

**PHOT 203 Color Printing Workshop (2)**

4 hours lecture/laboratory

**Prerequisite:** PHOT 201

**Note:** May be taken 3 times

**Transfer acceptability:** CSU

A continuing investigation of the creative uses of color negative and positive processes using portfolio and book projects to refine color skills. Emphasis on concepts and techniques in color. Students will be required to employ their developing visual literacy, analytical skills and subjective thought.

**PHOT 209 Photographic Portfolio (2)**

4 hours lecture/laboratory

**Prerequisite:** PHOT 105

**Note:** May be taken 3 times

**Transfer acceptability:** CSU

Methods of portfolio design and production, goal setting, market research, resumes, artist statements, cover and inquiry letters and self-promotion for a range of career, scholastic and artistic purposes. Students will be required to employ their developing visual literacy, analytical skills and subjective thought. Field trips and classroom visits by working professionals will be incorporated.

**PHOT 210 Advanced Black and White Photography (3)**

6 hours lecture/laboratory

**Prerequisite:** PHOT 105

**Transfer acceptability:** CSU; UC

An exploration of the creative and technical possibilities through various assignments aimed at developing a personal style and approach to the production of quality black and white photography. A study of the relationship between film exposure and development and its application in the "zone system" is stressed.

**PHOT 212 Landscape Photography (2)**

5 hours lecture/laboratory

**Prerequisite:** PHOT 100

**Note:** May be taken 4 times

**Transfer acceptability:** CSU

A survey and comparison of past and present landscape photography. An analysis of different philosophies and approaches as it applies to different locations. Usually will require one trip of several days outside of the local area.

**PHOT 215 Creative Photography (3)**

7 hours lecture/laboratory

**Prerequisite:** PHOT 100

**Transfer acceptability:** CSU; UC

Exploration of photography as an art form using both conventional and non conventional silver and non silver processes to permit broad variations and approaches to photographic expression.

**PHOT 216 Alternative Photographic Processes (3)**

7 hours lecture/laboratory

**Prerequisite:** PHOT 105

**Transfer acceptability:** CSU

A practical, hands-on survey of historical alternatives and contemporary variations to the modern standard photographic process. Silver, Ferric, Dichromate, and Photomechanical possibilities for self expression will be explored. Typical processes learned will include Van Dyke, Cyanotype, Platinum and Palladium Kallitype, Bromoil, and gum printing.

**PHOT 220 Commercial Photography (3.5)**

7 hours lecture/laboratory

**Prerequisite:** PHOT 105

**Transfer acceptability:** CSU

Considerations of professional technical fundamentals in lighting, film, camera systems, and management as applied in studio and location photography for commercial, advertising, and promotional purposes.

**PHOT 225 Photographic Portraiture (3)**

6 hours lecture/laboratory

**Prerequisite:** PHOT 105

**Transfer acceptability:** CSU

Techniques and styles of photographic portraiture. Studio and non studio applications will be explored using black and white and color films. Emphasis on lighting equipment and techniques.

**PHOT 230 Digital Darkroom (3.5)**

7 hours lecture/laboratory

**Prerequisite:** GCIP/R GCIP 140 and PHOT 100

**Note:** May be taken 2 times

**Transfer acceptability:** CSU

Introduction to the technology of digital (electronic) photography using traditional and digital cameras, the computer, and industry standard imaging software as the primary photographic processing and manipulation tools. Continuing instruction in digital image processing directed toward photographic output. Exploration of capabilities and use of the digital darkroom.

**PHOT 296 Special Projects (1,2,3)**

3, 6, or 9 hours laboratory

**Prerequisite:** PHOT 105

**Note:** May be taken 3 times

**Transfer acceptability:** CSU

Requires demonstrated proficiency in photography and the creative ability and initiative to work independently on a particular sustained project which does not fit in the context of regularly scheduled classes. Could include portfolio preparation.

**Physical Education (PE)**

See also Athletics and Competitive Sports

Contact the Physical Education Department for further information, (760) 744-1150, ext. 2462. For transfer information, consult a Palomar College counselor.

