

Calendar Year: 2004-2005  
Faculty: Arts & Science

The Department of Kinesiology and Physical Education offers a multidisciplinary major in Exercise Science for the Bachelor of Science (B.Sc.) degree. This major is designed for those students who wish to pursue advanced studies in Exercise Science in general, or Biomechanics, Exercise Physiology or Sport Psychology specifically. Students interested in pursuing advanced study in related fields, such as Anatomy, Physical Therapy, Medicine, Athletic Therapy or other high performance sport-related fields, might well be advised to select this major. Careful selection of the options available in this major will tailor a degree to the specific interest of the student.

Students interested in a specific stream or advice on course selection for a specific area should see the following Kinesiology professors:

**For Sport Psychology**

Dr. Jochen Bocksnick  
Dr. Steve Bray

**For Exercise Physiology**

Dr. Jennifer Copeland

**For Biomechanics and Skill Analysis**

Dr. Dayna Daniels  
Dr. Lesley Brown  
Dr. Gongbing Shan

Students pursuing an Exercise Science major should note the following recommended/required high school courses.

*UofL course High school course*

Biology	
1010	Biology 30, and Chemistry 30 or 0500
Chemistry	
1000	Chemistry 30 or 0500, Pure Mathematics 30 or Mathematics 30* or Mathematics 0500 <i>Recommended: Mathematics 31</i>
2100	Chemistry 30 or 0500 <i>Recommended: Chemistry 1000</i>
Mathematics	
1560	Pure Mathematics 30 or Mathematics 30* or Mathematics 0500 <i>Recommended: Mathematics 31 and a blended grade of at least 75% in Mathematics 30 or Pure Mathematics 30</i>
Physics	
1000	Physics 30, and Pure Mathematics 30 or Mathematics 30* or Mathematics 0500
1050	Pure Mathematics 30 or Mathematics 30* or Mathematics 0500 <i>Recommended: A course in physical science at the 20 level or above</i>
Statistics	
1770	Pure Mathematics 30 or Mathematics 30* or Mathematics 0500

*\*Students may use both Applied Mathematics 30 and a minimum grade of 75% in Athabasca University's Mathematics 101 instead of Mathematics 30 or Pure Mathematics 30.*

**High School Courses**

Several university-level science courses have high school-level courses as recommended background or prerequisites. Students are advised to complete recommended background courses before registering in the university-level course; students *must* have successfully completed prerequisites before they may register in the university-level course.

**Co-operative Education**

A Co-op option, requiring three work terms, is available. Students interested in the Co-operative Education/Internship program should contact the Coordinator of Co-operative Education in the Career Resources Centre (B610; tel. 403-382-7154) for further information.

# Program Planning Guide

University of  
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*This program guide is designed to help you plan your degree program. The information should help you keep track of your progress in your major, electives and all your degree requirements. Please remember that this is only a guide and not a graduation check. Students are responsible for the accuracy of their own programs. The guide should be used in conjunction with the University of Lethbridge Calendar, which is the final authority on all questions regarding program requirements and academic regulations.*

## REQUIREMENTS FOR THE EXERCISE SCIENCE MAJOR

### The Program

The B.Sc. degree with a multidisciplinary major in Exercise Science requires 40 semester courses, including 20 courses in the major.

### Transfer Credit

Remember that you may use both University of Lethbridge credit and credit transferred from another college or university to meet degree and major requirements. Transfer credit may be either specified or unspecified. Specified credit is indicated on your transcript by the subject name and the specific number of the course, e.g., Biology 1010, Kinesiology 2600, etc. Unspecified credit (1XXX, 2XXX, etc.) is indicated by the subject name and level of the course in parentheses, e.g., Biology (1000 level), Kinesiology (2000 level), etc.

Unspecified course credit means that the University of Lethbridge does not offer the same course you transferred in, but we recognize it and treat it as a regular course. An unspecified course would count as one of your maximum of 20 from one department, but it could not meet a specific course requirement. For example, if Kinesiology 1000 is required in your program, you could not use Kinesiology (1000 level) to fulfill that requirement.

### How do I use the guide?

When you have met one of the requirements, place a check mark beside it. When all the requirements are checked, you should have completed the major.

### Required Courses (12 courses):

- \_\_\_\_\_ 1. Biochemistry 2300 - Elements of Human Nutrition
- \_\_\_\_\_ 2. Biology 1010 - Cellular Basis of Life
- \_\_\_\_\_ 3. Chemistry 2100 - Elements of Organic Chemistry I
- \_\_\_\_\_ 4. Kinesiology 1000 - Wellness and Physical Activity
- \_\_\_\_\_ 5. \*Kinesiology 2200 - Research Methodologies in Physical Activity Involvement
- \_\_\_\_\_ 6. Knesiology 2600 - Functional Human Anatomy
- \_\_\_\_\_ 7. Kinesiology 2610 - Human Physiology
- \_\_\_\_\_ 8. Kinesiology 3610 (3600) - Exercise Physiology
- \_\_\_\_\_ 9. Kinesiology 3630 (2630) - Growth, Development and Aging
- \_\_\_\_\_ 10. Kinesiology 3650 - Biomechanics
- \_\_\_\_\_ 11. Mathematics 1560 - Calculus I
- \_\_\_\_\_ 12. Psychology 2600 - Brain and Behaviour

\* Kinesiology 2200 is a prerequisite for all 3000- and 4000-level Kinesiology courses.

