

SUR 351, Introductory Survey, Measurements, Analysis and Adjustments; SUR 451, Advanced Survey Measurements, Analysis and Adjustments; SUR 462, Advanced Geodesy

MINOR: Mathematics

A student must pass 18 or more credit hours in MATH and STAT courses, with at least 9 of the credits in upper division courses and 3 or those 9 credits in courses numbered above 400. The following courses are excluded from the minor: courses numbered below 125, MATH 200, MATH 300, MATH 308, MATH 312, MATH 313, MATH 314, MATH 400, MATH 459, and STAT 400. At most, one of STAT 251, STAT 271, or STAT 371 may be included in a minor. Any special topics courses, MATH or STAT 301 and MATH or STAT 401, must be approved by the department for credit toward the minor. Any course taught outside the Department of Mathematical Sciences but cross-listed with a MATH or STAT course, must also be approved by the department for credit toward the minor. A student may not earn a bachelor's degree in mathematics or a supplementary major in applied mathematics and also earn a minor in mathematics.

MILITARY SCIENCE

Lieutenant Colonel Bradley D. Gavle, department head

Assistant Professors Major Nakamoto, Captain Hugo, Sergeant First Class Perry (505) 646-4030

The Military Science program leads to a commission as an officer in the Army Reserve, National Guard, or Active Duty Army. The program consists of four parts: the student's academic major, nondepartmental courses of value to the military service, courses in military science, and a six-week Leader Development and Assessment course. The department offers a four-year program divided into two parts: the basic course (two years) and the advanced course (two years). Selected students may qualify for the two-year program with prior military service or successful completion of a six-week summer Leaders' Training course. Financial assistance and scholarships are available for qualified individuals. Students should contact the Department of Military Science to obtain additional information.

Requirements for Minor in Military Science

The minor in Military Science is administered by the Department of Military Science (Army ROTC) in the College of Arts and Sciences. To obtain a minor in Military Science a student must complete a total of 19 credits, all of which must be upper division. A grade of C or better must be obtained for each course. The only credits in which a grade of S will be accepted is MSC 350. Students should contact the Department of Military Science to obtain additional information.

MILITARY SCIENCE PROGRAM

Basic Course—Freshman

M SC 110, Introduction to Military Science.....	2
M SC 111, Introduction to Leadership.....	2

Basic Course—Sophomore

M SC 210, Self/Team Development.....	3
M SC 211, Leadership in Action and Team Building.....	3
M SC 225, Directed Studies.....	1-3
M SC 250, Leadership Internship I (summer only).....	4
Courses should be taken in sequence, normally one per semester.	

Advanced Course—Junior

M SC 310, 310L, Leading Small Organizations I/Lab.....	4
M SC 320, 320L, Leading Small Organizations II/Lab.....	4
M SC 325, Advanced Directed Studies.....	1-3
M SC 350, Leadership Internship (summer only).....	6

Advanced Course—Senior

M SC 401, 401L, Leadership Challenges and Goal Setting/Lab.....	4
M SC 402, 402L, Transition to Lieutenant/Lab.....	4
M SC 425, Practicum.....	1-4

The student's military science advisor will recommend course sequence. Military science students must sign up for and attend courses plus laboratories. Departmental requirements may not be taken S/U.

NONDEPARTMENTAL REQUIREMENTS

One course in Military History must be successfully completed to meet Professional Military Education requirements. See your military science advisor for specific courses.

MUSIC

Associate Professor Gregory Fant, department head

Professors Alt, Borchert, Klein, Shearer, Sylvan, K. Van Winkle; *Associate Professors* Kaplan, Romero, Rowe, Spitzer, Staehle; *Assistant Professors* Bugbee, Christiansen, Joy, Stovall, L. Van Winkle (505) 646-2421

DEGREE: Bachelor of Music Education
OPTIONS: K–12, Vocal
K–12, Instrumental

DEGREE: Bachelor of Music
OPTIONS: Piano Performance
Instrumental Performance
Vocal Performance
Business

MINOR: Music

Mission Statement

The mission of the Music Department at NMSU is: 1) to prepare our students for careers in music education, business, and/or performance; 2) to give the student body opportunities to perform, study, create, and experience music; 3) to enhance the cultural lives of our constituency by performance of superior music; and 4) to create an artistic environment which fosters the development of personal realizations we believe to be essential to the fabric of a healthy society.