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

**PROGRAMS OF STUDY**

**Adult Fitness/Health Management**

Training for fitness instructors and lifestyle educators in designing, implementing and managing a variety of health/fitness programs.

**CERTIFICATE OF ACHIEVEMENT**

<b>Program Requirements</b>		<b>Units</b>
BMGT 105	Small Business Management	3
BUS 140	Selling for Business	3
CSIS 105	Computer Concepts/Microcomputer Applications	3
FCS/HE 165	Fundamentals of Nutrition	3
HE 100	Health Education and Fitness Dynamics	3
HE 100L	Health Performance Lab	1-2
PE 104/EME 100	Advanced First Aid	3
PSYC 100	Introduction to Psychology	3
ZOO 205	Physiology Lecture	3
CE 100	Cooperative Education	2-4
<b>Group I (Select a minimum of 3 units)</b>		
ENG 100	English Composition	4
MATH 120	Elementary Statistics	3
SPCH 100	Oral Communication	3
<b>Group II (Select a minimum of 3 units)</b>		
FCS 170	Nutrition: Eating Disorders and Obesity	3
PSYC 115	Psychology of Personal Growth and Development	3
PSYC 210	Physiological Psychology	4
SOC 125/ PSYC 125	Human Sexuality	3
<b>Group III (Select a minimum of 3 units)</b>		
PE 100	Introduction to Physical Education	2
PE 125	Physical Fitness	1-2
PE 128	Wellness Activities	1-2

PE 129	Aerobics/Step	1-2
PE 151	Intermediate Weight Training	1-1.5
PE 165	Coed Softball	1-1.5
PE 168	Soccer	1-1.5
PE 231	Water Safety Instruction	3
PE 232	Teaching Swimming	1-1.5

**TOTAL UNITS** **36 - 39**

### Physical Education

Provides the student with background to begin upper division coursework and serves as preparation for entry level jobs in health clubs, non credentialed physical education and coaching positions, and as recreation aides. Transfer students should consult the four year college or university catalog for specific requirements or see a Palomar College counselor.

#### A.A. DEGREE MAJOR

Program Requirements		Units
HE 100	Health Education and Fitness Dynamics	3
HE 100L	Health Performance Lab	1-2
HE/FCS 165	Fundamentals of Nutrition	3
PE 100	Introduction to Physical Education	2
PE 104/EME 100	Advanced First Aid	3
PE 129	Aerobics/Step	1-1.5
PE 231	Water Safety Instruction	3
PSYC 100	Introduction to Psychology	3
ZOO 200	Anatomy	5
ZOO 205	Physiology Lecture	3

**Plus 3 of the following team skill courses (An ACS course in these sports may be substituted for one)**

PE 137	Water Polo	1
PE 156	Intermediate Volleyball	1-1.5
PE 165	Coed Softball	1-1.5
PE 166	Basketball	1
PE 168	Soccer	1-1.5
PE 210	Professional Preparation for Football	1-2
PE 212	Professional Preparation for Baseball	1-2

**Plus 3 of the following individual skill courses (An ACS course in these sports may be substituted for one)**

PE 118	Intermediate Golf	1-1.5
PE 127	Aquatic Exercises	1-2
PE 136	Intermediate Swimming	1-1.5
PE 141	Intermediate Tennis	1-1.5
PE 150	Beginning Weight Training	1-1.5

**TOTAL UNITS** **33 - 39**

#### COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.  
 Courses numbered under 100 are not intended for transfer credit.

An activity may be taken four times for credit. Activity is defined to include all ability levels (e.g., A student may take a total of only four tennis courses for credit).

UC – All ACS and PE activity courses combined: maximum credit, 4 units

CSU – No limit on PE activity credit

#### PE 47 Physical Education Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

**Note:** May be taken 4 times

Topics in Physical Education. See class schedule for specific topic covered. Course title will designate subject covered.

