

RECITAL REQUIREMENTS FOR ALL MUSIC DEGREES**Bachelor of Music Education**

Senior recital is required. All music education majors will give a half recital (30 minutes of music) in their major performance area.

Bachelor of Music

All performance majors are required to give a half recital (30 minutes of music) in the junior year and a full recital (60 minutes of music) in the senior year. Students taking the Music Business option will give a half recital in their major performance area.

Applied Music Requirements for All Music Degrees

All B.M.E. and B.M. degrees require that at least two semesters of the applied music study be at the 430 level.

All students enrolling in applied music will audition and obtain permission from an applied teacher before signing for applied music credit.

Obtain further information by contacting the instructor or the music department.

Other Music Requirements, Fees, and Regulations

1. A Piano Proficiency Examination is required of all music majors. The proficiency examination may be satisfied in one of two ways: (a) pass the Piano Proficiency examination; (b) complete MUS 145, 146, 147, and 261 with a grade of C or better. Detailed requirements may be obtained from the Department of Music office. Students must pass the piano Proficiency Exam before presenting a Senior Recital.
If there are extenuating circumstances that prevent a student from taking the piano proficiency exam, then the student should schedule a meeting with the Head of the Department of Music to discuss alternatives.
2. Qualitative grade-point average for graduation in music is 2.0 or higher. All grades in required music courses must be C or better.
3. A Music Theory Placement Examination is required of all entering freshman and transfer students. All theory and ear training requirements will be completed before the music education major is permitted to student teach.
4. An instrument rental fee is charged each semester for students using university instruments. Consult the music department concerning these fees.
5. Additional charges are made for applied lessons. Consult the music department concerning these fees. Applied lessons (MUS 230, 330, 430) can be taken for either 2 or 4 credits only.
6. Outside groups and individuals must have special permission to use music department facilities. Contact the music office for additional information.

Music Organizations

All students taking a major or minor in music, with the exception of piano majors, must participate in the major ensemble that is appropriate for their voice or instrument. Students may choose from MUS 150, 160, 161, 170, 171, and 172 or the upper-division equivalent. All music education instrumental majors, except piano and strings, are required to participate in marching band for three semesters. Students are strongly encouraged to take at least one semester of chamber ensemble or jazz band, or both, during their degree program.

Music Scholarships and Awards

A limited number of performance stipends and other music scholarships are available to any full-time registered student and are awarded through the department. Amounts awarded will reflect excellence and achievement in performance, determined by audition—either in person or by a tape recording—and references. Participation in the Marching Band (fall semester), and Symphonic Winds (spring semester) is required for a band stipend. For an orchestra stipend, participation in the Las Cruces Symphony at NMSU is required each semester an award is made. For a vocal stipend, participation in the University Singers is required each semester an award is made. For a music scholarship, applied music study and one or more of the following may be required: 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 stipend, 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. Specific endowed Scholarships each have independent criteria.

For more information on performance stipends and other music scholarships and awards, write to: Academic Department Head, Department of Music, P. O. Box 30001, MSC 3 F, 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 as well as a minor in Ethics. For more information visit the Department of Philosophy's web page at 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
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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
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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 Ethics.	
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 324, Cyberethics; PHIL 327, Ethics and Sports; 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
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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 Burkardt, graduate program head

Professors Armstrong, Burkardt, Burleson (emeritus), Daw (emeritus), Gibbs, Goedecke (emeritus), Ingraham (emeritus), Kyle, Liefeld (emeritus), Miller (emeritus), Ni, Pate; *Associate Professors* Hearn, Kanim, Nakotte, Papavassiliou, Stromberg (emeritus); *Assistant Professors* Curran, Engelhardt, Kiefer, Lee, Urquidí, 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.

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 and greater flexibility in choosing elective courses. The program requires a minor in a second field of study chosen by the student in consultation with an advisor.

Nondepartment Requirements (May not be taken S/U and must earn a grade of C or better.)

