

**REQUIRED COURSES****Freshman Year (18 credits)**

ART 150, Drawing I.....	3
ART 155, 2D Fundamentals and ART156, 3D Fundamentals .....	6
ART 295, Introduction to Art History I.....	3
ART 296, Introduction to Art History II.....	3
One 200-level studio course.....	3

**Sophomore Year (21 credits)**

ART 151, Drawing II.....	3
ART 250, Drawing III.....	3
ART 255, Introduction to Graphic Design and Digital Media, or ART 280, Printmaking I .....	3
ART 270, Photography I.....	3
ART 271, Large Format Photography and Lighting .....	3
ART 297, Introduction to Art History III .....	3
One 200-level elective studio course .....	3

**Junior Year (21 credits)**

ART 350, Drawing IV .....	3
ART 369, The Constructed Image.....	3
ART 370, Color Photography (may be taken at the same time as ART 271, Large Format Photography and Lighting).....	3
ART 373, Nonsilver Photographic Processes .....	3
Two 300/400-level art history courses.....	6
One 300/400-level elective studio course.....	3

**Senior Year (15 credits)**

ART 470, Photography Workshop.....	6
Three 300/400-level elective art history or studio courses.....	9

A senior thesis show is required of all graduating B.F.A. students in their last semester.

**EMPHASIS: Printmaking**

The printmaking program provides the student with a strong foundation in the major forms of art. Particular emphasis is placed on the development of the student's aesthetic through printmaking and drawing.

**REQUIRED COURSES****Freshman Year (18 credits)**

ART 150, Drawing I.....	3
ART 155, 2D Fundamentals and ART156, 3D Fundamentals .....	6
ART 295, Introduction to Art History I.....	3
ART 296, Introduction to Art History II.....	3
One 200-level studio course.....	3

**Sophomore Year (21 credits)**

ART 151, Drawing II.....	3
ART 250, Drawing III.....	3
ART 280, Printmaking I.....	3
ART 281, Printmaking II .....	3
ART 297, Introduction to Art History III .....	3
Any two 200-level courses, to include a 3-D area .....	6

**Junior Year (21 credits)**

ART 350, Drawing IV .....	3
ART 480, Printmaking Workshop .....	3
Two 300/400-level art history courses.....	6
Two 300/400-level elective studio courses .....	6

**Senior Year (18 credits)**

ART 450, Drawing Workshop.....	3
ART 380, Printmaking III .....	3
ART 480, Printmaking Workshop .....	3
One 300/400-level art history period course.....	3
Two 300/400-level elective studio courses .....	6

A senior thesis exhibition will be required of all graduating B.F.A. students in the last semester.

**EMPHASIS: Sculpture**

Students enrolled in the sculpture program are encouraged to experiment with a variety of forms and ideas and to distill these visual and conceptual experiences into art that reflects the individuality of the maker. Students frequently travel to exhibitions, symposia, and artists' studios to further their knowledge of

sculpture and their awareness of making art within a historical context. A collection of power tools, metal, plaster, and woodworking facilities, and a spacious outdoor work area augment students' practice.

**REQUIRED COURSES****Freshman Year (18 credits)**

ART 150, Drawing I.....	3
ART 155, 2D Fundamentals and ART156, 3D Fundamentals .....	6
ART 295, Introduction to Art History I.....	3
ART 296, Introduction to Art History II.....	3
One 200-level studio course.....	3

**Sophomore Year (21 credits)**

ART 151, Drawing II.....	3
ART 250, Drawing III.....	3
ART 265, Sculpture I, A.....	3
ART 266, Sculpture I, B.....	3
ART 297, Introduction to Art History III .....	3
Two 200-level studio courses .....	6

**Junior Year (21 credits)**

ART 350, Drawing IV .....	3
ART 365, Sculpture IIA.....	3
ART 366, Sculpture IIB.....	3
Two 300/400-level art history courses.....	6
Two 300/400-level studio courses.....	6

**Senior Year (18 credits)**

ART 465, Sculpture Workshop .....	12
One 300/400-level art history course .....	3
One 300/400-level studio course .....	3

A senior thesis exhibition is required of all graduating B.F.A. students in their last semester.