Departmental Requirements for all Bachelor's Degrees (Music Core)

A student must earn a grade of C or better in all departmental requirements for any degree in the Department of Music. All students wishing to pursue a music degree must audition and take the theory placement exam. Contact the department for current audition requirements.

Students enrolled in this department's major(s) or minor(s) may count credits in required applied courses toward their degrees beyond the normal maximum of 9 credits allowed in the College of Arts and Sciences. However, if students change the major(s) or minor(s) or do not complete the requirements for the minor at the time of graduation, they may only count a maximum of 9 credits of the applied/occupational credits toward graduation.

DEGREE: Bachelor of Music Education
OPTIONS: K–12, Instrumental
K–12, Vocal

The Bachelor of Music Education (B.M.E.) is a diversified four- to five- year degree program of teaching, performance, and specialized studies in music. The goal of this degree is to prepare the student for certification to teach music in the public schools, and serves as a foundation for advanced study toward master's and doctoral degrees: M.M., M.M.E., D.M.A., or Ph.D in music education.

REQUIREMENTS K-12 – Instrumental

Basic Music and Performance

MUS 141, Class Voice	2
MUS 202, Introduction to Music Literature	3
MUS 211/212, Ear Training I/II	2
MUS 213/214, Music Theory I/II	6
MUS 273, Music Technology	3
MUS 302, History and Literature of Music to 1750	3
MUS 303, History and Literature of Music After 1750	3
MUS 311/312, Ear Training III/IV	2
MUS 313/314 Music Theory III/IV	6
MUS 325, Beginning Conducting.....	1
MUS 326, Instrumental Conducting.....	3
MUS 230, 330, 430, Applied Music (instrumental)	14
MUS 315/316, Brass Technique I/II	2

MUS 317/318, Woodwind Technique I/II	2
MUS 319/320, String Technique I/II	2
MUS 323/324, Percussion Technique I/II	2
MUS 413, Form and Analysis	3
MUS 415, Orchestration	3
MUS 440, Senior Recital	2
Music ensemble band, orchestra	7
<i>Total Basic Music and Performance Credits</i>	<i>71</i>

Students must pass the piano proficiency exam before student teaching.

Students must be admitted into the Teacher Education Program before taking MUS 346 or MUS 349.

General Education Component

Critical Thinking/Analysis	6
ENGL 111G/ENGL 111H, Rhetoric and Composition	4
PHYS 120G, Introduction to Acoustics	4
Additional Writing Course	3
Math	3
Liberal Studies/Historical Perspectives	3
Human Thought/Behavior	3
Social Analysis	3
View Wider World (outside Arts and Sciences, Education)	3
<i>Total General Education requirements</i>	<i>35</i>

Professional Education Courses

CEP 210, Educational Psychology	3
MUS 250, Introduction to Music Education.....	1
MUS 346, Elementary Music Methods	2
MUS 349, Secondary Music Methods	2
SPED 350, Exceptional Learners	3
RDG 414, Reading in Content Area	3
EDUC 471, Secondary Student Teaching	9
EDUC 482, Secondary Student Teaching Seminar	3
<i>Total Professional Education</i>	<i>26</i>

REQUIREMENTS: K-12 –Vocal

Basic Music and Performance

MUS 202, Introduction to Music Literature	3
MUS 211/212, Ear Training I/II	2
MUS 213/214, Music Theory I/II	6
MUS 230, 330, 430 Applied Music (instrumental)	14
MUS 262/263, Diction I and II	4
MUS 302, History and Literature to 1750	3
MUS 303, History and Literature After 1750	3
MUS 311/312, Ear Training III/IV	2
MUS 313/314, Music Theory III/IV	6
MUS 321, Instrumental Techniques for Vocal Music Education Majors	2
MUS 325, Beginning Conducting	1
MUS 327, Choral Conducting	3
MUS 386, Pedagogy and Literature I	2
MUS 413, Form and Analysis	3
MUS 415, Orchestration	3
MUS 440, Senior Recital	2
MUS 486, Pedagogy and Literature II	2
Music Ensemble Choir	7
<i>Total Basic Music and Performance Credits</i>	<i>71</i>

Students must pass the piano proficiency exam before student teaching.

Students must be admitted into the Teacher Education Program before taking MUS 346 or MUS 349.

