek.com/>
* <http://www.usatoday.com/>
* <http://www.cbsnews.com/>
* http://members.keiserpermanete.org/kpweb/featuredhealth/clusterpage.do

The article will only be accepted via Edmodo. Students will be given an Edmodo code to join the Health Science 2 class, and are responsible for joining the class group so they may submit this bi-weekly homework assignment.

**#2 ~ Microorganism Weebly Page (project grade)**

The student will create a webpage of the five studied microorganisms. Each microorganism should have identifying information telling about the microbe (shape and appearance), 2 disease(s) it causes, epidemiology (incident and prevalence of each disease in large populations) and treatment. This will count as a project grade.

**#3 ~ Human Growth and Development Weebly Page (project grade)**

The student will create a webpage that must include a description of human growth and development, and why it is important for health care workers to understand each phase. On the weebly the student will be responsible for providing an example of a mental, physical, social, and emotional change for the human growth and development phase of choice.

**#4 ~ Nutritional Planning Weebly Page (project grade)**

The student will create a webpage where the student will research menus and nutritional data from various restaurants and websites to create two- healthy three meals-a-day menus. One menu must be from cooking all meals at home. Another menu must be from eating out only.

**#5 ~ Unannounced Notebook Checks (participation grade)**

Students are required and expected to maintain an organized notebook for this class. Notebooks should include only notes for this course (no math, history, or other notes included). There will be random notebook checks at the teacher’s discretion. I will ask for 5 specific notes/assignments/quizzes. Each is worth 20 points for a total of 100. If you are missing one, you will receive an 80; missing two a 60, and so on.

**Plagiarism:** will not be tolerated. Plagiarism is the stealing of ideas and/or words from another source and passing them off as your own. Verification of plagiarism will result in a “zero” for that assignment.

**Bi-weekly Participation Grade:** Every two weeks, students attend class a total of five class periods. For proper behavior and participation students will receive a participation grade of 100, which is 20 points per class. However, for improper behavior or lack of participation students will lose points. Student may lose points for, but are not limited to, the following examples:

Sleeping = -10 Cell Phone Use = -15 No Textbook/Notebook = -10

Tardy = -10 Talking during instruction = -10 HOSA Scrub = -15

**Late Work Policy**: Students are expected to turn assigned work and projects in **ON TIME**.

* It is the student’s responsibility to contact the teacher (on the first day of his/her return) and make arrangements for make-up assignments and/or tests.
* It is the student’s responsibility to meet all deadlines set by the teacher for turning in missed assignments.
* In cases of emergency, it is the student’s responsibility to contact the teacher and arrange an extension for turning in missed assignments.

**Absences:** Late work due to absences will be accepted for full credit if handed in at the start of the class period, two class meetings from the date of absence. For example, Susie has an excused absence on Monday. She may get her missed work from Monday as late as Wednesday’s class. It is due for full credit on Friday. If turned in after the allotted two class periods, the assignment will lose 10 points per day until the grade becomes a zero. For example, Susie has an excused absence on Monday, but turns her missing work in the following Tuesday. She can score no higher than a 90.

**Do-over Policy:** is a reassessment where re-teaching, practice, and tutoring must be completed in order to be able to re-assess the student’s knowledge for a better grade. The **Do-Over Policy does not apply to class assignments, participation, or quizzes**. In order for the student to take advantage of the “Do Over” to improve a **test**, the following requirements must be met:

* + - * Attempt the original assessment (test)
      * Prepare for and attend 1 tutoring session with their teacher
      * Complete all assignments that support the instruction prior to the initial assessment; **if there is a missing assignment covering the tested material the student will not qualify for the do over policy**.
      * Participate in the second offering of the assessment to have the opportunity to replace a grade with a **maximum of a 77.** (Students will receive the higher of the two grades up to a 77.)
      * Timeline: The Do Over time frame is **5 school days** from the date the assessment was returned to the class.
* The second assessment will be the same format as the original assessment but a different version. (example- multi-choice format, or essay format)
* **Do Over No Show:** If the student misses tutoring session, or the actual “Do Over” attempt without informing the instructor prior to his/her absence, he/she will have lost their privilege to improve the grade on the unit assessment.

**Restroom/Hall Pass Policy: NO** passes will be written during the first 15 minutes of class, and the last 15 minutes of class. This is a Battery Creek High School policy.

**Cell Phone/iPod Policy:** Cell phones are to be immediately placed in the phone dock on the student’s desk upon entering the classroom. If a student removes or uses his/her phone during class it will be taken and given to an administrator. A discipline referral will also be given. You will lose 15 points from your bi-weekly participation, for every time you have it out during class. If your parents need to contact you they may call the school, or you may ask permission to use the school phone to contact them. The following is Battery Creek High School’s policy on cell phones:

“Cell phones must be turned off during the school day and must be kept out of sight.

Violators will be dealt with as follows:

1st Offense for exposure with phone = confiscated turned over to student’s administrator – returned to student at the end of the day.