**MINOR: Art History**

The Art History minor requires 27 credits. Students cannot earn both a bachelor's degree in the Department of Art and an Art History minor unless they pass at least 6 credits in the minor beyond the requirements of the major. Students cannot earn both the Bachelor of Art with an Art History emphasis and a minor in Art History.

ART 295, Introduction to Art History I.....	3
ART 296, Introduction to Art History II.....	3
ART 297, Introduction to Art History III.....	3
Five art history courses at the 300-499 level .....	15
One course in humanities or studio art, subject to approval by the minor advisor .....	3

**MINOR: Studio Art**

The Studio Art minor requires 27 credits. Students cannot earn both a bachelor's degree in the Department of Art and a Studio Art minor unless they pass at least 6 credits in the minor beyond the requirements of the major.

18 credits from among: ART 110G, Visual Concepts, ART 150, Drawing I, ART 151, Drawing II, ART 155, Design: 2-D, ART 156, 3-D Design and Process, ART 255, Introduction to Graphic Design and Digital Media, ART 256, Introduction to Letter Forms and Typographic Design, ART 260, Painting I, ART 265, Introduction to Sculpture: Process and Possibility, ART 270, Photography I, ART 275 or 276, Ceramics I, A, or Ceramics I, B, ART 280, Printmaking I, ART 285, Metals and Jewelry I, ART 295, Introduction to Art History I, ART 296, Introduction to Art History II, and/or ART 297, Introduction to Art History III .....	18
Nine credits of studio art or art history at the 300-499 level .....	9

## ASTRONOMY

**Associate Professor Jim Murphy, department head**

**Professors** Anderson, Klypin, McNamara, Walterbos; **Associate Professors** Holtzman **Assistant Professors** Churchill, Vogt; **College Professors** Beebe, Webber; **College Assistant Professors** Chanover, Harrison  
(505) 646-4438

**MINOR: Astronomy**

The department offers an undergraduate astronomy minor degree, which requires 18 credits. The department does not offer a B.S. degree but encourages interested students to enroll in the physics program as a first step toward a career in astronomy. Our 100- and 300-level courses meet various university general education requirements. All students are invited to share with us this exciting area of study, through our basic and advanced undergraduate courses. The Department of Astronomy offers a graduate program leading to M.S. and Ph.D. degrees. Interested students should consult the Graduate School Catalog, which is available from the Graduate School.

**Regular Undergraduate Course Offerings**

ASTR 105G, The Planets.....	4
ASTR 110G, Introduction to Astronomy.....	4
ASTR 301G, Revolutionary Ideas in Science.....	3
ASTR 305G, Life in the Universe.....	3
ASTR 308G, Into the Final Frontier.....	3
ASTR 330G, Planetary Exploration.....	3
ASTR 405, Astronomy and Astrophysics I.....	3
ASTR 406, Astronomy and Astrophysics II.....	3
ASTR 435, Observational Techniques I.....	3

Other courses at the 300- and 400-levels are offered on an occasional basis. Consult the "Course Descriptions" chapter in this catalog.

**MINOR: Astronomy**

Pass one of ASTR 105G, The Planets; or ASTR 110G, Introduction to Astronomy.....	4
Pass two of: ASTR 301G, Revolutionary Ideas in Science, ASTR 305G, Life in the Universe, ASTR 308G, Into the Final Frontier, and/or ASTR 330G, Planetary Exploration.....	6
Note: ASTR 400 (Undergraduate Research) may replace one or both of the courses in this area	
Pass one in each of the following: a) ASTR 405, Astronomy and Astrophysics I or ASTR 505, Astronomy and Astrophysics I.....	3
b) ASTR 406, Astronomy and Astrophysics II, or ASTR 506, Astronomy and Astrophysics II.....	3
c) ASTR 435, Observational Techniques I, or ASTR 535, Observational Techniques I.....	3