General Education Component

Critical Thinking/Analysis	6
ENGL 111G/ENGL 111H, Rhetoric and Composition	4
PHYS 120G, Introduction to Acoustics	4
Additional Writing Course	3
Math	3
Liberal Studies/Historical Perspectives	3
Human Thought/Behavior	3
Social Analysis	3
View Wider World (outside Arts and Sciences, Education)	3
<i>Total General Education requirements</i>	<i>35</i>

Professional Education Courses

CEP 210, Educational Psychology	3
MUS 250, Introduction to Music Education.....	1
MUS 346, Elementary Music Methods	2
MUS 349, Secondary Music Methods	2
SPED 350, Exceptional Learners	3
RDG 414, Reading in Content Area	3
EDUC 471, Secondary Student Teaching	9
EDUC 482, Secondary Student Teaching Seminar	3
<i>Total Professional Education</i>	<i>26</i>

DEGREE: Bachelor of Music

OPTIONS: Instrumental Performance

Music Business

Piano Performance

Vocal Performance

The Bachelor of Music (B.M.) curriculum is designed to prepare students for performance careers and private studio teaching. In addition, the B.M. degree may be obtained in any of several fields that can lead to positions as professional entertainers or teachers at the college and university levels, or lead to music-related work in the business world.

REQUIREMENTS – Instrumental Performance

Music Core

MUS 230, Applied Piano *	4
MUS 230, 330, 430, Applied Music I/II/III (instrumental)	28
MUS 440, Senior Recital	2
Music Ensemble Band, Orchestra, Choir	8
<i>Total Music Core</i>	<i>42</i>

Supportive Courses in Music

MUS 202, Introduction to Music Literature	3
MUS 211/212, Ear Training I/II	2
MUS 213/214, Music Theory I/II	6
MUS 273, Music Technology	3
MUS 311/312, Ear Training III/IV	2
MUS 313/314, Music Theory III/IV	6
MUS 302, History and Literature to 1750	3
MUS 303, History and Literature After 1750	3
MUS 325, Beginning Conducting	1
MUS 413, Form and Analysis	3
MUS 415, Orchestration	3
Two 400 level music history courses	6
<i>Total Supportive Courses</i>	<i>41</i>

Note: Students must pass piano proficiency before completing the Senior Recital

General Education Component

Critical Thinking/Analysis	6
ENGL 111G/ENGL 111H, Rhetoric and Composition	4
PHYS 120G, Introduction to Acoustics	4
Additional Writing Course	3
Math	3
Liberal Studies/Historical Perspectives	3
Human Thought/Behavior	3
Social Analysis	3
Remaining Arts and Sciences core requirement	3
Viewing a Wider World	6
<i>Total General Education credits</i>	<i>38</i>

Departmental Requirements

Electives	6
Foreign Language or academic electives	8
<i>Total Departmental Requirements</i>	<i>14</i>

*MUS 145, 146, 147, 261, Functional Piano I, II, III, IV may be substituted for MUS 230 App. Piano

REQUIREMENTS – Music Business

Music Core

MUS 202, Introduction to Music Literature	3
MUS 211/212, Ear Training I/II	2
MUS 213/214, Music Theory I/II	6
MUS 230, Applied Piano *	2

MUS 230, 330, 430, Applied Music I/II/III (instrumental)	12
MUS 273, Music Technology	3
MUS 302, History and Literature to 1750	3
MUS 303, History and Literature After 1750	3
MUS 311/312, Ear Training III/IV	2
MUS 313/314, Music Theory III/IV	6
MUS 325, Beginning Conducting	1
MUS 339, Music Business Survey	3
MUS 413, Form and Analysis	3
MUS 415, Orchestration	3
MUS 440, Senior Recital	2
MUS 441, Supervised Studio Teaching	2
Music Ensemble Band, Orchestra, Choir	8
<i>Total Music Core</i>	<i>64</i>

Courses Outside Field

BUSA 111, Business in a Global Society	3
ACCT 251, Management Accounting	3
ACCT 252, Financial Accounting	3
ECON 252G, Microeconomics	3
MGT 309, Human Relations	3
FIN 341, Financial Analysis and Markets	3
MUS 455, Music Business Internship	3
<i>Total Outside Field</i>	<i>21</i>

General Education Component

Critical Thinking/Analysis	6
ENGL 111G/ENGL 111H, Rhetoric and Composition	4
PHYS 120G, Introduction to Acoustics	4
Additional writing course	3
Math	3
Liberal Studies/Historical Perspectives	3
Human Thought/Behavior	3
ECON 251G, Principles of Macroeconomics	3
Remaining Arts and Sciences core requirement	3
Viewing a Wider World	6
<i>Total General Education credits</i>	<i>38</i>

Electives

Two 400-level music history courses	6
Advance MKTG course	3
<i>Total Electives</i>	<i>9</i>

*MUS 145, 146, 147, 261, Functional Piano I, II, III, IV may be substituted for

MUS 230, Applied Piano.

