

# Exercise Science

**B.S. in Kinesiology degree (124 credit hours)**

**2.0 GPA for admission, major core, and graduation**

**No Pass/Fail except for exercise science electives and free electives**

**Effective for students matriculating August 2004 (revised 2005)**

**Department of Kinesiology**

## I. Major (Minimum 36 Credit Hours)

### A. REQUIRED KINESIOLOGY CORE

- 3 HPER N231 Human Nutrition (P:C101)
- 3 HPER P212 Introduction to Exercise Science
- 2 HPER E119 Personal Fitness
- 2 HPER P280 Principles of Athletic Training & Emergency Care
- 3 HPER P391 Biomechanics
- 3 HPER P405 Introduction to Sport Psychology
- 3 HPER P409 Basic Phsl of Exer (P:ANAT A215/P205 & PHSL P215)
- 3 HPER P452 Motor Learning

### B. SELECT ADDITIONAL MAJOR COURSES

Select a minimum of 11 credit hours from the following:

- 3 HPER C354 Multidisciplinary Perspectives in Gerontology
- 3 HPER F150 Life Span Development **OR**  
EDUC P314 Life Span Development
- 3 HPER P211 Introduction to Sport Management
- 2 HPER P317 Strength Training
- 3 HPER P333 Sport in America: Historical Perspective
- 3 HPER P335 Theories of Conditioning for Coaching
- 3 HPER P392 Sport in American Society
- 3 HPER P398 Adapted Physical Education
- 3 HPER P435 Philosophical Foundations of Coaching
- 3 HPER P490 Motor Development and Learning
- 3 HPER P491 Research in Kinesiology

A maximum of 6 of the 11 cr. hours in Area B may be completed from:

- 1-2 HPER P399 Adapted Lab
- 1-3 HPER P448 Internship in Exercise Science
- 1-3 HPER P492 Lab Assisting or Field Exp. in Sport Science

*Note:* If the total number of credit hours in the Exercise Science Elective area (see other side of this sheet) exceeds the required 15, up to 3 credits of the excess credit hours may count in the above category. With advisor approval, a maximum of two fitness specialist courses chosen from HPER P217, P218, P416, P419, P420 may be completed in partial completion of Area B. Fitness courses are strongly recommended for students wishing to enter the IUB Clinical Exercise Physiology graduate program.

### C. SELECT ONE (1) COMPUTER COURSE

- 3 BUS K201 The Computer in Business
- 3 CSCI A110 Intro to Computers & Computing
- 4 CSCI A201 Introduction to Programming 1
- 4 CSCI C211 Introduction to Computer Science
- 3 HPER P200 Microcomputer Applications in Physical Ed
- 3 HPER R237 Computers in Park Recreation Tourism Mngt.

## II. General Education (48 – 57 Credit Hours)

### A. ORAL & WRITTEN COMMUNICATIONS (12 credits)

**Required:**

- 3 CMCL C121 Public Speaking (not C122)

**Select 9 credit hours from:**

- 3 BUS X204 Business Communications
- 3 CMCL C223 Bus & Prof Communication **OR** C323 Spch Comp
- 3 ENG W103 Introduction to Creative Writing
- 1 ENG W119 Critical Review Writing
- 3 ENG W131 Elementary Composition 1 (C- min) **OR**  
ENG W170 Introduction to Argumentative Writing (C- min)
- 3 ENG W143 Interdisciplinary Writing
- 3 ENG W203 Creative Writing (P: ENG W103)
- 3 ENG W231 Professional Writing Skills
- 3 ENG W240 Community Service Writing\*
- 3 ENG W270 Argumentative Writing
- 3 ENG W350 Advanced Expository Writing
- 3 TEL T211 Writing for Electronic Media

### B. LIFE & PHYSICAL SCIENCES (24-33 Credit Hours)

**Required:**

- 3-5 ANAT A215 Basic Hum Anat **OR** HPER P205 Structural Kines
- 5 PHSL P215 Basic Human Physiology
- 5 PHYS P201 General Physics 1

**Select two (2) courses from the following:**

- 3 MATH M118 Finite Math **OR** A118 **OR** both D116-D117 (4 cr.)
- 3 MATH M119 Brief Surv of Calc I **OR** MATH M211 Calc 1 (4 cr.)
- 3 MATH M120 Brief Surv of Calc II **OR** MATH M212 Calc 2 (4cr.)

