**Human Anatomy and Physiology**

Course Description:

This course is designed to be an introduction to structure and function of the human body from the cellular level to the homeostatic balance of the entire organism. It is also intended to be a preparatory course for those interested in the medical professions. Students will take full advantage of the Personal Learning Device initiative and Project Based Learning to gain an in-depth functioning knowledge of the human body.

Course Methods:

In this course we will take a VERY student centered approach. The course will be driven by student initiative and the Indiana State Standards. The expectations for student achievement, independence and integrity will be very high.

Each nine weeks will be devoted to 4 topics. Each topic will have its own activities, discussions, test and expert presentation group. Each topic will be given approximately a 7 school day window for an in-depth group examination. These units will be organized and led by students. The expert group for each topic will lead class discussions, provide learning activities and help to assemble the information for the unit test. Students will have the opportunity to request workshops or discussion topics from the instructor to assist in deeper understanding.

The last week of each grading period will be devoted to the presentation of the Grand Rounds Projects of each of the four expert groups. The final document from these presentations will be the basis for the final exam at the end of the semester. The Grand Rounds project will be a presentation of the overview of the expert group’s unit with the addition of medical applications of the knowledge gained. This presentation will be made to a panel of medical professionals from area health care facilities.

In all facets of the course we will be working to develop the following 21st century skills:

-***Professionalism***: Students will display a high degree of honor and integrity, citizenship and responsibility. These qualities may be evidenced by proper dress, work ethic, promptness, attendance, respect and leadership.

-***Technology Literacy***: Students will be able to use digital technology, communication tools, and/or networks appropriately to solve information problems in order to function in an information society.

-***Collaborative Skills***: Students will be able to work with staff, faculty, community members, and peers. Team members should discuss and work toward what they hope to accomplish to meet individual and group goals.

-***Critical and Inventive Thinking***: Students will display flexible, creative, and critical thinking in order to produce innovative works. Thinking must demonstrate resourcefulness, persistence, curiosity, and risk taking.

-***Content Knowledge and Application***: Students will be able to demonstrate proper use of the content as directed by Indiana State Standards to apply the knowledge gained from the class and the projects assigned.

-***Communication***: Students will be able to speak and write with an awareness of audience and purpose.

Grading and Evaluation Methods:

Each grading period will carry the same types of grades:

* Work Logs for Unit Development time (Due every MWF, 15pts. each)
* 4 Unit Tests (100pts. Each)
* 4 Unit Activities (Points will be determined by the activity)
* Unit Plan Packet (100pts.)
* Grand Rounds Presentation (400pts.)

Each Student Developed Unit Plan Should Include:

* Anatomy Handout-Labeled and ready to copy
* Plans for at least one directed activity. This might include labs, demos, games, puzzles or clinical application questions. This must include a component that is grade-able!
* Topic and Outline for at least one student directed lecture or discussion.
* Topics and main points for up to 3 teacher directed discussions.
* A list of quality essay topics or questions for a unit test.
* Explanation of at least 3 day-to-day functions of the system the unit is about. This may be a portion of an activity or student-led discussion but may not be the entire lesson.
* Brainstorming list of possible Medical Application information for the Grand Rounds presentation.

Attendance/Late Work:

Since the overwhelming majority of this course will be available online only absences that would also keep a student from being able to access a computer will be accepted as reason for missing a deadline. Exceptions to deadlines are far easier to negotiate in advance of that deadline so please be sure to communicate with the instructor in an upfront and honest fashion if you know there is going to be an issue.

Any assignment that is not turned in by its deadline will be subject to significant penalty up to and including zero credit.

Course Calendar:

Each grading period will be set up as follows:

2 weeks- Individual and group preparation time for unit packets.

7-8 class days each for 4 units.

* 1 day for covering Anatomy Handouts
* 1 day for activity or lab
* 4-5 days for discussion/activities
* 1 day for test

1 week for Preparation and Presentation of Grand Rounds Projects