

## Program Description

The Associate of Science (A.S.) Degree in Exercise Science Transfer Pathway will examine the effects of exercise and physical activity on people in order to optimize their physical and mental health. This program focuses on the anatomy, physiology, biochemistry, and biophysics of human movement, and its application to exercise and therapeutic rehabilitation. This degree can prepare students to transfer, and choose from a broad range of careers such as clinical testing, personal training, and performance enhancement, sports management, physical therapy, strength and conditioning, athletic training, cardiac rehabilitation, and many more.

## Program Outcomes

By completing this program, students will achieve the following learning outcomes:

- Demonstrate foundational knowledge in the basic sciences (biology, physiology, and chemistry) pertinent to the field of exercise science;
- Apply basic scientific principles from exercise physiology and biomechanics to human movement and exercise;
- Discuss ethical standards, expectations, and education requirements in the exercise science professions;
- Explain how physical activity and nutrition influence human physiology; and
- Discuss psychological factors that influence behavior change.

## Program Course Requirements

### Required Discipline Courses (14 credits)

HLTH 1520	Principles of Nutrition .....	3 cr
PHED 1522	Weight Training .....	2 cr
PHED 1528	Introduction to Exercise Science .....	3 cr
PHED 1594	Fitness for Life <b>OR</b>	
PHED 1597*	Honors Fitness for Life.....	2 cr
PHED courses	.....	4 cr

### Required MnTC Courses (43 - 46 credits)

An A.S. degree requires a minimum of 30 credits selected from at least six of the ten goal areas of the Minnesota Transfer Curriculum.

BIOL 1404	Human Biology (Goal 3) <b>OR</b> .....	3 cr
BIOL 1411	Concepts of Biology (Goal 3) <b>OR</b> .....	3 cr
BIOL 1431	General Biology (Goal 3).....	5 cr
CHEM 1407	Life Science Chemistry (Goal 3) <b>OR</b> .....	4 cr
CHEM 1414	Fundamentals of Chemistry (Goal 3) <b>OR</b> ....	4 cr
CHEM 1424	Chemical Principles I (Goal 3) .....	5 cr
BIOL 2467*	Anatomy and Physiology I (Goal 3).....	4 cr
BIOL 2468*	Anatomy and Physiology II (Goal 3).....	4 cr
ENGL 1410	Composition I (Goal 1) <b>OR</b>	
ENGL 1420*	Honors Composition I (Goal 1) .....	4 cr
ENGL 1411*	Composition II (Goal 1) <b>OR</b>	
ENGL 1421*	Honors Composition II (Goals 1,9).....	4 cr
MATH 1460*	Introduction to Statistics (Goal 4) <b>OR</b>	
MATH 1461*	Honors Intro to Statistics (Goals 2,4).....	4 cr
PHIL 2420	Ethics (Goals 6,9) <b>OR</b>	
PHIL 2421	Honors Ethics (Goals 6,9) .....	3 cr
PSYC 2421	General Psychology (Goals 2,5) <b>OR</b>	
PSYC 2423*	Honors General Psychology (Goals 2,5) .....	4 cr
Goal 1 COMM course.....		3 cr
Goal 5 course .....		3 cr
Goal 7 course .....		3 cr

### Additional Required Courses

MnTC courses to total 60 credits..... 0-3 cr

### GRADUATION REQUIREMENT - 60 CREDITS

\*Denotes Prerequisites

\*\*Many courses from Goals 1 – 6 also meet Goal 7 – 10. Credits count only once. Students are advised to select MnTC courses with multiple goal assignments whenever possible.

## Semester Course Requirements

*This is a sample full-time student pathway.*

### Semester One (15-17 credits)

BIOL 1404	Human Biology (Goal 3) <b>OR</b> .....	3 cr
BIOL 1411	Concepts of Biology (Goal 3) <b>OR</b> .....	3 cr
BIOL 1431	General Biology (Goal 3) .....	5 cr
ENGL 1410	Composition I (Goal 1) <b>OR</b>	
ENGL 1420*	Honors Composition I (Goal 1) .....	4 cr
PHED 1528	Introduction to Exercise Science .....	3 cr
PHED course(s)	.....	2 cr
Goal 5 course	.....	3 cr

### Semester Two (14-15 credits)

CHEM 1407	Life Science Chemistry (Goal 3) <b>OR</b> .....	4 cr
CHEM 1414	Fundamentals of Chemistry (Goal 3) <b>OR</b> ....	4 cr
CHEM 1424	Chemical Principles I (Goal 3) .....	5 cr
ENGL 1411*	Composition II (Goal 1) <b>OR</b>	
ENGL 1421*	Honors Composition II (Goals 1,9).....	4 cr
MATH 1460*	Introduction to Statistics (Goal 4) <b>OR</b>	
MATH 1461*	Honors Intro to Statistics (Goals 2,4).....	4 cr
PHED 1594	Fitness for Life <b>OR</b>	
PHED 1597*	Honors Fitness for Life.....	2 cr

### Semester Three (15 credits)

BIOL 2467*	Anatomy and Physiology I (Goal 3).....	4 cr
Goal 1 COMM course	.....	3 cr
HLTH 1520	Principles of Nutrition.....	3 cr
PHIL 2420	Ethics (Goals 6,9) <b>OR</b>	
PHIL 2421	Honors Ethics (Goals 6,9).....	3 cr
PHED course(s)	.....	2 cr

### Semester Four (13-16 credits)

BIOL 2468*	Anatomy and Physiology II (Goal 3).....	4 cr
PHED 1522	Weight Training .....	2 cr
PSYC 2421	General Psychology (Goals 2,5) <b>OR</b>	
PSYC 2423*	Honors General Psychology (Goals 2,5).....	4 cr
Goal 7 course	.....	3 cr
MnTC course(s)	.....	0-3 cr

\*Denotes Prerequisites

\*\*Many courses from Goals 1 – 6 also meet Goal 7 – 10. Credits count only once. Students are advised to select MnTC courses with multiple goal assignments whenever possible.

## Transfer Opportunities

The Exercise Science Transfer Pathway A.S. Degree offers students a powerful option: the opportunity to complete an Associate of Science degree with course credits that directly transfer to designated Exercise Science bachelor's degree programs at Minnesota State universities. The curriculum has been specifically designed so students completing this pathway degree and transferring to a Minnesota State university may enter with junior-year status. Courses in the Exercise Science Transfer Pathway associates degree will directly transfer and apply to the designated bachelor's degree programs. Students should consult with an advisor for guidance regarding how to best meet the requirements of their intended baccalaureate program. Universities within the Minnesota State system participating in the Exercise Science Transfer Pathways include:

- Bemidji State University, BS
- Minnesota State University, Mankato - BS
- Minnesota State University, Moorhead - BS
- Southwest MN State University, BS
- Winona State University, BS

## Course Prerequisites

Some courses may require appropriate test scores or completion of basic math, basic English, and/or reading courses with a "C" or better. CLC utilizes a multiple measure approach for placement which may include high school MCA, SAT, and/or ACT scores in addition to high school GPAs. For insurance purposes, internships may require that students be 18 years old.

## Graduation Requirements

In addition to the program requirements, students must meet the following conditions in order to graduate:

1. College Cumulative GPA Requirement: cumulative grade point average (GPA) of credits attempted and completed at CLC must be at least 2.0;
2. Residency Requirement: students must complete 25% of their credits at Central Lakes College.