

UNIVERSITY OF MINNESOTA

Twin Cities Campus

*Biology Teaching and Learning
College of Biological Sciences*

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Dear Students and Parents Participating in College in the Schools,

Welcome to the University of Minnesota course BIOL 1015: Human Physiology, Technology, and Medical Devices. BIOL 1015 is offered at your school through a concurrent enrollment program called College in the Schools (CIS). Students who successfully complete BIOL 1015 will get a jump-start on college, as they will earn both UMN and high school credit.

Let me introduce myself. I'm Murray Jensen, associate professor in the University of Minnesota's College of Biological Sciences, Department of Biology Teaching and Learning. As CIS faculty coordinator, I help select, prepare, and continuously support all high school instructors teaching this course at participating high schools.

In this letter I want to communicate clearly what students, and parents, can expect in the course. The first -- and maybe most important -- point I want to emphasize is that BIOL 1015 is not an easy course. Students should expect a faster pace, assume greater personal responsibility, and perform at a higher level than in a typical high school course. They will likely complain about the work load and course demands. Academic rigor is healthy for young college students. In my 20-plus years of teaching experience at both the high school and college levels, I've learned that the most deleterious trait an incoming college student can have is false confidence. False confidence is fostered by easy courses, those where students do little work and still receive high marks. These students frequently struggle or even drop out of college, when faced with genuine scholastic challenges. BIOL 1015 is a real college class; students will be expected to work hard, and top marks will be difficult to achieve.

Who should take the course?

BIOL 1015 is an excellent introduction to human physiology and the rigors of college coursework. It provides students the opportunity to determine if they wish to pursue majors in the health or biological sciences. It is not a substitute for more advanced (upper level) physiology courses, and is not the first course in a two-course sequence that is frequently used in allied health care preparations programs.

College credit

Students who successfully complete BIOL 1015 will earn four UMN semester credits and fulfill their biological science with lab graduation requirement. If students attend the University of Minnesota after graduating from high school, they do not need to worry about

the paperwork involved in transferring credits, as all CIS students receive an official University of Minnesota transcript.

If a student applies to another college or university after graduation, they should be aware that the decision to grant credit recognition rests entirely within that institution. However, CIS has collected data from many students over the years that indicate that the majority of students succeed in securing recognition for their UMN credits earned through CIS. Students should keep the course syllabus along with exams, papers, reports, etcetera, after the course has ended. Having this documentation available can help students secure credit recognition.

Quantity of work

University policy states that students can expect 3 hours of work per week per credit. Students in BIOL 1015 should expect approximately 12 hours of work per week, including class time.

Grades

CIS students will be graded using University of Minnesota standards. As the majority of students taking this course on the UMN campus receive B's or C's, students should set their expectations accordingly.

College GPA

The grades students receive in BIOL 1015 through CIS will be recorded on official UMN transcripts and will be used in calculating their University GPAs. If students apply to another college or university, their GPA will be calculated using a formula determined by that institution, and may include the grade from this course.

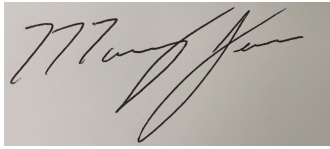
Course goals

Historically, the study of human physiology has focused on memorizing long lists of bones and muscles or steps of physiological processes such as contraction of muscle cells or propagation of nerve signals. While this course will require students to learn many bones and muscles, it will go much further than that, as there is much more to human physiology than memorization. Students will work in cooperative learning groups to derive possible solutions to physiological problems. The process of learning to work in groups is often difficult but necessary. Health care and the sciences are professional fields that require teamwork, and, to that end, learning to work in a group is indeed one of the course goals for BIOL 1015. To make progress towards this goal, instructors will employ weekly cooperative quizzes. Each week there will be at least one cooperative quiz, which is completed in two parts: First, students take the quiz on an individual basis and turn in their answers. Second, they work in groups of two to four to complete the quiz a second time, this time working together to come to consensus on a set of answers that represent the group's combined efforts. Final point totals for cooperative quizzes are calculated as an average of the individual and group components. The quizzes will help prepare students for exams, which are graded on an individual basis.

Another feature of BIOL 1015 that sets it apart from typical high school science classes is its emphasis on inquiry-based teaching and learning. Inquiry is a core feature of any scientific endeavor and involves the process of identifying a problem and then generating and critiquing possible solutions. Inquiry is more complex than simple memorization, as it involves

problems and issues that cannot be solved easily. Encountering doubt and dealing with ambiguity are common experiences during this process. Initially, students in the course might find the inquiry approach confusing, but in time, good science students often learn to embrace it.

Have a good year, and I hope your child will enjoy learning the basic concepts of human physiology.

A handwritten signature in black ink, appearing to read "Murray Jensen", is displayed on a light gray rectangular background.

Sincerely,
Dr. Murray Jensen
Associate Professor
H.T. Morse-Alumni Distinguished Teaching Professor of Biological Sciences