#### PE 83 Cheerleading (3)

6 hours lecture/laboratory

**Prerequisite:** Enrollment subject to audition

**Recommended preparation:** Previous cheerleading experience

**Note:** This is a TBA class and will require travel away from the college on week-ends and other dates; may be taken 4 times

Designed to teach the fundamentals of cheerleading. Students will explore practical and theoretical aspects of competitive and non-competitive cheerleading. Students will acquire knowledge of, and respect for, the skills needed to perform at college events and competition.

#### PE 100 Introduction to Physical Education (2)

2 hours lecture

**Transfer acceptability:** CSU; UC

An interpretation of the field designed to give the prospective major student an understanding of its scope. History and principles of physical education. Study of the objectives of modern physical education with a view toward the development of a basic philosophy and background for professional education.

#### PE 102 Physical Education in Elementary Schools (3)

3 hours lecture

**Transfer acceptability:** CSU

Develop understanding, knowledge, and appreciation of physical education activities adapted to the needs and interests of elementary school children. Experience in planning, writing and conducting physical education programs and curriculum.

#### PE 103 Evaluative Fitness (2.5)

2 hours lecture-1.5 hours laboratory

**Transfer acceptability:** CSU

Theory and practical application of current measurement, testing, and evaluation procedures in adult fitness programs. Familiarization with heart rate monitoring, blood pressure, anthropometric assessment techniques (skinfold measures, circumference measurements, bioelectric impedance, BMI, waist to hip ratios), cardiorespiratory fitness assessment techniques (YMCA bike test, 3 minute step test, 1-mile walk test), musculoskeletal fitness assessment (strength, endurance, and flexibility measures), client assessment, exercise programming, and energy expenditure calculations. current theory and treatment prescription of major health problems.

#### PE 104 Advanced First Aid (3)

3 hours lecture

**Note:** Cross listed a EME 100

**Transfer acceptability:** CSU; UC

The study and application of emergency medical skills and procedures, including basic anatomy and physiology, terminology, and prevention of disease transmission, for CPR certification from the American Heart Association and/or the American Red Cross.

#### PE 110 Beginning Badminton (1,1.5)

2 or 3 hours lecture/laboratory

**Note:** Maximum of 4 completions in any combination of PE 110, PE 111

**Transfer acceptability:** CSU; UC

Recreational and competitive skill levels for beginner and advanced beginner. A development of mental and physical skills such as: interpreting rules and regulations, tactics and strategies, sport etiquette and sport-specific motor skills.

#### PE 111 Intermediate Badminton (1,1.5)

2 or 3 hours lecture/laboratory

**Note:** Maximum of 4 completions in any combination of PE 110, PE 111

**Transfer acceptability:** CSU; UC

Development of competency in badminton strokes, and defensive and offensive tactics in singles and doubles match play.

#### PE 112 Yoga (1,1.5,2)

2, 3, or 4 hours lecture/laboratory

**Note:** May be taken 4 times

**Transfer acceptability:** CSU; UC

Investigation and practice of the principles of Physical Hatha Yoga. Emphasis is on improved body alignment, joint flexibility, muscle tone and breathing.