Must pass piano proficiency before completing the Senior Recital.

REQUIREMENTS – Piano Performance**Music Core**

MUS 230, 330, and 430, Applied Music	32
MUS 386, 486, Applied Music Pedagogy and Literature I, II	4
MUS 440, Senior Recital	2
Music Ensemble Chamber or Large Ensemble	4
MUS 470, Special Topics: Functional Skills for Pianists	2
<i>Total Major Area</i>	<i>44</i>

Supportive Courses in Music

MUS 202, Introduction to Music Literature	3
MUS 211/212, Ear Training I/II	2
MUS 213/214, Music Theory I/II	6
MUS 273, Music Technology	3
MUS 302, History and Literature to 1750	3
MUS 303, History and Literature After 1750	3
MUS 311/312, Ear Training III/IV	2
MUS 313/314, Music Theory III/IV	6
MUS 325, Beginning Conducting	1
MUS 413, Form and Analysis	3
MUS 415, Orchestration	3
History course	3
<i>Total Supportive Courses</i>	<i>38</i>

General Education Component

Critical Thinking/Analysis	6
ENGL 111G/ENGL 111H, Rhetoric and Composition	4

PHYS 120G, Introduction to Acoustics	4
Additional writing course	3
Math	3
Liberal Studies/Historical Perspectives	3
Human Thought/Behavior	3
Social Analysis	3
Remaining Arts and Sciences core requirement	3
Viewing a Wider World	6
<i>Total General Education credits</i>	<i>38</i>

Departmental Requirements

Electives	11
<i>Total Dept. Requirements</i>	<i>11</i>

REQUIREMENTS – Vocal Performance**Music Core**

MUS 230, Applied Piano *	4
MUS 230, 330, 430, Applied Music I/II/III (voice)	28
MUS 262/263, Vocal Diction I/II	4
MUS 386, Applied Music Pedagogy and Literature I	2
MUS 440, Senior Recital	2
Music Ensemble Choir	8
<i>Total Music Credits</i>	<i>48</i>

Supportive Courses in Music

MUS 202, Introduction to Music Literature	3
MUS 211/212, Ear Training I/II	2
MUS 213/214, Music Theory I/II	6
MUS 273, Music Technology	3
MUS 302, History and Literature to 1750	3
MUS 303, History and Literature After 1750	3
MUS 311/312, Ear Training III/IV	2
MUS 313/314, Music Theory III/IV	6
MUS 325, Beginning Conducting	1
MUS 413, Form and Analysis	3
MUS 415, Orchestration	3
MUS 429, Opera and Music Drama	3
One 400-level music history course	3
<i>Total Supportive Courses</i>	<i>41</i>

General Education Component

Critical Thinking/Analysis	6
ENGL 111G/ENGL 111H, Rhetoric and Composition	4
PHYS 120G, Introduction to Acoustics	4
Additional writing course	3
Math	3
Liberal Studies/Historical Perspectives	3
Human Thought/Behavior	3
Social Analysis	3
Remaining Arts and Sciences core requirement	3
Viewing a Wider World	6
<i>Total General Education credits</i>	<i>38</i>

Electives

One semester each of French and German	8
Electives	3
<i>Total Electives</i>	<i>11</i>

*MUS 145, 146, 147, 261, Functional Piano I, II, III, IV may be substituted for
MUS 230, Applied Piano.

Must pass piano proficiency before completing the Senior Recital.

MINOR: Music

A student may not earn both a bachelor's degree in the Department of Music and a minor in Music. The minor requires 24 credits.

MUS 202, Introduction to Music Literature	3
MUS 211, Ear Training I	1
MUS 212, Ear Training II	1
MUS 213, Music Theory I	3
MUS 214, Music Theory II	3
Nine upper division elective credits	9
Applied music	2
Ensemble or additional applied music	2

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.