

The Charter School of Wilmington

Neuroscience

Instructor Information

Teacher: Dr. Fleetwood
email: tfleetwood@charterschool.org
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room: 321
phone: 302-651-2727 ext. 321
office hours: I am available any day after school by appointment.

Course Content

In this semester long course, students investigate the inner workings of the brain, spinal cord, nervous system and special senses. Topics include how the brain learns, how we process memories, how we perceive and interpret the world, how the nervous system controls the body, and what happens when things go wrong. The course uses a clinical approach as students learn about brain imaging techniques, neurological testing techniques, and work to solve case studies.

Course Philosophy

As in all fields of study, content knowledge is very important however, application of that content is equally, if not more, important. Additionally, the development of skills necessary to allow an individual to continue to learn in life is essential, particularly in a college preparatory environment. These skills include, among other things, the ability to learn independently, to think critically, to explain your thought process and resultant understanding with clarity, and the ability to work with others toward a common goal. With these things in mind, this course has been developed in the style of 'problem-based learning' and will offer a significant challenge to the student as they 'learn to learn'. More information on my approach to teaching can be found on my website at <http://www.docfleetwood.net/>

Resources

Textbook: Human Anatomy and Physiology 4th Edition by Elaine N. Marieb, Benjamin Cummings, 1998.

In class text resources, the Internet, and the library will also be necessary.

Goals of Neuroscience

Upon completion of Neuroscience, students will be prepared for success in college, in their careers, and in their daily lives by:

1. Learning relevant terminology and its proper usage.
2. Learning how our nervous system functions to perceive our world and control our body.
3. Learning the application of various technologies in healthcare and human body research.
4. Developing an awareness of career pathways involving math, science and/or technology.
5. Developing their ability to find, evaluate and use appropriate learning resources.
6. Learning to think critically.
7. Being able to analyze and solve complex, real world problems.
8. Working cooperatively with others.
9. Communicating ideas clearly and effectively in writing and orally.
10. Using content knowledge and intellectual skills to become a continual learner.

** Specific objectives for each unit will be discussed in class.

Materials Needed for Daily Class

The textbook
3-ring loose-leaf binder
Loose-leaf paper

A pencil and eraser
A pen
A good sense of humor

The Classroom

You are not to touch any equipment or computers that are not a direct part of the scheduled lab or activity. Anyone abusing the equipment or computers will face strict disciplinary action. I have **zero tolerance** for this!

Academic Dishonesty (Cheating)

Cheating is an intolerable offense in this classroom. The first offense will result in a grade of zero for that assignment for all parties involved. The second offense will result in more severe punishment up to and including referral to the review board and dismissal from school. **DO NOT CHEAT!**

Grading

Your grade in this course will be based on a running total of points for each quarter. Everything that is graded counts for points toward your grade. (note: not everything we do will be graded) At the end of the quarter, add up all of the points you have earned, divide by the total number possible, multiply by 100 and you get your percentage grade.

The following items may be included in your grade:

- **Quizzes** - These may be open or closed notes depending on the quiz. You may be asked to repeat specific problems from previous homework assignments.
- **Tests** – Tests will be announced throughout the year. They will cover all the material since the previous test **and may include questions from previous material**. There will generally be a review the day before the test.
- **Labs** - You will be doing a series of labs throughout the year. These may be problem solving activities or experiments. Questions or a lab report may be completed depending on the lab.
- **Projects** - You will have projects throughout the year. They may be in pairs, groups, etc... Some in-class time will be set aside to work on your project, but groups are also expected to work outside of class.
- **Homework** – Homework may or may not be collected for a grade, depending on the assignment. Most homework will be practice for your benefit and not count as a grade.

Community

It is extremely important in science, and in life, that you become involved in the learning process to fully understand the concepts being presented. This includes being prepared for class, individual responses, and group interactions. Furthermore, due to the group work nature of this class it is essential that you are in class to complete your obligations to your group. Lateness or lack of attendance or lack of participation is disruptive to group functioning. Community also includes, among other things, integrity, responsibility, participation, time management, effort, and perseverance. You will not receive a direct grade for these items, but failure to consider their importance to your success will, no doubt, cause you to do worse than your potential would otherwise allow. These are also the types of things that show up as comments on the report card or that teachers remember when they write letters of recommendation.

Make-up Work/Missed Assignments

If you miss work or a test due to an illness, it is **YOUR** responsibility to see me within **two (2) days** of your return so we can arrange a make-up. Make-up work, especially tests, may not be the same as that given to other students.

Help

If you require extra help PLEASE do not hesitate to contact me to arrange for extra help time after school or during free periods. I can not read your mind or hunt down all my students – you must come to me if you want help. I am here to help you learn and I want to help you be the best person you can.

Expectations

I expect myself to be prepared for class and to teach you, the student, to the best of my ability. I will make time for extra help if you need it and I will work hard to create a challenging learning environment where your learning will be meaningful and fun.

I expect you, the student, to come to class prepared to learn. This includes bringing the required materials and having an open mind and positive attitude. I expect you to put forth your best effort to learn and never give up.

I expect all of us to work together to make this an enjoyable school year where we can learn and have fun at the same time.

Peer Contact Information

Write down the names, numbers, and emails of any two classmates. It is your responsibility for contacting these people to determine any missed work.

Name: _____ email: _____

Cell #: _____ Home #: _____

Name: _____ email: _____

Cell #: _____ Home #: _____

Contract & Contact Information

I have read the above syllabus and understand that learning is my responsibility and I am clear as to what is expected of me in this course. If I am not clear I understand that it is my responsibility to see the course instructor for any clarifications as soon as possible.

Student Signature: _____

I have read the above syllabus and understand what is expected of my son/daughter in this course. If I am not clear I will contact the instructor as soon as possible for any clarifications.

Parent Signature: _____

Student Contact Information

Student name: _____

Student email: _____

Student phone number: _____

Parent Contact Information

Parent(s) name: _____

Parent email: _____

Parent daytime phone: _____