

- A S 102. Career Planning and Development 1 cr.
Individual assessment of self, the world of work, and the career decision making process.
- A S 200. Interdisciplinary Topics 1-4 cr.
An interdisciplinary approach to subject matter cutting across departmental fields. Specific subjects to be announced in the *Schedule of Classes*.
- A S 300. Interdisciplinary Topics 1-3 cr.
An interdisciplinary approach to subject matter cutting across departmental fields. Specific subjects to be announced in the *Schedule of Classes*.
- A S 301. Arts and Sciences Advising Seminar 1 cr.
Selected students, second semester juniors or seniors, will spend supervised time in the Advising Center advising and evaluating the work of the center. May be repeated for a maximum of 3 credits. Prerequisite: consent of instructor. Graded S/U.
- A S 305. Prehealth Internship 1 cr. (30P)
Placement with an office of a health professional. May be repeated for a maximum of 3 credits. Prerequisites: consent of instructor, minimum junior standing, 2.5 GPA. Student must be registered with the Prehealth Advisory Committee and must have a minimum of 15 credits completed at NMSU. Graded S/U.
- A S 450. Interdisciplinary Topics 1-3 cr.
An interdisciplinary approach to subject matter cutting across departmental fields. Specific subjects to be announced in the *Schedule of Classes*.
- A S 499. Research Projects 1-3 cr.
Students conduct research projects on behalf of the College of Arts and Sciences. Prerequisite: 2.5 GPA in 28 or more graded NMSU credits. May be repeated for a maximum of 6 credits.

• ASTR—Astronomy

- ASTR 105G. The Planets 4 cr.
Comparative study of the planets, moons, comets, and asteroids which comprise the solar system. Emphasis on geological and physical processes which shape the surfaces and atmospheres of the planets. Laboratory exercises include analysis of images returned by spacecraft. Intended for non-science majors, but some basic math required. Satisfies general education requirement IIB.
- ASTR 110G. Introduction to Astronomy 4 cr. (3+3P)
A survey of the universe. Observations, theories, and methods of modern astronomy. Topics include planets, stars and stellar systems, black holes and neutron stars, supernovas and gaseous nebulae, galaxies and quasars, and cosmology. Emphasis on physical principles involving gravity, light, and optics (telescopes). Generally non-mathematical. Laboratory involves use of the campus observatory and exercises designed to experimentally illustrate principles of astronomy.
- ASTR 210. The Search for Extraterrestrial Life 3 cr.
Recent discoveries concerning life within the Solar System are discussed and generalized to other star systems. Current space travel and interstellar communication efforts are reviewed.
- ASTR 301G. Revolutionary Ideas in Science 3 cr.
Examines fundamental scientific revolutions that have shaped our view of Earth and the universe. Topics range from biology to geology to astronomy and provide the perspective necessary to evaluate scientific issues in current public policy debates. Includes in-class debates. Prerequisite: any general education science course.
- ASTR 305G. The Search for Life in the Universe 3 cr.
Use of information from several of the sciences to explore the likelihood that life exists elsewhere in the universe. Subjects include an overview of historical ideas about the possibility of life elsewhere in the universe, the chemistry and biology of life on Earth, recent explorations for life within our solar system, and current search strategies for life in the universe and their scientific basis.
- ASTR 308G. Into the Final Frontier 3 cr.
Exploration of space: a brief review of the history of space flight, the Apollo program, joint U.S.-Soviet space missions, and unstaffed exploration of the planets. Emphasis on knowledge gained through these efforts. Includes new space initiatives. Same as HON 308G.
- ASTR 330G. Planetary Exploration 3 cr.
A current planetary mission is studied within the context of the solar system. The data acquired and principles involved in executing the mission, as well as political and economic implications, are examined. Prerequisite: MATH 142G or equivalent. Same as HON 330G.
- ASTR 350. Special Topics 3 cr.
Special topics course in astronomy for undergraduate students. Specific subjects to be announced in the *Schedule of classes*.
- ASTR 400. Undergraduate Research 1-3 cr.
Supervised individual study or research. Prerequisite: consent of instructor. May be repeated for a maximum of 6 credits.
- ASTR 405. Astronomy and Astrophysics I 3 cr.
Application of physical principles to problems in modern astronomy. Emphasis on radiation mechanisms and radiation transfer in astronomical systems. Prerequisite: consent of instructor. No S/U grading. Same as ASTR 505 with less advanced work.
- ASTR 406. Astronomy and Astrophysics II 3 cr.
Sequel to ASTR 405 with emphasis on basic dynamics and (magneto) hydrodynamics. Prerequisite: consent of instructor. No S/U grading. Same as ASTR 506 with less advanced work.
- ASTR 435. Observational Techniques I 3 cr.
Up-to-date introduction to modern observational astronomy. Includes computers, data analysis, optical telescopes, optical and infrared photometry, image processing, and detection. Prerequisite: consent of instructor. No S/U grading. Same as ASTR 535 with less advanced work.
- ASTR 461. Astronomy for Teachers 3 cr.
Illustration and presentation of concepts of astronomy in different subject areas to broaden teacher preparation for science education in public schools.

• AXED—Agricultural and Extension Education

- AXED 100. Introduction to Agricultural, Extension, and Technology Education 3 cr.
Orientation to programs, philosophy, and competencies needed for the role of an educator in career and technical education, agricultural education, extension education, technology education, and opportunities in industry, governmental agencies, communications, and international organizations. Career opportunities in diverse educational settings.
- AXED 105. Techniques in Agricultural Mechanization 3 cr. (2+2P)
Development of competencies in agricultural mechanics including safety, tool identification, operation and maintenance of hand and power tools, cold metal, drafting, and plumbing procedures. Designed for any major wishing to improve mechanical skills needed in agriculturally related occupations in education and industry.
- AXED 111. Freshmen Orientation 1 cr.
Orientation to university life, including available resources and methods to promote success at NMSU. General exposure to fields in agriculture and home economics. Open to all freshmen and transfer students. Graded S/U.
- AXED 200. Special Topics 1-4 cr.
Specific subjects and credits to be announced in the *Schedule of Classes*. Maximum of 4 credits per semester. No more than 6 credits toward degree.
- AXED 201G. Effective Leadership and Communication in Agricultural Organizations 3 cr. (2+2P)
Theory and practice in leadership and communication for professionals who must work effectively in leadership and supervisory roles with people in agricultural business, industry, government agencies, and education. Course focuses on contemporary leadership theories. Oral communication skills in informative and persuasive speaking, parliamentary procedure, and for small groups are developed.
- AXED 205. Metal Technology-Fabrication 3 cr. (2+4P)
Processes and procedures of metal fusion, including gas and electric welding techniques and safety. Designed for any major wishing to improve mechanical skills needed in agriculturally related occupations in education and industry.
- AXED 230. Early Field-Based Experience 1 cr.
Five-day field experience plus orientation and evaluation session. First-hand view of the roles of professional educators through field experiences in agricultural, extension, or technology education settings. Site options may include schools, extension offices, agencies, business, and industry. Prerequisites: consent of instructor. Corequisite: AXED 100.
- AXED 300. Special Topics 1-4 cr.
Course addresses specific subjects and issues as identified by department. Topics and credits to be announced in the *Schedule of Classes*. Maximum of 4 credits per semester. No more than 6 credits may be applied to a degree.