

3. Senior Exercise.
 - a. PPE 160, Freedom, Markets and Well-Being, or PPE 190, Senior Seminar
 - b. PPE 195, Senior Exercise, and designated sections of the senior exercise in the student's department of primary focus

Courses

- 160. Freedom, Markets and Well-Being.** *Ms. Brown, Mr. Green.* Our society embraces commitments both to safeguarding basic liberties and to facilitating the pursuit of happiness. This course examines the interplay of philosophy, politics and economics in social and political theory and explores scholarship that relates theory to issues of public policy such as health care and development policies towards Third World countries. Prerequisites: ECON 102 and one course in each of philosophy and politics. Fall 2010.
- 190. Senior Seminar.** *Ms. Brown, Mr. Green.* Exposes students to scholarship that works across disciplinary boundaries in the fields of philosophy, politics and economics. Attention is paid to theoretical discourse and to policy applications. The course prepares PPE majors to write an integrative senior thesis and is designed to be taken prior to/or concurrently with the senior thesis. To be announced.
- 195. Senior Exercise.** *Staff.* Thesis plus designated sections of the Senior Exercise in the student's department of primary focus. PPE-politics majors must take the Politics Department oral examination (no credit). PPE-economics majors must take the Major Field Achievement Test in economics. The thesis shall be original and integrative across at least two of the participating disciplines, including the student's discipline of primary focus. Faculty readers for theses shall be drawn from the departments concerned. Full course. Each spring.

PHYSICAL EDUCATION DEPARTMENT

Professor Charles Katsiaficas, department chair

*Professors Beckett, Caron, Connell, Katsiaficas, Lebedeff, Reynolds, Swartz
Athletic Trainer and Professor Jones
Associate Professors Cowan, Pericolosi¹, Scanlon
Assistant Professors Boston, Brown, Ferguson, Rodriguez*

Pomona College is committed to the provision of competitive opportunities through intercollegiate, club and intramural sports programs and to developmental opportunities through instructional and recreational activities. Students are encouraged to consider sports participation at all levels as a significant and vital part of the college experience.

The College recognizes that participation in physical education, intercollegiate athletics and campus-sponsored recreational activities encourages the development of positive values and provides opportunities for social growth and development. Furthermore, such experiences provide students with specific knowledge in the areas of physical fitness, body awareness, skill acquisition and nutrition. Participation in these activities also sets the stage for adoption of a healthy lifestyle and optimal health in life after college.

Students are required to complete one semester's participation (cumulative credit) in one physical education activity during their first year at the College and are encouraged to enroll in one of the courses in lifetime sports, team sports and/or fitness classes. Permission to extend completion of this requirement may be requested of the department chair. Participation on an intercollegiate athletic team is counted as participation in one activity class.

¹On leave Fall 2009

Courses

The academic offerings in physical education are offered periodically for students who wish to develop an understanding of the significant concepts of physical education, sport, athletics and recreation. These courses may provide a background for further study and for exploring career possibilities in physical and occupational therapy, athletic training, sport administration, public and private recreation, therapeutic recreation or athletic coaching.

All courses except 51 are offered for Pass/No Credit grading only.

- 1-84 Physical Education Activity.** *Staff.* Designed to give students instructional opportunities in a variety of sports, physical activities and dance. Cumulative course. May be repeated. Each semester.
- 101-185. Intercollegiate Athletics.** *Staff.* Participation on any of the College's 21 athletic teams. Cumulative course. May be repeated. Each semester.
- 85. Adapted Physical Education.** *Mr. Katsiaficas.* The goal of this class is to develop, implement and monitor a designed physical education program for a student with a disability; to help give the student the skills necessary for a lifetime of rich recreation and sport experiences to enhance physical fitness and wellness. Each semester.
- 87. Fitness and Wellness.** *Ms. Lebedeff.* Designed to provide the student with a better understanding of fitness and wellness, its development and lifetime maintenance. Focuses on the development of the whole person, including physical, mental, emotional and social well-being practices. Half course. Each fall.
- 89. Lifeguard Training/Red Cross Certification.** *Mr. Rodriguez.* Lifeguard Training is an American Red Cross course in lifeguard skill, pool operation and aquatic safety. Course completion includes CPR and Basic First Aid Cards. Swim test required for enrollment. Each semester.
- 90. CPR/First Aid.** *Staff.* Designed to give students the confidence and ability to perform first aid skills in case of an emergency. Includes texts, lecture/discussion and skills practice. Students receive American Red Cross certification in adult, infant and child CPR, as well as in advanced first aid. Does not satisfy the physical education requirement. Each semester.
- 91. Care and Prevention of Athletic Injuries.** *Mr. Jones.* Theory and practice in the care and prevention of injuries commonly encountered in athletics and physical education. Lecture, lab and demonstration. Does not satisfy the physical education requirement. Half-course. Spring 2009.
- 99/199. Reading and Research: Selected Topics in Physical Education.** *Staff.* Independent reading and research under the guidance and counsel of a faculty member. Students select an area of study and present papers and evidence of research appropriate to the project. Individual discussions and papers. Permission of department screening committee required. Does not satisfy the physical education requirement. Prerequisite: permission of instructor. 99, lower-level; 199, advanced work. Course or half-course. May be repeated. Each semester. (Summer Reading and Research taken as 98/198.)

