College of Education

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PURPOSE

For students, choosing a professional college is an important step because it determines the profession within which a career will be built. The College of Education provides a stimulating, challenging forum wherein scholars and practitioners interact in the discovery and mastery of the science and art of educational endeavors. This balanced approach, in which research and practice are viewed as essential and complementary, enables the college to produce superior educators.

The purposes of the faculty of the College of Education are as follows:

- to engage in the scholarly, scientific, and professional study of education;
- to prepare competent professionals who will serve in a variety of critical educational roles;
- to develop productive scholars who will make significant contributions to the educational literature and to the quality of educational practice; and
- to serve the education profession at the local, national, and international levels.

In accord with these purposes, the College of Education is committed to producing quality scholarship and research and to excellence in teaching.

ORGANIZATION

The College of Education is organized into three divisions. These divisions and their academic program areas are listed below:

Division of Curriculum and Instruction

Adult Education
Early Childhood Education
Educational Media and Computers
Elementary Education
Multicultural Education
Reading and Library Science
Secondary Education
Special Education

Division of Educational Leadership and Policy Studies

Educational Administration and Supervision Educational Policy Studies Higher Education

Division of Psychology in Education

Counseling Psychology
Counselor Education
Learning and Instructional
Technology
Lifespan Developmental Psychology
Measurement, Statistics, and
Methodological Studies
School Psychology

Services to students and the community are provided through the centers and offices described below.

Center for Bilingual/Bicultural Education. The Center for Bilingual/Bicultural Education conducts interdisciplinary research on classroom interaction, language development, and cognitive development. The focus of these research efforts is bilingual and bicultural students in Arizona.

Center for Indian Education. The

Center for Indian Education serves as a service agency to Indian communities, school districts, and Indian students attending ASU. The center also conducts research on Indian education in Arizona and other states with American Indian populations.

Office of Student Affairs. The Office of Student Affairs assists individuals interested in teacher preparation programs through advising, admission, and retention activities and certification assistance. Other services include program of study validation, petition review, student communications, and high school and community college articulation/relations.

Office of Professional Field Experiences. The Office of Professional Field Experiences places all teacher preparation students in public schools and similar institutions for internships and student teaching, monitors students' progress in their field experiences, sponsors courses for cooperating teachers, and conducts research on student performance in the field.

Office of Diversity, Recruitment, and Support Programs. The Office of Diversity, Recruitment, and Support Programs counsels students regarding College of Education scholarships and provides recruitment and support services for students wishing to enter the Professional Teacher Preparation Program (PTPP).

College of Education Degrees, Majors, and Concentrations

Major	Degree	Administered by
Baccalaureate Degrees		
Early Childhood Education ¹	B.A.E.	Division of Curriculum and Instruction
Elementary Education	B.A.E.	Division of Curriculum and Instruction
Concentration: bilingual education/English as		
a second language		
Secondary Education	B.A.E.	Division of Curriculum and Instruction
Academic specializations: biological sciences;		
business education; chemistry; Chinese;		
communication; economics; English; family		
resources and human development (home economics);		
French; geography; German; history; Japanese;		
journalism; mathematics; mathematics/chemistry;		
mathematics/physics; physical education; physics;		
physics/chemistry; political science; Russian;		
social studies; Spanish		
Selected Studies in Education ¹	B.A.E.	College of Education
Special Education	B.A.E.	Division of Curriculum and Instruction
Graduate Degrees		
Counseling	M.C.	Division of Psychology in Education
Counseling Psychology	Ph.D.	Division of Psychology in Education
Counselor Education	M.Ed.	Division of Psychology in Education
Concentration: counseling and student personnel	nun 1	B
Counselor Education	Ed.D. ¹	Division of Psychology in Education
Curriculum and Instruction	M.A., M.Ed.	Division of Curriculum and Instruction
Concentrations: bilingual education, communication		
arts, early childhood education, elementary education,		
English as a second language, Indian education, mathematics education, multicultural education,		
reading education, science education, social studies		
education, and secondary education		
Curriculum and Instruction	Ed.D.	Division of Curriculum and Instruction
Concentrations: bilingual education, communication	Ea.D.	Division of Carrearant and Instruction
arts, curriculum studies, early childhood education,		
elementary education, English as a Second language,		
Indian education, mathematics education, multicultural		
education, reading education, science education,		
social studies education, and secondary education		
Curriculum and Instruction	Ph.D. ²	Interdisciplinary Committee on Curriculum
Concentrations: curriculum studies, early		and Instruction
childhood education, educational media and		
computers, elementary education, English		
education, exercise and wellness education, music		
education, physical education, reading education,		
science education, special education		
Educational Administration and Supervision	M.A., M.Ed.,	Division of Educational Leadership and
	Ed.D.	Policy Studies
Educational Leadership and Policy Studies	Ph.D.	Division of Educational Leadership and
Educational Madia and Computers	M.Ed.	Policy Studies Division of Curriculum and Instruction
Educational Media and Computers Concentration: business education	wi.Eu.	Division of Currenally and Instruction
Concentration. Dusiness education		