- PE 114 Walkfit (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Instruction and training in walking techniques to increase endurance and fitness levels.
- PE 115 Bowling (1.5)**  
3 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
Competency development in selection of ball, approach, delivery, scoring, and league experience. Class meets off campus.
- PE 116 Aikido (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Introduction to and a survey of Aikido, a non-aggressive, non-competitive martial art. Based upon a philosophy that underscores the importance of harmony with nature and control of body and mind. The significance of good posture, physical skill, reflexes, responsibility, and etiquette is emphasized.
- PE 117 Beginning Golf (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)  
**Transfer acceptability:** CSU; UC  
Skill development in the use of various clubs, scoring, and playing etiquette.
- PE 118 Intermediate Golf (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)  
**Transfer acceptability:** CSU; UC  
A course designed for those students who are not ready to play on a regulation golf course but have mastered the basic skills of beginning golf. This course will include the techniques (pitching, chipping, putting, sand shots and wood shots) that should enable the student to play a successful round of golf. Rules, situation analysis, and course strategy will also be covered.
- PE 119 Advanced Golf (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 117, PE 118, PE 119, PE 216 (Golf)  
**Transfer acceptability:** CSU; UC  
Development of playing strategies. Emphasis on swing techniques and mental approach to golf game. Wise use of practice time. Competency in the rules of golf. Classes held off campus.
- PE 120 Beginning Surfing (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 120; 121  
**Transfer acceptability:** CSU; UC  
Introduction to beginning surfing is designed to meet the needs of the beginning level surfer. Instruction will cover such topics as: historical perspectives of surfing, ocean safety, surfing etiquette, wave selection, proper paddling and appropriate take-off procedures. Students will be required to provide their own equipment.
- PE 121 Intermediate Surfing (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 120; 121  
**Transfer acceptability:** CSU; UC  
Concepts of intermediate surfing are designed for the intermediate level surfer who can negotiate waves and do basic turns on a consistent basis. Ocean knowledge such as currents, wave development, wind pattern and ocean floor terrain will be presented. Students will be taught short and longboard maneuvers such as: Duck dive, cutback, "off the lip", roundhouse, sideslip, crossover and walk to nose. Students will become confident in riding surf, four feet or larger. Students will be required to provide their own equipment.
- PE 125 Physical Fitness (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Training in endurance, flexibility, and strength. Methods to achieve training include: swimming, running, walking, step bench, weight training, strength training, and/or cycling. Emphasis is on pre testing, post testing, and the development of personal fitness.
- PE 127 Aquatic Exercises (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
Rhythmical and aerobic movement in water designed to improve flexibility, strength, and endurance.
- PE 128 Wellness Activities (1,1.5,2)**  
3, 4.5, or 6 hours laboratory  
**Note:** Open entry/Open exit; Credit/No Credit grading only; may not be taken as an audit  
**Transfer acceptability:** CSU; UC  
Physical conditioning through aerobic fitness, flexibility, and resistance training programs. Activities include treadmill, stairmaster, stationary biking, rowing, and weight machines. Individualized tests determine the conditioning program and the level of performance expected.
- PE 129 Aerobics/Step (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
Improve cardiovascular fitness through a variety of aerobic exercises. The development of strength, endurance, flexibility, and coordination using optional resistance equipment such as step benches, hand weights, and flex bands.
- PE 130 Individualized Fitness Exercise (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
An interdisciplinary course focusing on specific aspects of fitness including physical, mental, and emotional parameters. May include, but not limited to, physical performance, stress management, weight management, self esteem, behavior modification, and injury rehabilitation.
- PE 135 Beginning Swimming (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 135, PE 136, PE 214 (Swimming)  
**Transfer acceptability:** CSU; UC  
Basic swimming strokes with an emphasis on skill development.
- PE 136 Intermediate Swimming (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 135, PE 136, PE 214 (Swimming)  
**Transfer acceptability:** CSU; UC  
Intermediate swimming strokes, starts, and turns. Basic diving techniques, water survival, and rescue techniques. Emphasis on skill development and conditioning.
- PE 137 Water Polo (1)**  
2 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 137, PE 170 (Water Polo), PE 214 (Water Polo)  
**Transfer acceptability:** CSU; UC  
Development of ball-handling skills, swimming conditioning, performance of offensive and defensive tactics, and game strategies.