**Select:**

- 5 CHEM C117 Principles of Chemistry & Biochemistry I

**Or all of the following:**

- 3 CHEM C101 Elementary Chemistry 1
- 2 CHEM C121 Elementary Chemistry Laboratory 1
- 3 CHEM C102 Elementary Chemistry 2
- 2 CHEM C122 Elementary Chemistry Laboratory 2

### C. SOCIAL & BEHAVIORAL SCIENCES (12 Credit Hours)

- 3 ANTH A105 Human Origins **OR** ANTH E105 Cult & Society
- 3 PSY K300 Statistical Techn (**or** MATH K310) (**or** SPEA K300)
- 3 PSY P101 Introductory Psychology 1 (or P151)

**Select one course from:**

- 3 SOC S100 Introduction to Sociology
- 3 SOC S101 Social Programs and Policies

*NONE OF THE ABOVE CLASSES MAY BE TAKEN PASS/FAIL*

### III. EXERCISE SCIENCE ELECTIVES (15 Credit Hours)

A maximum of two (2) courses in area III may be taken pass/fail.

#### Choose 15 credits from below:

- \_\_\_ 4 ANAT A464 Human Tissue Biology
- \_\_\_ 3 ANTH A303 Evolution and Prehistory
- \_\_\_ 3 ANTH B200 Bioanthropology
- \_\_\_ 3 ANTH B301 Bioanthropology Laboratory
- \_\_\_ 3 ANTH B480 Human Growth and Development
- \_\_\_ 3-5 BIOL L100 Humans & the Biological World **OR**
- BIOL L104 Introductory Biology Lectures **OR**
- BIOL L112 Intro to Biology: Biological Mech
- \_\_\_ 3 BIOL L111 Intro to Biology: Evolution & Divers
- \_\_\_ 3 BIOL L113 Biology Laboratory
- \_\_\_ 3 BIOL L211 Molecular Biology (P: L112)
- \_\_\_ 3 BIOL L302 Topics in Human Biology
- \_\_\_ 3 BIOL L330 Biology of the Cell
- \_\_\_ 3 BIOL L311 Genetics & Development
- \_\_\_ 3 BIOL L312 Cell Biology
- \_\_\_ 3 BIOL L313 Cell Biology Laboratory
- \_\_\_ 3 BIOL M200 Microorganisms in Nature and Disease
- \_\_\_ 1 BIOL L215 Microorganism Laboratory
- \_\_\_ 5 CHEM C103 Introduction to Chemical Principles
- \_\_\_ 5 CHEM C118 Principles of Chemistry & Biochem II
- \_\_\_ 3 CHEM C341 Organic Chemistry I
- \_\_\_ 3 CHEM C342 Organic Chemistry II
- \_\_\_ 2 CHEM C343 Organic Chemistry Laboratory I
- \_\_\_ 2 CHEM C344 Organic Chemistry Laboratory II
- \_\_\_ 3 CHEM C360 Elementary Physical Chemistry
- \_\_\_ 3 CHEM C483 Biological Chemistry
- \_\_\_ 3 CHEM C485 Biosynthesis & Physiology
- \_\_\_ 2 CLAS C209 Medical Terms from Greek & Latin
- \_\_\_ 1.5 CSCI A111 Survey of Computers & Computing
- \_\_\_ 1.5 CSCI A112 Programming Concepts
- \_\_\_ 1.5 CSCI A113 Data Analysis Using Spreadsheets
- \_\_\_ 1.5 CSCI A114 Introduction to Databases
- \_\_\_ 1.5 CSCI A115 Using the World Wide Web
- \_\_\_ 1.5 CSCI A116 Multimedia Communication
- \_\_\_ 4 CSCI A202 Introduction to Programming II
- \_\_\_ 2 CSCI A304 Introduction to C++ Programming
- \_\_\_ 4 CSCI C212 Introduction to Software Systems
- \_\_\_ 3 CSCI C241 Discrete Structures for Comp Science
- \_\_\_ 4 CSCI C311 Programming Languages
- \_\_\_ 4 CSCI C335 Computer Structures
- \_\_\_ 4 CSCI C343 Data Structures
- \_\_\_ 3 HPSC X200 Introduction to Scientific Reasoning
- \_\_\_ 3 MATH M301 Applied Linear Algebra and Appl
- \_\_\_ 3 MATH M303 Linear Algebra for Undergraduates
- \_\_\_ 4 MATH M311 Calculus III
- \_\_\_ 3 MATH M312 Calculus IV
- \_\_\_ 3 MSCI M131 Disease and the Human Body
- \_\_\_ 3 MSCI M216 Medical Science of Psychoactive Drugs
- \_\_\_ 3 PHIL P105 Thinking and Reasoning
- \_\_\_ 3 PHIL P140 Introduction to Ethics
- \_\_\_ 3 PHIL P150 Elementary Logic