 $^{^{1}}$ Applications are not being accepted at this time. 2 This program is administered jointly by the College of Education and the Graduate College. See the "Graduate College" section of this cata-

Major	Degree	Administered by
Educational Psychology	M.A., M.Ed.	Division of Psychology in Education
Educational Psychology	Ph.D.	Division of Psychology in Education
Concentrations: lifespan developmental		
psychology; measurement, statistics, and		
methodological studies; school psychology		
Higher and Adult Education	M.Ed., Ed.D.	Division of Educational Leadership and
Concentrations: adult education, higher education		Policy Studies
Learning and Instructional Technology	M.A., M.Ed.,	Division of Psychology in Education
	Ed.D.	
Learning and Instructional Technology	Ph.D.	Division of Psychology in Education
Concentrations: instructional technology, learning		
School Library Science	M.A., ¹ M.Ed. ¹	Division of Curriculum and Instruction
Social and Philosophical Foundations of Education	M.A.	Division of Educational Leadership and Policy Studies
Special Education	M.A.	Division of Curriculum and Instruction
Special Education	M.Ed.	Division of Curriculum and Instruction
Concentrations: gifted, mildly handicapped,		
multiculturally exceptional, severely/multiply		
handicapped		

¹ Applications are not being accepted at this time.

Center for Academic Precocity. The Center for Academic Precocity provides academic services to intellectually advanced students in grades pre-K through 11. These services include individual assessment, talent identification, and a variety of courses.

Counselor Training Center. The Counselor Training Center provides counseling for ASU students, staff, and the community at large in personal and career development, stress management, and marriage and family issues. Counseling is conducted by graduate students in counseling and counseling psychology under the supervision of certified psychologists.

Other Units. Other units within the college offering specialized research and educational services include the College of Education Preschool, Arizona Educational Information System, Technology Based Learning and Research, and Mountain States Multifunctional Resource Center.

Teacher Education

Programs that prepare students for teacher certification by the state are available to both the undergraduate pursuing a first degree and the individual with a college degree in a noneducation field. Undergraduate students interested in teacher certification in art, music, dance, or theatre enroll through programs offered by the College of Fine Arts. These students must also meet the same eligibility requirements for admission to the PTPP on page 247. See pages 321–356 for more information.

Undergraduate programs leading to the Bachelor of Arts in Education degree are described in the text that follows. Descriptions of graduate degree programs can be found in the *Graduate Catalog*.

Bachelor of Arts in Education

Candidates for the Bachelor of Arts in Education degree must complete the PTPP offered by the College of Education. Graduates of this program are able to demonstrate proficiency in specified knowledge areas or skills, including the following:

- 1. principles and application of effective instruction;
- classroom organization and management;
- 3. content or subject matter;
- 4. specific curriculum and teaching strategies;
- interrelationship of culture and schooling in a multicultural society;

- 6. human development;
- 7. communication skills;
- 8. theories of learning and motivation:
- 9. assessment and evaluation; and
- 10. computer literacy.

Each student in the PTPP selects one of five major areas that provide specialized instruction and preparation. The program areas are

- 1. Bilingual/ESL Education;
- 2. Early Childhood Education (birth–third grade);
- 3. Elementary Education;
- 4. Secondary Education; and
- Special Education.

Students in Secondary Education may be certified for grades 7–12 in a specific academic specialization. Students in art, foreign languages, music, or physical education complete a K–12 endorsement in their field. Special Education majors may be certified for grades K–12 in mental retardation (MR), emotionally disabled (ED), or learning disabilities (LD).

PTPP Areas and Options or Endorsements

Early Childhood Education Elementary Education bilingual education English as a second language

² This program is administered jointly by the College of Education and the Graduate College. See the "Graduate College" section of this catalog.