- PE 140 Beginning Tennis (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)  
**Transfer acceptability:** CSU; UC  
Introduction to basic tennis strokes, footwork, rules, and scoring.
- PE 141 Intermediate Tennis (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)  
**Transfer acceptability:** CSU; UC  
Competency development in tennis strokes, defensive and offensive tactics, and match play.
- PE 142 Advanced Tennis (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 140, PE 141, PE 142, PE 216 (Tennis)  
**Transfer acceptability:** CSU; UC  
Designed primarily for competitive play with stress on court position and strategy.
- PE 150 Beginning Weight Training (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 150, PE 151  
**Transfer acceptability:** CSU; UC  
Developing basic skills, coordination, muscular tone, and strength through the use of weight machines and free weights.
- PE 151 Intermediate Weight Training (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 150, PE 151  
**Transfer acceptability:** CSU; UC  
Advanced work for toning and muscular development through the use of weights, variable resistance machines, and other weight devices.
- PE 155 Beginning Volleyball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)  
**Transfer acceptability:** CSU; UC  
Beginning skills in volleyball including passing, setting, hitting, and serving. Drills and team play.
- PE 156 Intermediate Volleyball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)  
**Transfer acceptability:** CSU; UC  
Advanced work on fundamentals including blocking and defense, with emphasis on team drills and team play.
- PE 157 Advanced Volleyball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 155, PE 156, PE 157, PE 170 (Volleyball)  
**Transfer acceptability:** CSU; UC  
Advanced techniques of volleyball with emphasis on competitive play.
- PE 165 Coed Softball (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 165, PE 170 (Softball)  
**Transfer acceptability:** CSU; UC  
Basic skills of slow pitch, fast pitch, and over the line softball. Includes rules, basic skills, and play.
- PE 166 Basketball (1)**  
2 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
**Note:** Maximum of 4 completions in any combination of PE 166, PE 170 (Basketball), PE 211  
Basic basketball skills including passing, shooting, dribbling, ball handling, and rebounding. Team play, offensive sets, and defensive patterns will be emphasized.
- PE 168 Soccer (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 168, PE 170 (Soccer)  
**Transfer acceptability:** CSU; UC  
Beginning skills in soccer. Analysis of individual positions, rules, basic drills, and team play.
- PE 170 Team Sports (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Football, PE 170 (Football), PE 210; For Volleyball, PE 155, PE 156, PE 157, PE 170 (Volleyball); For Soccer, PE 168, PE 170 (Soccer); For Softball, PE 165, PE 170 (Softball); For Baseball, PE 170 (Baseball), PE 212; For Basketball, PE 166, PE 170 (Basketball), PE 211; For Wrestling, PE 170 (Wrestling), PE 215, 216 (Wrestling); For Water Polo, PE 137, PE 170 (Water Polo), PE 214 (Water Polo)  
**Transfer acceptability:** CSU; UC  
Instruction and participation in team sports for advanced players. Team sports offered include football, volleyball, soccer, softball, baseball, basketball, wrestling, and water polo. See Class Schedule for particular sport(s) offered each semester.
- PE 175A Psychology of Specific Athletic Competition – Contact (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 175B Psychology of Specific Athletic Competition – Minimal Contact (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 175C Psychology of Specific Athletic Competition – Non-Contact (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 175D Psychology of Specific Athletic Competition – Skilled (2)**  
2 hours lecture  
**Transfer acceptability:** CSU  
Psychological, mental, and physical preparation for the competitive athlete.
- PE 176 Athletic Training (3)**  
3 hours lecture  
**Transfer acceptability:** CSU; UC  
An overview of the field of sports medicine with an emphasis on the prevention, recognition, evaluation, first aid, and treatment of athletic injuries.
- PE 180 Adaptive Outdoor Activities (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Planning of, participation in, and evaluation of a variety of sports and other outdoor activities adapted to disabled students. Emphasis will be on self reliance, organization of personal belongings, problem solving situations, interpersonal relations, and meeting new challenges.

