University of Lethbridge

Name: _____ ID: _____

Program Planning Guide

Current and past Program Planning Guides are available on the UofL website at www.uleth.ca/ross/ppgs/ppg.html

Calendar Year: 2012/2013

Faculty: Arts & Science

Bachelor of Science

Exercise Science

About the Department of Kinesiology and Physical Education

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 of physical activity from a natural sciences perspective. Students gain an understanding of human movement by integrating the study areas of Anatomy, Biomechanics, Exercise Physiology, and Motor Control.

Career Options

Graduates of Exercise Science have a variety of career options that may lead into diverse areas, including

- sports medicine
- athletic therapy
- coaching
- cardiac rehabilitation
- sports nutrition
- exercise prescription
- therapy and rehabilitation
- exercise physiology
- fitness/wellness industry
- sport and exercise psychology

Careful selection of the options available in this major will tailor a degree to the specific interest of the student.

Contact a Kinesiology Professor

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

For Sport/Exercise Psychology
Dr. Jochen Bocksnick
Dr. Sharleen Hoar

For Exercise Physiology
Dr. Jennifer Copeland

For Biomechanics and Skill Analysis
Dr. Lesley Brown
Dr. Jon Doan
Dr. Gongbing Shan

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 (AH154 | phone: 403-382-7154) for further information.

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

UofL Science course		*High School course*
Biochemistry	2300	Chemistry 30**
Biology	1010	Biology 30 and Chemistry 30**
Chemistry	1110	*Recommended: Chemistry 30** and Mathematics 30-1 or Pure Mathematics 30**
Mathematics	1560	Mathematics 30-1 or Pure Mathematics 30* *Recommended: Mathematics 31 and a blended grade of at least 75% in Mathematics 30-1 or Pure Mathematics 30**
Statistics	1770	Mathematics 30-1, Mathematics 30-2, or Pure Mathematics 30*

** Instead of Mathematics 30-1, Mathematics 30-2, or Pure Mathematics 30, students may use UofL's Mathematics 0500.*

*** Instead of Chemistry 30, students may use UofL's Chemistry 0500.*

Program Requirements

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

Athletic Therapy Option

The Department of Kinesiology and Physical Education, in collaboration with Mount Royal University 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 University. For details concerning eligibility and course requirements, contact the Department of Kinesiology and Physical Education.

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

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. Students with unspecified transfer credit need to consult an Academic Advisor to establish how the transfer credit fits in the degree program. This should be done as soon as possible after transfer credit is awarded.

Program Worksheet

Name: _____ **ID:** _____

Required core (12 courses):

_____ 1. Biochemistry 2300 - Elements of Human Nutrition

_____ 2. Biology 1010 - Cellular Basis of Life

_____ 3. Chemistry 1110 - Chemistry for Life Sciences I

_____ 4. Kinesiology 1000 - Wellness and Physical Activity

_____ 5. Kinesiology 2200 - Research Methodologies in Physical Activity Involvement

_____ 6. Kinesiology 2600 - Functional Human Anatomy

_____ 7. Kinesiology 2610 - Human Physiology

_____ 8. Kinesiology 3610 - Exercise Physiology

_____ 9. Kinesiology 3630 - Growth, Development and Aging

_____ 10. Kinesiology 3650 - Biomechanics

_____ 11. Mathematics 1560 - Calculus I

_____ 12. Neuroscience 2600 - Brain and Behaviour

Options:

Eight courses (24.0 credit hours) from the following; a minimum of six courses (18.0 credit hours) from the Options list must be at the 3000/4000 level:

_____ Biochemistry 2000 - Introductory Biochemistry
_____ Chemistry 2120 - Chemistry for Life Sciences II
_____ Engineering 2000 - Engineering Statics
_____ Engineering 2060 - Engineering Mechanics
_____ Kinesiology 2115 - Scientific Basis of Strength Training
_____ Kinesiology 2350 - Recognition and Care of Athletic Injuries
_____ Kinesiology 2750 - Physical Basis of Ergonomics
_____ Kinesiology 3500 - Physical Activity and Nutrition
_____ Kinesiology 3670 - Motor Skill Learning
_____ Kinesiology 3680 - Sport Psychology
_____ Kinesiology 3690 - Motor Control
_____ Kinesiology 3780 - Exercise Psychology
_____ Kinesiology 4500 - Physical Activity and Aging
_____ Kinesiology 4610 - Fitness and Lifestyle Assessment
_____ Kinesiology 4615 - Advanced Exercise Physiology
_____ Kinesiology 4630 - Physical Activity and Special Populations
_____ * Kinesiology 4640 - Applied Ethics in Sport and Physical Activity
_____ Kinesiology 4660 - Biomechanical Instrumentation and Analysis
_____ Kinesiology 4665 - Biomechanical Modelling
_____ ** Kinesiology 4720 - Gender and Physical Activity
_____ Kinesiology 4900 - Seminar
_____ Kinesiology 4995 - Undergraduate Thesis (6.0 credit hours)
_____ Psychology 1000 - Basic Concepts of Psychology
_____ Psychology 2320 - Cognition and Perception: Thinking and Seeing
_____ One of: Psychology 2030 - Methods and Statistics or Statistics 1770 - Introduction to Probability and Statistics

** Prerequisite required: One of Kinesiology 2130 or Philosophy 1000*

*** Prerequisite required: Kinesiology 2150*

Specific offerings under Kinesiology 2850/Kinesiology 3850/Kinesiology 4850 - Special Topics, Applied Studies, and Independent Studies may be acceptable as Options selections in the major with permission of the Department Chair.

Sample Sequencing Plan

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.

Year 1, Fall	***Year 1, Spring***
Biochemistry 2300[1]	Biology 1010
Kinesiology 1000	Mathematics 1560
GLER course	GLER course
GLER course	GLER course
GLER course	Science elective
Year 2, Fall	***Year 2, Spring***
Chemistry 1110	Kinesiology 2200
Kinesiology 2600	Kinesiology 3610
Kinesiology 2610	Kinesiology 3650
GLER course	Options list course
GLER course	Science elective
Year 3, Fall	***Year 3, Spring***
Neuroscience 2600	Kinesiology 3630
Options list course 3000/4000 level	Options list course 3000/4000 level
Science elective	Options list course
Elective	Science elective
Elective	Elective
Year 4, Fall	***Year 4, Spring***
Options list course 3000/4000 level	Options list course 3000/4000 level
Options list course 3000/4000 level	Options list course 3000/4000 level
Science elective	Science elective
Elective	Elective 3000/4000 level
Elective	Elective

[1] *Semester of offering may vary.*

Note: *For detailed information concerning eligibility and course requirements for the Athletic Therapy Option, students are advised to contact the Department of Kinesiology and Physical Education.*

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 2012/2013 University of Lethbridge Calendar, Part 4 - Academic Regulations (p. 89) for complete information.

The Faculty of Arts and Science offers Liberal Education 1000 and 2000, 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 2012/2013 University of Lethbridge Calendar, Part 14 - Courses, p. 312). LBED 1000 and 2000 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).