Secondary Education certification in specific academic specializations K-12 endorsements in art, music, or physical education Special Education emotionally disabled learning disabilities mental retardation

PTPP students in areas other than Special Education complete a common core of courses as well as courses specific to the area or option selected. Early Childhood Education and Elementary Education prepare students for certification by the state in grades K-8. Students who select these majors develop the knowledge and skills needed to teach children from a variety of language, cultural, and developmental backgrounds. The Early Childhood Education concentration prepares students to work in infant programs, preschools, and grades K-3. The Elementary Education bilingual education/English as a second language (ESL) concentration prepares students to work in bilingual/ESL settings in grades K-8. The Special Education major prepares students to teach mildly handicapped students in diverse settings and for certification in grades K-12 in MR, ED, or LD. Students completing the Elementary Education major must also complete the human development requirements and an academic specialization. Students completing the Special Education major must complete a human development requirement and a specialization in MR, ED, or LD.

Secondary Education offers programs that prepare students for certification by the state in specific academic subjects in grades 7–12. Students with teaching majors in the College of Fine Arts earn the appropriate bachelor's degree from that college.

Courses for the academic specialization are determined by the faculty in the academic discipline. Therefore, students with majors in Secondary Education and the College of Fine Arts have two academic advisors: one in the college and department of the academic specialization and one in the Office of Student Affairs in the College of Education. For more information, refer to the following section titled, "Academic Specialization," page 248.

ADVISING

All students pursuing teaching certificates should seek early advising from the Office of Student Affairs in the College of Education. Careful planning and early advising in developing an approved program of study are essential if teacher candidates are to complete certification and graduation requirements within the typical 120-semester-hour undergraduate degree pro-

Mandatory Advising. Transfer students are required to meet with an academic advisor before registering for their first semester classes. Freshmen must meet with an advisor before registering for each of their first two semes-

ADMISSION

Preprofessional Admission

Students admitted to ASU during their freshman and sophomore years may also be admitted to the College of Education with preprofessional status. Preprofessional students should seek advising within the College of Education through its Office of Student Affairs, EDB 7. Note: Admission to ASU with preprofessional status in the College of Education does not guarantee admission to the PTPP. Admission to the PTPP is a separate process.

Professional Program Admission

Students are eligible for consideration for admission to the PTPP if they meet the following criteria:

- admission to ASU as a classified student;
- 2. a minimum cumulative GPA of
- 3. completion of at least 56 semester hours by the time of PTPP admis-
- submission of scores from either the American College Test (ACT) or Pre-Professional Skills Test (a minimum score is not required; an applicant may be referred for additional skill development while matriculating through the program of
- completion of ENG 101 and 102 and General Studies L1 or S1 and N1 requirements with a grade of

- "C" or better (courses in progress do not satisfy this requirement);
- a special application with additional supporting materials (emphasis is placed on prior experience, paid or volunteer, working with the age or group of the certification area sought).

Admission is competitive and not guaranteed to all who satisfy the minimum admission criteria. Emphasis is placed on prior volunteer or paid experience working with the age or group of the certification area sought.

Some academic units have additional requirements. Note: Students seeking admission to K-12 or secondary education programs should consult the Office of Student Affairs (602/965-3877) to determine if there are additional admission requirements for their teaching fields.

PTPP application deadlines are February 15 for fall admission and September 15 for spring admission. Applicants should contact the Office of Student Affairs for an application.

Because PPST or ACT scores must be included for an application to be complete, applicants should plan to take the test well in advance of application deadlines.

Transfer Students

To be considered for admission to the PTPP, transfer students must first be formally admitted to ASU (see pages 50-52). Transfer students must also meet all PTPP admission requirements and should contact the Office of Student Affairs within the College of Education for admission procedures and advising. ASU Undergraduate Admissions should receive the application for admission to ASU, transcripts, applicable test scores, and other required information at least three months before the PTPP application deadline date for the desired PTPP admission semester.

Students completing their first two years of course work at a community college or at a four-year institution in Arizona other than ASU should consult the University Academic Advising Center and ASU academic advisors during those two years for advice in

planning a sequence of courses that will meet the ASU General Studies requirement.

Program of Study

A program of study must be filed during the first semester of enrollment in the PTPP. Preprofessional students completing 87 hours (the university limit for registering without a program of study) who have not been admitted to the PTPP are provided a registration waiver by the College of Education. See page 68 for university requirements.

Program Requirements

The College of Education offers the Bachelor of Arts in Education (B.A.E.) degree. Progress toward the degree involves meeting university, college, and division requirements. The degree program also includes courses and academic content required for teacher certification by the State of Arizona. Students seeking certification in one of the fine arts complete degree requirements in the College of Fine Arts and specified courses through the PTPP.