- PE 181 Adaptive Aquatics (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Basic swimming, survival strokes, and water orientation adapted to individual student's disability.
- PE 182 Adaptive Weight Training (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Resistance activities designed to meet specific needs of the student with a disability. Development and maintenance of a level of strength, flexibility, and cardiovascular endurance in order to facilitate independence of movement and rehabilitation of specific muscle groups.
- PE 183 Adaptive Skiing (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Snow skiing using adapted equipment where appropriate. Field trip to ski area required. Expenses, except for transportation, to be borne by student.
- PE 184 Adaptive Body Conditioning (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU; UC  
Training to increase endurance, flexibility, and strength. Emphasis on individual fitness profile.
- PE 190 Theory of Softball (2)**  
2 hours lecture  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Fastpitch softball rules, playing techniques, coaching strategies, and practice organization.
- PE 197 Topics in Physical Education (.5-4)**  
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
Topics in Physical Education. See Class Schedule for specific topic offered. Course title will designate subject covered.
- PE 204 Off Season Sports Conditioning (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be taken 4 times; may be open entry/open exit  
**Transfer acceptability:** CSU; UC  
An intensified out of season conditioning and strength program for men and women in intercollegiate sports. Different forms of strength training, equipment and their use will be emphasized. Implementation of a sports specific agility program will be established. Out of season speed/endurance work, and skill efficiency will be enhanced through use of different fitness parameters in preparing men and women for their season of competition.
- PE 205 In Season Sports Conditioning (1,1.5)**  
2 or 3 hours lecture/laboratory  
**Note:** May be open entry/open exit; may be taken 4 times  
**Transfer acceptability:** CSU; UC  
Maintenance training program for men and women in intercollegiate sports during season. Proper use of weights will be emphasized. Sports specific agility program, speed/endurance work, and skill efficiency will be enhanced through use of different fitness parameters.
- PE 206 Coaching of Women's Team Sports (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times
- Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
The application and development of knowledge, skills, and strategy as they apply to intercollegiate competition. Fall semester: volleyball and soccer. Spring semester: basketball and softball.
- PE 210 Professional Preparation for Football (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Football), PE 210  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 211 Professional Preparation for Basketball (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** Maximum of 4 completions in any combination of PE 166, PE 170 (Basketball), PE 211  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 212 Professional Preparation for Baseball (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Baseball), PE 212  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 214 Professional Preparation for Water Sports (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Swimming, PE 135, PE 136, PE 214 (Swimming); For Water Polo, PE 137, PE 170 (Water Polo), PE 214 (Water Polo)  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games, weekly practice schedules, and anticipated innovations for the future.
- PE 215 Professional Preparation for Wrestling (1,1.5,2)**  
2, 3, or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of PE 170 (Wrestling), PE 215, PE 216 (Wrestling)  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation of teams for games and weekly practice schedules, and anticipated innovations for the future.
- PE 216 Professional Preparations for Individual Sports (Golf, Tennis, and Wrestling) (1,2)**  
2 or 4 hours lecture/laboratory  
**Note:** May be taken 4 times; maximum of 4 completions in any combination of courses for the same sport; For Golf, PE 117, PE 118, PE 119, PE 216 (Golf); For Tennis, PE 140, PE 141, PE 142, PE 216 (Tennis); For Wrestling, PE 170 (Wrestling), PE 215, PE 216 (Wrestling)  
**Transfer acceptability:** CSU; UC – PE 101, 190 and 206-225 combined: maximum credit, 8 units  
Development of fundamental skills with emphasis on history, rules, styles, game strategy, current developments, preparation for games and matches, weekly practice schedules, and anticipated innovations for the future.

**PE 229 Lifeguarding (1.5)**  
 1½ hours lecture  
**Prerequisite:** Ability to swim 500 yards continuously  
**Transfer acceptability:** CSU; UC  
 Follows American Red Cross curriculum lifeguard training and professional rescuer CPR. National certifications can be earned upon successful completion of two topic areas. An individual will have basic preparation for aquatic lifeguard job opportunities in California.

**PE 230 Lifeguarding and Emergency Response (3)**  
 3 hours lecture  
**Prerequisite:** Ability to swim 500 yards continuously  
**Transfer acceptability:** CSU; UC  
 Follows American Red Cross curriculum lifeguard training, professional rescuer CPR, and emergency response. National certifications can be earned upon successful completion of all three topic areas. Prepares an individual for aquatic lifeguard job opportunities in California.

**PE 231 Water Safety Instruction (3)**  
 3 hours lecture  
**Transfer acceptability:** CSU; UC  
 American Red Cross Instructor candidate training and water safety instruction. Follows the National Red Cross instructor course, learning levels of basic swim instruction, aquatic activities, and emergency rescue. National certifications can be earned by students 17 years of age or older upon successful completion of topics. Prepares an individual for teaching job opportunities at an aquatic facility.