MATH 191, 192, 291, Calculus and Analytic Geometry I, II, III; and MATH 392, Differential Equations

Minor in a second field from another department (18 credits)

Department Requirements

PHYS 150, Elementary Computational Physics.....	3
PHYS 213/213L, Mechanics, and Experimental Mechanics.....	4

PHYS 214/214L, Electricity and Magnetism, and Experimental Electricity and Magnetism.....	4
PHYS 217/217L, Heat, Light, and Sound, and Experimental Heat, Light, and Sound.....	4
PHYS 315 Modern Physics.....	3
PHYS 315L, Experimental Modern Physics.....	3
PHYS 451, Intermediate Mechanics.....	3
PHYS 454, Intermediate Modern Physics I.....	3
PHYS 455, Intermediate Modern Physics II.....	3
PHYS 461, Intermediate Electricity and Magnetism I.....	3
PHYS 462, Intermediate Electricity and Magnetism II.....	3
PHYS 480, Thermodynamics.....	3
Electives: Sufficient to bring total number of credits to 128, including 54 upper-division.	

Suggested Minors for the Bachelor of Arts Physics Major

Basic Science Minor—A minor in a related scientific field broadens the overall knowledge of the student majoring in physics. Some departments which offer such minors are astronomy, chemistry, computer science, geology, and mathematics.

Prehealth Minor—Students wishing to attend a medical or dental post-graduate school are strongly encouraged to obtain a minor in a life science field such as biochemistry, biology, human biology, microbiology, and molecular biology.

Prelaw Minor—Students wishing to attend a post-graduate law school should obtain a minor in a law-related field, such as government, accounting, finance, international business, global political economy, or a Supplementary Major in Law and Society (24 credits).

DEGREE: Bachelor of Science
MAJOR: Physics

A Bachelor of Science degree in physics at NMSU prepares a student well for graduate study in physics or geophysics, or for a variety of careers in research and teaching. Specialization in one of the emphasis areas should increase employability at the B.S. level.

Nondepartmental Requirements (Must earn a grade of C or better)

MATH 191, MATH 192, MATH 291, Calculus and Analytic Geometry I, II, III; MATH 392, Differential Equations.

CHEM 115, CHEM 116, Principles of Chemistry I, II, or higher-level courses.

Departmental Requirements

PHYS 150, Elementary Computational Physics.....	3
PHYS 213/213L, Mechanics, and Experimental Mechanics.....	4
PHYS 214/214L, Electricity and Magnetism, and Experimental Electricity and Magnetism.....	4
PHYS 217/217L, Heat, Light, and Sound, and Experimental Heat, Light, and Sound.....	4
PHYS 315, Modern Physics.....	3
PHYS 315L, Experimental Modern Physics.....	3
PHYS 451, Intermediate Mechanics.....	3
PHYS 454, Intermediate Modern Physics I.....	3
PHYS 455, Intermediate Modern Physics II.....	3
PHYS 461, Intermediate Electricity and Magnetism I.....	3
PHYS 462, Intermediate Electricity and Magnetism II.....	3
PHYS 480, Thermodynamics.....	3
Advanced laboratory (PHYS 471 or 475).....	2
Six additional credits in physics or geophysics numbered 300 or above.....	6
Electives: Sufficient to bring total number of credits to at least 128, including 54 upper-division.	

Students who plan to pursue graduate study in physics or geophysics are strongly advised to take one or more senior-level courses in optics, nuclear physics, atmospheric physics, condensed matter physics, geophysics, or computational physics.

Students who plan to seek employment at the B.S. level are advised to take one of the following emphasis area curricula in addition to the general and departmental requirements. The program of study should be chosen by the student in consultation with an advisor. Some recommended courses are listed below.

EMPHASIS: Applied Physics

The program of study in applied physics is planned by the student and the physics advisor and includes classes in electrical and mechanical engineering along with classes in computer science.