2nd Offense for exposure with phone = confiscated, turned over to student’s administrator – parent must pick up phone.

3rd and subsequent offenses = confiscated, turned over to student administrator – parent must pick up phone.”

**Parent Involvement:** I strongly encourage involvement of parents and other relatives. I hope this course will enhance communication within your family—that students will share what they are learning in class with their parents, and that parents will ask what is being studied in school.

**Technology Infused for Parents and Students:** School Fusion is no longer the active form on virtual communication for parents, teachers, and students. Battery Creek High School will now be using Edmodo.

**Edmodo:**  is essentially a Facebook for Educators. Please go to www.edmodo.com and create a user account. Once you have created an account you may **join the class group by using the code: zth47a**. Parents may then request from me a private code to create their own account and link to the HST 2 group. From here you will be able to view post from me to your student or vice versa, presentations from class that include notes for when your student was absent, or additional resources to supplement class materials. You child will also be able to take, and submit quizzes on Edmodo. This program works very similarly to Facebook. It is a great tool to use in order to see your student’s progress and involvement.

**Weebly:** Please go to http://batterycreekhealthscience.weebly.com/. At the top right of the page you will see a “More” tab. Select your course from the list. Here you will be able to find all notes from class, assignments, videos, and more. There will be no excuse that students were missing information because it will be posted on the internet. Students will even be able to view the agenda for the entire week so if they are absent, missed information can be retrieved from the internet at your earliest convenience.

**Classroom Rules:**

Students must abide by the following rules while in my class:

1. Students must **respect** classmates, teachers, and administration at all times.
2. Students must have agenda to leave the classroom for ANYTHING.
3. No talking while teacher is giving instruction.
4. Raise your hand to be acknowledged by the teacher.
5. Abide by the student handbook.
6. Absolutely no cell phone use.

**Consequences:** If a student chooses to not follow the classroom rules the result maybe:

* Change of seats
  + Detention
  + Office discipline referral
  + Parent Contact
  + Other appropriate action

**REQUIRED Materials:**

* 1 ½ -2” binder with notebook paper
* Highlighter
* Agenda (I will not write you a pass without one; also you will have assignments in it that your parent/guardian will have to sign)

**SUGGESTED Materials:**

* Colored pencils
* Index cards
* Pencil and/or pen

## **Health Science Technology II**

**Course Outline**

Note: This is a tentative outline. This outline will be modified and adjusted, as needed!

#### Week 1 = ORIENTATION

* Student/teacher expectations
* Leadership/HOSA
* Medical Terminology

#### Weeks 2 - 5 = INFECTION CONTROL, Unit 13

* Principles of Infection Control
* Observing Standard Precautions
* Sterilizing with an Autoclave

**Weeks 6 - 9 =** **VITAL SIGNS, Unit 14**

* Measuring Vital Signs
* Interpreting the results

#### Weeks 10 - 14 = HUMAN GROWTH AND DEVELOPMENT, Unit 7

* Life Changes
* Death and Dying
* Human Needs
* Effective Communication

**THANKSGIVING BREAK, 11/22 – 11/30**

**Weeks 15 - 17 = EMPLOYABILITY SKILLS,**

**Unit 16**

* Obtaining Employment
* Employability Skills

**CHRISTMAS BREAK, 12/22 – 1/4**

**Weeks 18 - 21 = GERIATRIC CARE, Unit 9**

* **SEMESTER 1 EXAM**
* Myths on Aging
* Physical Changes
* Psychological Changes
* Disorientation

**Week 22 – 25 = NUTRITION, Unit 10**

* Fundamentals
* Essentials
* Utilization
* Maintenance
* Therapeutic Diets

**Week 26 - 31 = LABORATORY ASSISTANT SKILLS, Unit 18**

* Microscopes
* Hematocrit
* Blood Cells
* Blood Sugar
* Testing Urine

**SPRING BREAK, 4/11 – 4/19**

**Weeks 32 - 34 = PROMOTION OF SAFETY,**

**Unit 12**

* Body Mechanics
* Preventing Accidents
* Observing Fire Safety

**Week 35 - 37 = Intro to HST Review**

* Review Key Concepts
* **SEMESTER 2 EXAM**

**SC Foundation Standards to Be Covered in HST II**

**Foundation Standard 1: Academic Foundation**

Healthcare professionals will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. The following accountability criteria are considered essential for students in a health science program of study.

1. **Analyze** diagrams, charts, graphs, and tables to interpret healthcare results.

2. **Perform mathematical applications** to determine vital sign applications and basic pharmacology equations.

3. **Recogniz**e physical, mental, social, and emotional development through the life span and **identify** patient needs at each developmental stage.

4. **Identify** stages of death and dying.

**Foundation Standard 2: Communications**

Healthcare professionals will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing.

1. **Report** subjective and objective information.

2. **Use** medical terminology and medical math to communicate information (oral and written).

3. **Recognize** elements of written and electronic communication (spelling, grammar, formatting, and confidentiality).