**PE 232 Teaching Swimming (1,1.5)**  
 2 or 3 hours lecture/laboratory  
**Transfer acceptability:** CSU; UC  
 Techniques for teaching swimming. Practical experience teaching beginning and intermediate swimming classes under supervision of college instructor.

**PE 295 Directed Study in Physical Education (1,2,3)**  
 3, 6, or 9 hours laboratory  
**Prerequisite:** Approval of project or research by department chairperson/director  
**Note:** May be taken 4 times  
**Transfer acceptability:** CSU  
 Independent study for students who have demonstrated skills and/or proficiencies in Physical Education subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

## Physical Science (PHSC)

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

### COURSE OFFERINGS

**PHSC 100 Introduction to Physical Science (3)**  
 3 hours lecture  
**Transfer acceptability:** CSU; UC – No credit for students with prior lecture credit in ASTR, CHEM, GEOL or PHYS  
 The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non science majors. For teacher training see PHSC 101.

**PHSC 100L Introduction to Physical Science Laboratory (1)**  
 3 hours laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in, PHSC 100  
**Transfer acceptability:** CSU; UC – No credit for students with prior lab credit in ASTR, CHEM, GEOL or PHYS  
 The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lab exercises. A general education course designed particularly for non-science majors. For teacher training see PHSC 101L.

**PHSC 101 Principles of Physical Science (3)**  
 3 hours lecture  
**Transfer acceptability:** CSU  
 The study of selected topics from the fields of physics and chemistry and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non science majors. Especially recommended for teacher training.

**PHSC 101L Principles of Physical Science Laboratory (1)**  
 3 hours laboratory  
**Prerequisite:** Completion of, or concurrent enrollment in, PHSC 101  
**Transfer acceptability:** CSU  
 The study of selected topics from the fields of physics and chemistry and their related sciences through lab exercises. A general education course designed particularly for non-science majors; not open to majors in physics, chemistry, or engineering. Especially recommended for teacher training.

## Physics (PHYS)

Contact the Physics and Engineering Department for further information, (760) 744-1150, ext. 2505

### COURSE OFFERINGS

\*UC credit limitations:

- No credit for PHYS 101 or 102 if taken after 120, 200, or 230
- PHYS 120 and 121 combined with 200, 201, 230, 231, 232: maximum credit, one series
- PHYS 200 and 230 combined: maximum credit, one course
- PHYS 201 and 231 combined: maximum credit, one course

**PHYS 101 Introduction to Physics (4)**  
 3 hours lecture-3 hours laboratory  
**Prerequisite:** MATH 50 or one year of high school Algebra  
**Note:** Not open to students with prior credit in PHYS 100, 110, 115, 120, 125, 230, 231, and 232  
**Transfer acceptability:** CSU; UC\*  
 An introductory survey course in classical and modern physics. Not intended for science majors.

**PHYS 102 Introduction to Physics (Lecture) (3)**  
 3 hours lecture  
**Prerequisite:** MATH 50 or one year of high school Algebra  
**Note:** Not open to students with prior credit in PHYS 101, 110, 115, 120, 125, 230, 231, and 232  
**Transfer acceptability:** CSU; UC\*  
 An introductory survey course in classical and modern physics. Not intended for science majors.

**PHYS 120 General Physics (4)**  
 3 hours lecture-3 hours laboratory  
**Prerequisite:** MATH 110  
**Recommended preparation:** MATH 115  
**Transfer acceptability:** CSU; UC\*; CAN PHYS 2; PHYS 120+121= CAN PHYS SEQ A  
 The fundamental principles of classical mechanics, wave motion, sound, thermodynamics, and fluids.

**PHYS 121 General Physics (4)**  
 3 hours lecture-3 hours laboratory  
**Prerequisite:** PHYS 120  
**Transfer acceptability:** CSU; UC\*; CAN PHYS 4; PHYS 120+121= CAN PHYS SEQ A  
 A second semester continuation of PHYS 120. The fundamental principles of optics, electricity, magnetism, and modern physics.