### Options:

EIGHT courses from the following; a minimum of SIX courses from the Options lists must be at the 3000/4000 level:

- \_\_\_\_\_ Biochemistry 3010 - Biochemistry I
- \_\_\_\_\_ Biochemistry 3020 - Biochemistry II

- \_\_\_\_\_ Chemistry 2200 - Elements of Organic Chemistry II
- \_\_\_\_\_ Engineering 2000 - Engineering Statics
- \_\_\_\_\_ Engineering 2060 - Engineering Mechanics
- \_\_\_\_\_ Kinesiology 2000 - Foundations of Motor Skill Acquisition
- \_\_\_\_\_ Kinesiology 2520 - Contemporary Health Issues
- \_\_\_\_\_ Kinesiology 3670 - Motor Skill Learning
- \_\_\_\_\_ Kinesiology 3680 - Sport Psychology
- \_\_\_\_\_ Kinesiology 3690 - Motor Control
- \_\_\_\_\_ Kinesiology 3780 - Exercise Psychology
- \_\_\_\_\_ Kinesiology 4500 - Physical Activity and Aging
- \_\_\_\_\_ Kinesiology 4630 - Physical Activity and Special Populations
- \_\_\_\_\_ Kinesiology 4660 - Biomechanical Instrumentation and Analysis
- \_\_\_\_\_ Kinesiology 4665 - Biomechanical Modelling
- \_\_\_\_\_ Kinesiology 4700 - Women and Physical Activity
- \_\_\_\_\_ Philosophy 3402 - Biomedical Ethics
- \_\_\_\_\_ ONE of:
  - \_\_\_\_\_ Physics 1000 - Introduction to Physics I
  - \_\_\_\_\_ Physics 1050 - Introduction to Biophysics
- \_\_\_\_\_ \*Physics 3200 - Mechanics
- \_\_\_\_\_ Psychology 1000 - Basic Concepts of Psychology
- \_\_\_\_\_ Psychology 2110 (3110) - Introduction to Child Development
- \_\_\_\_\_ ONE of:
  - \_\_\_\_\_ Psychology 2030 - Methods and Statistics
  - \_\_\_\_\_ Statistics 1770 - Introduction to Statistics and Probability
- \_\_\_\_\_ Psychology 2320 - Cognition and Perception: Thinking and Seeing
- \_\_\_\_\_ Psychology 3120 - Psychology of Aging
- \_\_\_\_\_ Specific offerings under Kinesiology 2850/3850/4850 - Special Topics, Applied Studies and Independent Studies may be acceptable as Options selections in the major with permission of the Department Chair.

\* Prerequisites required: Physics 2000 and Mathematics 2580.

**Remember: A minimum of 20 courses is required for this major.**

**Note:** The Department of Kinesiology and Physical Education, in collaboration with Mount Royal College in Calgary, offers a limited number (five) of B.Sc. Exercise Science majors the opportunity to pursue an Athletic Therapy Option. These students will attend the University of Lethbridge for Years 1, 2, and 4 of their B.Sc. - Exercise Science degree program. They will complete Year 3 as Visiting Students at Mount Royal College. For details concerning eligibility and course requirements, contact Arts and Science Student Program Services (SU060) and see the Program Planning Enclosure.

# SAMPLE COURSE SEQUENCING PLAN

## B.Sc. - EXERCISE SCIENCE

Shown below is a sample sequence of courses for your degree. If you follow this plan, you should be able to graduate in four years, provided you complete five courses per semester. This is just one example of how you could complete your major and degree requirements; you may find that a different sequence works as well as this one.

### TERMS USED

**GLER course:** A course that could count toward the General Liberal Education Requirement. You may use courses in your major towards this 12-course requirement. See the 2004-2005 University of Lethbridge Calendar, Part 4 - Academic Regulations (pp. 77-80) for complete information.

The Faculty of Arts and Science offers Liberal Education 1001 and 1002, specifically designed to introduce first-year students to the wide scope of human knowledge and teach essential university success skills, critical thinking, and integrative thinking (see the 2004-2005 University of Lethbridge Calendar, Part 15 - Courses, p. 347). LBED 1001 and 1002 may be used toward satisfying the GLER.

**Elective:** A course that you may choose freely from all those available and applicable to your program. Use courses inside or outside your major, bearing in mind any restrictions that may apply (e.g., a maximum of 20 courses from any one department).

YEAR ONE	FALL	SPRING
	Kinesiology 1000 GLER course GLER course GLER course GLER course	Biochemistry 2300 Biology 1010 Kinesiology 2200* Mathematics 1560 GLER course

YEAR TWO	FALL	SPRING
	Chemistry 2100 Kinesiology 2600 Kinesiology 2610 GLER course GLER course	Kinesiology 3610 (3600) Kinesiology 3650 Options list course Elective Elective

YEAR THREE	FALL	SPRING
	Options list course 3000/4000 level Psychology 2600 Elective Elective Elective	Kinesiology 3630 (2630) Options list course 3000/4000 level Options list course Elective Elective

YEAR FOUR	FALL	SPRING
	Options list course 3000/4000 level Options list course 3000/4000 level Elective Elective Elective	Options list course 3000/4000 level Options list course 3000/4000 level Elective 3000/4000 level Elective Elective

\* Kinesiology 2200 is a prerequisite for all 3000- and 4000-level Kinesiology courses.

**Note:** For detailed information about the Athletic Therapy Option (Mount Royal College), students are directed to the Program Planning Enclosure. Because of sequencing considerations, students interested in preparing for this Option must consult Arts and Science Student Program Services (SU 060).

This is a planning guide and not a graduation check or guarantee of course offerings. You should have a program check done in your final year of studies.

