EXERCISE SCIENCE: SCIENTIFIC BASIS, B.S.

2013-2014

MAJOR REQUIREMENTS (66 UNITS) Grades of “C” or better required.
Exercise Science core curriculum
- EXSC 215 Introduction to Athletic Training (3)
- EXSC 344 Special Education (2)
- EXSC 426 Exercise Physiology (4) Prerequisite: BIOL 131 & 132
- EXSC 444 Physiological Assessment & Exercise Prescription (3) Prerequisite: BIOL 131, EXSC 426, MATH 121 & HLSC 120
- HLSC 214 Dimensions of Health (4) Theme IB. Prerequisite: ENGL 111/124. Recommended: HLSC 120/214.

Scientific Basis concentration
- BIOL 131 Human Anatomy and Physiology I (5) Theme IVA
- BIOL 132 Human Anatomy and Physiology II (5) Prerequisite: BIOL 131
- HLSC 429 Measurement and Evaluation (4) Prerequisite: MATH 121 and a Statistics course

Choose 3 courses from the following:
- EXSC 408 Management of Physical Education and Sport (4) Offered winter quarters during even years.
- EXSC 418C Movement in Cultural Perspective (4) Meets Upper Division Rhetoric requirement.
- EXSC 424 Biomechanics of Human Movement (4) Prerequisite: BIOL 131, 132, PHYS 117 and Junior standing. Offered spring during even years.
- EXSC 427 Motor Learning (4) Prerequisite: ENGL 111/124 and HLSC 429. Offered spring quarters during even years.
- HLSC 225 Nutrition Theory and Practice (4) Theme IVA. No laboratory. Prerequisite: Sophomore; recommended: HLSC 120/HLSC 214.
- HLSC 317 Health, Society, and the Consumer (4) Prerequisite: ENGL 111/124 and HLSC 214.
- HLSC 467 Principles of Epidemiology (3) Prerequisite: HLSC 214, 429 & MATH 121

Choose 1 general science series from the following:
General Biology
- BIOL 111 General Biology I (4) and BIOL 111L Laboratory (1) Theme IVA
- BIOL 111A General Biology Seminar (0)
- BIOL 112 General Biology II (4) and BIOL 112L Laboratory (1) Theme IVA. Prerequisite: BIOL 111, 111A, 111L.
- BIOL 113 General Biology III (4) and BIOL 113L Laboratory (1) Theme IVA. Prerequisite: BIOL 112 and 112L.

General Chemistry
- CHEM 111 General Chemistry I (4) and CHEM 111L Laboratory (1) Theme IVA. Prerequisite: MATH 121 eligibility, CHEM 110 or placement.
- CHEM 112 General Chemistry II (4) and CHEM 112L Laboratory (1) Theme IVA. Prerequisite: CHEM 111 and 111L.
- CHEM 113 General Chemistry III (4) and CHEM 113L Laboratory (1) Theme IVA. Prerequisite: CHEM 112 and 112L.

General Physics
- PHYS 231 General Physics I (4) and PHYS 231L Laboratory (1) Theme IVA. Prerequisite: MATH 122 (PHYS 231A) or MATH 131 (PHYS 231B).
- PHYS 232 General Physics II (4) and PHYS 232L Laboratory (1) Theme IVA. Prerequisite: PHYS 231 and 231L.
- PHYS 233 General Physics III (4) and PHYS 233L Laboratory (1) Theme IVA. Prerequisite: PHYS 232 and 232L.

UNIVERSITY STUDIES FOUNDATIONAL STUDIES (20-37 UNITS) Grades of “C” or better required.
I FIRST-YEAR SEMINAR
- UNST 101A (1) and 101B (1) or UNST 100A (3) and 100B (3)

II RHETORICAL SKILLS
- A. ENGL 111 (3), 112 (3), 113 (3) College Writing or ENGL 124 Freshman Seminar (4)
- B. Upper Division Rhetoric: EXSC 418C Movement in Cultural Perspective (4)

III MATHEMATICS
- One college-level Mathematics course (4) MATH 121 required by major.

IV WORLD LANGUAGES
- Level 3 proficiency (e.g. 153) in one non-English language (4-12)

V HEALTH AND FITNESS
- HLSC 120 Lifetime Fitness with laboratory (2)

UNIVERSITY STUDIES GENERAL STUDIES (52 UNITS, 20 UPPER DIVISION) Grades of “D” or better required, unless courses are required by major.

Theme IA Understanding Human Beings or IB Humans as Thoughtful Global Citizens (4) May be fulfilled through major.

Theme IIA History and Appreciation of Visual and Performing Arts (4)
- IIB Historical or Contemporary Culture and Context (4)
- IIC Exploring Culture (HUMN 204 / 205 / 206) (4) Prerequisite: ENGL 111/124.

Theme III Any Theme III course (Theme III A, B, C, or D) (4)
- IIB Beliefs and Practice (Choose RELT 104 / 106 / 245 or RLGN 304) (4)
- IIC Scripture (4)
- RLGN RLGN 304 Adventism in Global Perspective or RLGN 305 Religion in Three Cultures (4) Prerequisite: ENGL 113/124, Junior.

Theme IVA Life Science (4) Theme IVA Life Science or Theme IVA Physical Science must include a laboratory. May be fulfilled through major.
- IVB Physical Science (4) Theme IVB Life Science or Theme IVB Physical Science must include a laboratory. May be fulfilled through major.

Theme IVC Scientific Foundations (NSCI 404 / 405 / 406 / 407) (4) Prerequisite: ENGL 113/124, Theme IVA/Theme IVB, F3 Mathematics.

Theme V Senior Seminar: UNST 404G Religion, Values, and Social Responsibility (4) Prerequisite: ENGL 111/124, Junior.

UNIVERSITY STUDIES SERVICE-LEARNING (3 courses)

* A maximum of 4 units from the Major, and 8 units of Cognates required by the Major, may apply to University Studies General Studies requirements (2013-2014 Undergraduate Academic Bulletin p. 66).

NOTES: A course with quarters marked by [brackets] indicate the quarters in which that course is usually offered. Should a student’s general education and major degree program not meet the minimum 190 units required for graduation, the student must complete elective units to make up the deficiency.
EXERCISE SCIENCE: SCIENTIFIC BASIS
Bachelor of Science

CAREER OPPORTUNITIES AND RELATED OCCUPATIONS: Students majoring in Exercise Science – Scientific Basis can consider career paths such as personal training, specialization in strength and conditioning, or entry into fitness or wellness center management. It is also an excellent foundational degree in preparation for application to graduate school by including prerequisite coursework for programs that include medicine, physical therapy, physician’s assistant, occupational therapy, and pharmacy school.

EDUCATIONAL QUALIFICATIONS: Careers in personal and athletic training have varying educational requirements. An increasing number of employers require personal and athletic trainers to have bachelor degrees in fields such as physical education, kinesiology, or exercise science. In most states, trainers need a license or certification; requirements vary by state. Physical therapists require a postgraduate professional degree.

JOB OUTLOOK: In California, jobs for fitness trainers and aerobics instructors are expected to increase by 16.5 percent, or 4,600 jobs between 2010 and 2020 which is average in comparison to all occupations. Employment of athletic trainers is expected to grow by 30 percent from 2010 to 2020, much faster than the average for all occupations.

ENTERING SALARY: The median annual wage of athletic trainers was $41,600 in May 2010. The lowest 10 percent earned less than $25,750, and the top 10 percent earned more than $64,390. The median annual wage in 2012 for fitness trainers and aerobics instructors in California was $41,905 with salaries ranging from $31,091 to $56,835.
