

Arizona State University

2003–2004 Graduate Catalog

All colleges, schools, divisions, and departments establish certain academic requirements that must be met before a degree is granted. Advisors, directors, department chairs, and deans are available to help the student understand these requirements, but the student is responsible for fulfilling them. At the end of a student's course of study, if requirements for graduation have not been satisfied, the degree is not granted. For this reason, it is important for all students to acquaint themselves with all regulations, to be informed throughout their college careers, and to be responsible for completing requirements. Courses, programs, and requirements described in the catalog may be suspended, deleted, restricted, supplemented, or changed in any other manner, at any time, at the sole discretion of the university and the Arizona Board of Regents. The catalog does not establish a contractual relationship but summarizes the total requirements the student must currently meet before qualifying for a faculty recommendation to the Arizona Board of Regents to award a degree.

Arizona Štate University reserves the right to add, amend, or revoke, without notice, any of the materials—information, requirements, regulations—published in this catalog.

The catalog is also available on the Web at www.asu.edu/aad/catalogs. Graduate admissions information is available at www.asu.edu/graduate/admissions. Address requests for additional information to

GRADUATE ADMISSIONS OFFICE ARIZONA STATE UNIVERSITY PO BOX 871003 TEMPE AZ 85287-1003

Arizona State University complies with the federal Family Educational Rights and Privacy Act of 1974 as amended.

POSTMASTER: Send change of address to

GRADUATE CATALOG MAIL SERVICES ARIZONA STATE UNIVERSITY PO BOX 870710 TEMPE AZ 85287-0710 The *Graduate Catalog* is produced by Academic and Administrative Documents, in conjunction with the Graduate College, under the Office of the Executive Vice President and Provost of the University.

Academic and Administrative Documents

Manager / Steve Gobbell
Associate Editors / Dot DiRienzi, John MacIsaac
Assistant Editor / Rebecca Howe
Senior Office Specialist / Julie Zehring
Senior Desktop Publishing Specialist / Michael J. Martin
Desktop Publishing Specialist / Margaret Dempsey
Proofreader / Jeanne Fairbanks
Computer Support Specialist IV / Anthony Garone
Editorial Assistant II / Elizabeth Moreau

Graduate College Coordination

Editor / Gabriel Goltz
Associate Editor / Dennis Durband
Graphics Consultant / Marilyn Canteloupe
Editorial Consultant / Virginia Hunter

Course Coordination

Manager, Communications / Katty McIntosh Desktop Publishing Assistant / Michael J. Belisle

Cover Design

InfoDesign Management, Scottsdale, Arizona

Printing

Von Hoffmann, Inc., Owensville, Missouri

Academic and Administrative Documents welcomes questions, suggestions, recommendations, and comments about the organization and format of the catalog. Send them by e-mail to aad@asu.edu, or write to

CATALOG EDITOR ARIZONA STATE UNIVERSITY PO BOX 874211 TEMPE AZ 85287-4211

To discuss specific matters of catalog content, contact the units responsible.



President Michael M. Crow

Tim Trumble photo

Dear ASU Students and Prospective Students:

Michael Crow

It is my privilege, as its 16th president, to welcome you to Arizona State University and introduce you to the 2003–2004 *Graduate Catalog*. Within these pages you will find confirmation of why ASU is a Research Extensive university and on the verge of becoming the new American University, in one of the fastest growing metropolitan areas in the country.

ASU consistently attracts talented and diverse students and faculty who are drawn by our commitment to delivering a quality education, to achievements in research and creative activities, and by the richness in our cultural diversity. The depth and breath of ASU graduate degree programs will give you a true sense of our commitment to quality in research and teaching.

I am tremendously excited to welcome you to ASU and to our vigorous academic community.

Sincerely,

Michael M. Crow President



Bianca L. Bernstein

Tim Trumble photo

I extend a warm welcome to new and continuing graduate students at Arizona State University. Our advanced programs are a source of pride for our students, alumni, and faculty. We offer 48 doctoral programs, 95 master's degree programs, and 15 graduate certificates, supported by 1,600 faculty members whose innovative teaching and groundbreaking research are recognized nationally and internationally.

A leading center for research and technological development, ASU partners with the private sector to advance the economic competitiveness and quality of life in Arizona. Benefiting from the rich resources and intellectual capital existing in the Phoenix metropolitan area, ASU is a key contributor in developing the industries and services of the New Economy. As one of the major metropolitan research universities in America, we take pride in our success in matching university talents and expertise with the vision of community leaders to shape the future.

Our faculty are at the forefront of reforming doctoral education. ASU is one of 14 institutions in the U.S. participating in the Woodrow Wilson National Fellowship Foundation's Responsive Ph.D. program to improve doctoral education in the arts and sciences. We emphasize professional development through our Preparing Future Faculty program, one of the first in the nation, and our Preparing Future Professionals program for students headed toward nonacademic careers. A prominent feature of graduate education at ASU is the wide range of opportunities for students and faculty to work together on interdisciplinary, collaborative research projects.

We are proud of our commitment to graduate education: to prepare our students to become scholars and professional leaders in a new century marked by constant change, rapid technological advances, and rich traditions. Our partnership with ASU students provides a nurturing environment to enhance their intellectual and personal growth. Please call on us if we may be of assistance.

I wish you every success in the pursuit of your goals at Arizona State University.

Cordially,

Bianca L. Bernstein

Dean of the Graduate College

ianea V. Bernoten