

Singers is required each semester an award is made. For a music scholarship, applied music study and one or more of the following are required of all recipients: participation in one of the music ensembles, as accompanist or recital appearances. Students must have a 2.0 grade-point average to retain a band grant, and a 2.5 grade-point average to retain a music scholarship; music scholarship students must have a 3.0 grade point average in their applied music study. Other foundation scholarships may require different GPAs.

For information on orchestra scholarships, band grants, and other music scholarships and awards, write to Music Department Head, Department of Music, MSC 3F, NMSU, P O Box 30001, Las Cruces, New Mexico 88003-8001 or email music@nmsu.edu.

## PHILOSOPHY

### Associate Professor Timothy Cleveland, department head

**Associate Professor** Scoccia; **Assistant Professors** Thorsrud, Vessel  
(505) 646-4616; 646-2358 (fax)

**DEGREE: Bachelor of Arts**  
**MAJOR: Philosophy**

**MINORS: Ethics**  
**Philosophy**

A major in philosophy serves not only as preparation for further graduate study in philosophy but also as an area of concentration in a liberal arts program. A philosophy major is appropriate for students planning to attend medical school as well as for those students interested in a career which requires critical reading and argument analysis. Such careers include business, theology and above all, law.

While the course requirements for the major should meet the ends of the liberal arts student, those students interested in graduate study in philosophy or in a career in law are encouraged to seek advice from a faculty advisor as early in their career as possible.

A minor program in philosophy requiring 18 hours of course work is also offered. Information on specific requirements is available in the department office. For more information visit the Department of Philosophy's web page at [www.nmsu.edu/~philos/](http://www.nmsu.edu/~philos/).

**DEGREE: Bachelor of Arts**  
**MAJOR: Philosophy**

#### Departmental Requirements

PHIL 201G, Introduction to Philosophy, or PHIL 101G, The Art of Wondering...3  
PHIL 312, Formal Logic .....3  
PHIL 341, Ancient Philosophy, or PHIL 344, Modern Philosophy.....3

#### Three credits in ethics from the following:

PHIL 320, Social and Political Philosophy; PHIL 373, Ethical Theory; PHIL 376, Philosophy of law.....3

#### Six credits from the following core:

PHIL 315, Philosophy of Language; PHIL 346, Philosophy of Mind; PHIL 350, Theories of Knowledge; PHIL 351, Philosophy of Science; PHIL 380, Nature of Reality .....6

At least 12 additional credits in philosophy, 6 of which are courses numbered 300 or above.

Electives: Sufficient to bring total credits to 128, including 54 upper-division.

#### MINOR: Ethics

A student who earns a B.A. in Philosophy may not also earn a minor in Philosophy.

PHIL 101G, The Art of Wondering, or PHIL 201G, Introduction to Philosophy.....3  
PHIL 211G, Informal Logic.....3  
PHIL 373, Ethical Theory.....3

Three of the following courses, of which at least two must be upper division:

CJ 425, Issues in Ethics, Law and Criminal Justice; HON 225G, History of Ethics; HON 304G, Dilemmas of War and Peace; HON 306G, Science and

Ethics; JOUR 377, Mass Media Ethics; PHIL 220, Individual Conduct and Society; PHIL 240G, Ethics for Engineering and Scientific Careers; PHIL 302, Business Ethics; 321 Biomedical Ethics; PHIL 322, Environmental Ethics; PHIL 323, Engineering Ethics; PHIL 381, Human Nature and the Good Life; and SUR 401, Surveying Ethics. Students may earn up to 3 credits in this category from special topics or Honors courses approved by the head of the Department of Philosophy.....9

#### MINOR: Philosophy

A student who earns a B.A. in Philosophy may not also earn a minor in Philosophy.

PHIL 101G, The Art of Wondering, or PHIL 201G, Introduction to Philosophy.....3  
PHIL 220, Individual Conduct and Society, or PHIL 223G, Ethics, or PHIL 373, Ethical Theory.....3  
PHIL 211G, Informal Logic, or PHIL 312, Formal Logic .....3  
Nine additional Philosophy credits at the 300 or above level.....9

## PHYSICS

### Professor Gary Kyle, department head

**Professor** Stephen Pate, undergraduate program head

**Professor** Matthias Burkhardt, graduate program head

**Professors** Armstrong, Burkhardt, Burleson (emeritus), Chen (emeritus), Daw (emeritus), Gibbs, Goedecke (emeritus), Ingraham (emeritus), Kyle, Kunz (emeritus), Liefeld (emeritus), Miller (emeritus), Ni; **Associate Professors** Hearn, Nakotte, Papavassiliou, Pate, Stromberg (emeritus); **Assistant Professors** Curran, Engelhardt, Kanim, Kiefer, Urquidi, Vasiliev  
(505) 646-3831

**DEGREE: Bachelor of Arts**  
**MAJOR: Physics**

**DEGREE: Bachelor of Science**  
**MAJOR: Physics**

**EMPHASIS: Applied Physics**  
**EMPHASIS: Applied Optics**  
**EMPHASIS: Computational Physics**  
**EMPHASIS: Geophysics**

**DEGREE: Bachelor of Science**  
**MAJOR: Engineering Physics**

#### DESIGNATED MINORS:

Physics/Classical Mechanics  
Computational Physics  
Physics/Electromagnetics  
General Physics  
Geophysics  
Physics/Materials  
Physics/Optics  
Physics/Quantum Mechanics

A bachelor's degree in physics provides the basis for careers in industry, teaching, the military, government, or for study toward advanced degrees in physics or engineering. It should also provide the skills that recipients of physics degrees have listed as among the most important in obtaining their current positions, including problem solving ability, computer skills, mathematical skills, and laboratory skills, as well as knowledge of physics.

Further information about the department may be found on the web at [www.physics.nmsu.edu](http://www.physics.nmsu.edu).

**DEGREE: Bachelor of Arts**  
**MAJOR: Physics**

The curriculum for the Bachelor of Arts degree is designed for students who would like to have a firm foundation in physics combined with study in another area