- \_\_\_ 3 PHIL P250 Introduction to Symbolic Logic
- \_\_\_ 3 PHIL P251 Intermediate Symbolic Logic
- \_\_\_ 5 PHYS P202 General Physics 2
- \_\_\_ 2 PHYS P302 Elementary Electronics
- \_\_\_ 4 PHSL P431 Human Physiology\*\* (changing to BIOL P451 in Fall 2006)
- \_\_\_ 3 PSY P102 Introductory Psychology II (or P152)
- \_\_\_ 3 PSY P201 Biological Bases of Behavior
- \_\_\_ 3 PSY P204 Psy and Bio Bases of Human Sexuality
- \_\_\_ 3 PSY P211 Methods of Experimental Psychology
- \_\_\_ 3 PSY P303 Health Psychology
- \_\_\_ 3 PSY P315 Developmental Psychology
- \_\_\_ 3 PSY P319 The Psychology of Personality
- \_\_\_ 3 PSY P323 Industrial/Organizational Psychology
- \_\_\_ 3 PSY P324 Abnormal Psychology
- \_\_\_ 3 PSY P325 Psychology of Learning
- \_\_\_ 3 PSY P326 Behavioral Neuroscience
- \_\_\_ 3 PSY P327 Psychology of Motivation
- \_\_\_ 3 PSY P329 Sensation and Perception
- \_\_\_ 3 PSY P330 Perception/Action
- \_\_\_ 3 PSY P335 Cognitive Psychology
- \_\_\_ 3 PSY P350 Human Factors/Ergonomics
- \_\_\_ 3 PSY P405 Elementary Mathematical Psychology
- \_\_\_ 3 PSY P426 Lab in Behavioral Neuroscience
- \_\_\_ 3 PSY P435 Lab in Human Learning & Cognition

\*\*Recomm prior to enrollment in the IUB Clinical Exercise Physiology Master's Program. With advisor approval, other science courses may be counted as Exercise Science Electives.

### IV. Free Electives (11 - 23 Credit Hours)

#### Suggested/Recommended:

- \_\_\_ 1-3 Any HPER E elective options
- \_\_\_ 3 HPER H160 First Aid
- \_\_\_ 3 HPER H263 Personal Health
- \_\_\_ 3 HPER H350 Compl. and Alternative Approaches to Health
- \_\_\_ 3 HPER H401 Emergency Medical Technician
- \_\_\_ 1 HPER P301 Job Search Strategies for Kines Students
- \_\_\_ 3 HPER P333 Prevention of Cardiovascular Disease
- \_\_\_ 3 HPER T142 Living Well
- \_\_\_ 3 MSCI M499 Internship Medical Science Instruction

#### ALL STUDENTS MUST PRESENT EVIDENCE OF CARDIOPULMONARY RESUSCITATION CERTIFICATION (CPR)

#### TOTAL REQUIRED CREDIT HOURS:

<b>MAJOR CORE</b>	36 CREDIT HOURS
<b>GENERAL EDUCATION</b>	48 - 57 CREDIT HOURS
<b>Oral and Written (12)</b>	
<b>Social Science (12)</b>	
<b>Life &amp; Physical Science (24-33)</b>	
<b>EXERCISE SCIENCE ELECTIVES</b>	15 CREDIT HOURS
<b>FREE ELECTIVES</b>	16 - 25 CREDIT HOURS
<b>TOTAL FOR GRADUATION</b>	124 CREDIT HOURS

Visit the HPER website at [www.hper.indiana.edu](http://www.hper.indiana.edu)

For information about this major and career options, visit: [www.indiana.edu/~udiv/majors/majorinfo.cgi/82](http://www.indiana.edu/~udiv/majors/majorinfo.cgi/82)