4. **Document, report, and communicate** in a straightforward, understandable, accurate, and timely manner (understanding how to correct errors, read labels and report information and data).

5. **Apply** active speaking and listening skills.

**Foundation Standard 3: Systems**

Healthcare professionals will understand how their role fits into their department, their organization, and the overall healthcare environment. They will identify how key systems affect services they perform and quality of care.

1. **Explain** factors influencing healthcare delivery systems. (Example: Affordable Care Act, aging populations etc..)

2. **Discuss** common methods of payment for healthcare to include Medicaid, Medicare, TRICARE, private insurance, worker’s compensation, etc.

3. **Describe** responsibilities of consumers within the healthcare system related to admission, discharge, and follow-up.

4. **Explain** the impact of emerging issues such as technology, epidemiology, genetics, bioethics, and socioeconomics on healthcare delivery systems.

**Foundation Standard 4: Employability Skills**

Healthcare professionals will understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate key employability skills and will maintain and upgrade skills, as needed.

1. **Demonstrate** process for obtaining employment.

2. **Demonstrate** employability skills (as they apply to hygiene, dress, language, confidentiality, behavior and work ethic)

3. **Expand** components of a personal portfolio (letter of introduction, resume, healthcare project, writing sample, work-based learning, oral presentation, service learning, credentials, technology, and leadership experience).

4. **Participate** in healthcare work-based learning experiences (guest speakers, virtual tours, job shadowing, blood drives, community service projects, etc.).

**Foundation Standard 5: Legal Responsibilities**

Healthcare professionals will understand the legal responsibilities, limitations, and implications of their actions within the healthcare delivery setting. They will perform their duties according to regulations, policies, laws, and legislated rights of clients.

1. **Analyze** legal responsibilities and explain laws governing harassment, labor and scope of practice.

2. **Apply** procedures for accurate documentation and record keeping.

3. **Apply** standards for Health Insurance Portability and Accountability Act (HIPAA).

4. **Describe** advance directives, informed consent and explore the Patient’s and Residents Bill of Rights.

**Foundation Standard 6: Ethics**

Healthcare professionals will understand accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare environment. They will perform quality healthcare delivery.

1. **Discuss** bioethical issues related to healthcare.

2. **Apply** ethical behaviors in healthcare including personal, professional, and organizational ethics.

3. **Discuss** procedures for reporting activities and behaviors that affect health, safety, and welfare of others.

**Foundation Standard 7: Safety Practices**

Healthcare professionals will understand the existing and potential hazards to clients, coworkers, and self. They will prevent injury or illness through safe work practices and follow health and safety policies and procedures.

1. **Demonstrate** principles of infection control related to Transmission Based Precautions (gowns, gloves, masks, etc). **Recognize the difference** between Transmission Based Precautions and Standard Precautions.

2. **Define and understand** language associated with Infection control, including medical and surgical asepsis.

3. **Apply principles** of body mechanics and patient safety during transfers and positioning and in all areas of healthcare activities.

4. **Discuss** implications of hazardous materials and recognize Safety Data Sheets (SDS).

5. **Comply** with safety signs, symbols and labels.

6. **Summarize** principles of basic emergency response in natural disasters or other emergencies.

**Foundation Standard 8: Teamwork**

Healthcare professionals will understand the roles and responsibilities of individual members as part of the healthcare team, including their ability to promote the delivery of quality healthcare. They will interact effectively and sensitively with all members of the healthcare team.

1. **Act** responsibly as a team member

**Foundation Standard 9: Health Maintenance Practices**

Healthcare professionals will understand the fundamentals of wellness and the prevention of disease processes. They will practice preventive health behaviors among the clients.

1. **Apply** behaviors that promote health and wellness.

2. **Describe** strategies for prevention of diseases including health screenings and examinations.

3. **Apply** practices that promote prevention of disease and injury.

**Foundation Standard 10: Technical Skills**

Healthcare professionals will apply technical skills required for all career specialties. They will demonstrate skills and knowledge as appropriate.

1. **Apply** procedures for measuring and recording vital signs (blood pressure, height, and weight)

including recognition of normal ranges and understanding what the data means.

2. **Apply** skills to obtain training or certification in adult, child, and infant cardiopulmonary

resuscitation (CPR) and automated external defibrillator (AED).

3. **Demonstrate** First Aid skills for certification if needed or not received in Level 1

**Foundation Standard 11: Information Technology Applications**

Healthcare professionals will use information technology applications required within all career specialties. They will demonstrate use as appropriate to healthcare applications.

1. **Identify** records and files common to the healthcare setting (including electronic health record).

2. **Use** health record data collection tools (such as input screens, document templates)

3. **Create** documentation in the health record that reflects timeliness, completeness, and accuracy while adhering to information systems policies and procedures at the local, state, and national and organizational level.

4. **Recognize** technology applications in healthcare (including file storage).

5. **Differentiate** types and content of health records (patient, pharmacy, laboratory etc.).

6. **Demonstrate** appropriate methods to correct inaccurate information/errors personally entered into HER.