**BIOLOGY****Professor Daniel Howard, department head**

*Professors* Bernstein, Boecklen, Botsford, Gutschick, Howard, Milligan; *Associate Professors* Houde, Nishiguchi, Serrano, Smith; *Assistant Professors* Bailey, Curtis, Dawe, Gustafson, Hanley, Preszler, C. Shuster, Throop, Unguez, Wright; *College Associate Professor* Ghoshroy; *College Assistant Professor* M. Shuster (505) 646-3611

**DEGREE: Bachelor of Arts**  
**MAJOR: Biology**

**DEGREE: Bachelor of Conservation Ecology**  
**MAJOR: Conservation Ecology**

**DEGREE: Bachelor of Science**  
**MAJOR: Biology**  
**MAJOR: Microbiology**

**MINORS: Biology**  
**Conservation Ecology**  
**Human Biology**  
**Microbiology**

A student may earn the Bachelor of Arts in biology or the Bachelor of Science through major studies in the Department of Biology. The Bachelor of Science in biology or microbiology is recommended for premedical and predoctoral

students, those preparing to teach biology and other sciences at the secondary and college levels, those interested in the numerous fields of biological research and applied biology, and those planning on obtaining an advanced degree in biology.

Freshmen should begin taking required biology and chemistry courses in their first year. Students are required to speak with an adviser in the Department of Biology as soon as they declare a biology major. The department welcomes students considering a biology major who wish preliminary advising. More information on the Department of Biology is available on our web site, <http://biology-web.nmsu.edu>

A student must earn a grade of C- or better to receive credit for any non-departmental or departmental requirement for any major or minor offered by the Department of Biology.

It is strongly recommended that students include a minor or supplementary course work in a specific discipline to enhance their academic experience. See under General Information at the beginning of this catalog specific requirements for, and departments which offer, a minor. Selection of a minor or a supplementary course work area should be done in consultation with an adviser.

The department offers minors in biology and microbiology for students in other disciplines. In addition, we offer minors in human biology and in conservation ecology, for biology and other majors.

**DEGREE: Bachelor of Arts****MAJOR: Biology**

The Bachelor of Arts curriculum is intended for students who desire a broad education with emphasis in biology in a program chosen by the student in consultation with an adviser. The Bachelor of Arts is recommended for those who plan to teach biology at the primary and secondary school levels or to use a background in life science in business or other endeavors.

**Nondepartmental Requirements**

CHEM 111-112, General Chemistry I, II.....	8
CHEM 211, Organic Chemistry, or CHEM 313, 314, 315, Organic Chemistry, I, II and Lab.....	4-8
MATH 142G, Applied Mathematics for Biological and Social Sciences I, or MATH 191, Calculus and Analytic Geometry I.....	3
One course from one of the following departments: astronomy, computer science, geology or physics.....	3-4

**Departmental Requirements**

BIOL 111G, Natural History of Life.....	3
BIOL 111L, Natural History of Life Laboratory.....	1
BIOL 211G, Cellular and Organismal Biology.....	3
BIOL 211L, Cellular and Organismal Biology Laboratory.....	1
BIOL 305, Principles of Genetics.....	3
BIOL 467, Evolution.....	3

One course from each of the following four general areas:

Cellular integration: BIOL 311, 377, 474, 490

Organismal integration: BIOL 314, 354, 381, 442, 480

Ecology: BIOL 301, 473

Evolutionary pattern: BIOL 312, 313, 322, 330, 433, 439, 440, 445, 447, 465, 472

Sufficient upper-division biology electives to bring total upper-division credits to 20. Choice of electives should be done in consultation with an adviser.

Other electives: Sufficient to bring total to 128, including 54 upper-division.

**DEGREE: Bachelor of Conservation Ecology**  
**MAJOR: Conservation Ecology**

See "Cross-College Degrees" section of this catalog.

**DEGREE: Bachelor of Science**  
**MAJOR: Biology**

The major in biology provides a solid academic base for those planning to enter any of the various fields of the biological sciences. The program allows considerable latitude. Suggested course sequences for specific areas of interest within biology (such as botany, zoology, ecology, conservation biology, animal, plant, or cellular physiology, preprofessional studies, and preparation for graduate school) can be obtained from the student's adviser.

**Nondepartmental Requirements**

CHEM 111-112, General Chemistry I and II.....	8
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