Activities

Students engage in an elective program of physical education activities in either the basic instruction program or the program of intercollegiate athletics; each carries physical education credit. Students desiring to learn new skills or to participate regularly in activities that they enjoy may enroll either for credit or for no credit. The basic instruction program is aimed primarily at providing instructional opportunities in lifetime sport activities. Classes are coeducational, with the exception of intercollegiate sports.

Courses include aerobics, archery, badminton, basketball, bowling, dance (ballet, hip-hop, modern, social, tap, repertory), fencing, fitness training, golf, jogging, karate, life saving, martial arts, pickleball, pilates, racquetball, soccer, social dance, squash, swimming, table tennis, tennis, ultimate frisbee, volleyball, water safety, weight training, wellness and yoga.

Intramural Program

The Physical Education Department conducts a competitive intramural program of sports in season, including air hockey, badminton, basketball, beach volleyball, dodgeball, flag football, foosball, pool/billiards, racquetball, soccer (indoor and outdoor), softball, squash, tennis, tube water polo and volleyball.

Intercollegiate Athletics

Intercollegiate athletics represent an important educational component of the wide range of learning experiences provided by the College. Students may sign up for physical education credit for participation on the following intercollegiate teams. For women: basketball, cross country, golf, lacrosse, soccer, softball, swimming, tennis, track and field, volleyball and water polo. For men: baseball, basketball, cross country, football, golf, soccer, swimming, tennis, track and field and water polo.

Club Sports

Club sports, organized by students of the undergraduate Claremont Colleges, include badminton (coed), cycling (coed), equestrian, fencing (coed), lacrosse (men), racquetball, rugby (men/women), ultimate frisbee (men/women) and volleyball (men).

PHYSICS AND ASTRONOMY DEPARTMENT

Professor Bryan Penprase, department chair

Professors Mawhorter, Mitescu², Moore, Penprase, Zook

Associate Professors Kwok, Tanenbaum

Assistant Professors Choi³, Whitaker

Physics is the study of the most fundamental properties of matter and energy, stressing the quantitative description of nature. As such, it has close connections to and applications in mathematics, the other physical sciences, particularly chemistry and geology and increasingly in the life and medical sciences. Astronomy, the study of the formation and evolution of the large-scale universe, extends the laws of physics to the largest scales of both space and time and allows students to apply their knowledge of physics to the formation and structure of stars, galaxies and the early universe itself. Both physics and astronomy have also been important in Western intellectual history and the development of fields outside the sciences such as philosophy, religion, history and politics. Majoring in physics or astronomy also develops capabilities valuable in many “real life” situations: problem-solving skills, quantitative modeling and analysis skills, technical reading and writing skills, experimental design skills and oral presentation skills.

Student Research. An important aspect of the major is the required senior thesis. Majors are strongly encouraged to elect independent research projects, usually in conjunction with a faculty member’s research program, which may be experimental, computational or theoretical. Recent thesis topics involving independent research have included carbon nanotubes, maskless lithography, optical tweezers, electron diffraction, computational general relativity, computational and experimental fluid dynamics, nonlinear dynamics and chaos, passive solar architecture and physics education research. Astronomy research projects have included monitoring active galactic nuclei, quasar absorption line spectroscopy, telescope instrument design, analyzing Spitzer and Hubble Space Telescope data and acquiring

²On leave Spring 2010

³On leave 2009-10