COURSE WORK REQUIREMENTS

A minimum of 120 semester hours are required for the B.A.E. degree in these categories:

- 1. General Studies;
- 2. academic specialization;
- human development (Bilingual/English as a Second Language Education, Early Childhood Education, Elementary Education, Secondary Education, and Special Education majors only); and
- 4. PTPP.

General Studies Requirement

All students enrolled in a baccalaureate degree program must satisfy a university requirement of a minimum of 35 hours of approved course work in General Studies, as described on pages 71–74. General Studies courses are listed on pages 74–94, in the course descriptions, in the *Schedule of Classes*, and in the *Summer Sessions Bulletin*.

Preprofessional students should complete as many of the General Studies courses as possible before admission to the PTPP. Students are encouraged to consult with an academic advisor to ensure they comply with all necessary requirements.

Academic Specialization

Courses in the academic specialization give students a greater depth of knowledge in one academic area. Elementary Education majors complete 18 hours in a single academic subject. Special Education majors specialize in MR, ED, or LD. A Secondary Education major completes 36-60 hours, depending upon the area, in the subject in which the student wishes to be certified: fine arts may require more. Teacher candidates should confer with the Office of Student Affairs regarding acceptable academic specializations. Refer to the pages shown below for descriptions of the academic specializations:

Academic Specialization	Page(s)		
art education ¹	327–328		
biological sciences	118		
business education	See advisor.		
chemistry	124		
Chinese	153		
communication	375		
dance education ¹	336-337		
economics	See advisor.		
English	129		
family resources and			
human development	137		
French	153		
geography	140		
German	153		
history	146		
Japanese	153		
journalism	379		
mathematics	164		
mathematics/chemistry	164		
mathematics/physics	164		
music ²	340-341		
physical education	133		
physics	176		
physics/chemistry	176		
political science	180		
Russian	153		
social studies	114, 188		
Spanish	153		
theatre education ¹	352–353		

Art education, dance education, and theatre education concentrations are under corresponding B.F.A. majors.

Human Development

The programs that prepare students for teacher certification by the state in

elementary and special education require students to complete 15 credits selected from specific human development courses pertinent to the teaching area. Teacher candidates should confer with an academic advisor in the Office of Student Affairs regarding course selection.

Professional Teacher Preparation Program

The PTPP is a four-semester sequential program consisting of 35–44 credits. Ranging from seven to 14 credits per semester, the courses for one semester must be completed before enrolling in the next semester. In other words, courses for one semester may not be taken at the same time as those scheduled for another semester. In addition to the PTPP courses, students continue completing the General Studies requirement and human development and academic specialization requirements through the third semester of the program.

Four-Semester Requirements Professional Teacher Preparation Program

Elementary Education (K-8) Major

Seme	ster I	(7)		
DCI	396	Field Experience I0		
EDP	301	Learning and Motivation		
		in Education2		
EDP	303	Human Development L2 3		
SPF	301	Culture and Schooling2		
Seme	ster I	I (7)		
DCI	303	Classroom Organization and		
		Management2		
DCI	397	Field Experience II0		
EDP	302	Assessment and Evaluation		
		in Education1		
EED	400	Principles of Effective		
		Instruction in Elementary		
		Education3		
EMC	300	Computers in Education1		
Seme	ster I	II (14)		
EED	401	Teaching Science and Social		
		Studies to Children4		
EED	402	Teaching Mathematics in the		
		Elementary School2		
EED	404	Language Arts2		
EED	496	Field Experience0		
RDG	401	The Teaching of Reading3		
RDG	402	Reading Practicum3		
Semester IV (14)				
EED	478	Student Teaching in the		
		Elementary School12		
SPF	401	Theory and Practice in		
		Education2		

² Students major in either Choral-General Music or Instrumental Music under the B.M. degree.

	wit Bilin	ary Education (K–8) Major th a Concentration in gual Education/English a Second Language	RDG RDG Seme	401 402 ster I	Field Experience	Semester III (9) SPE 414 Methods and Strategies in Behavior Management
Seme	ster I	(7)	EED	4/8	Student Teaching in the	SPE 494 ST: Instruction in Content
DCI	396	Field Experience I0	CDE	401	Elementary School12	Areas: Science/Social
EDP	301	Learning and Motivation in Education2	SPF	401	Theory and Practice in Education2	Studies
EDP		Human Development L2 3	Sec	onda	ry Education (7–12) Major	Semester IV (16)
SPF	301	Culture and Schooling2	Bee	onua	ry Education (7–12) Major	SPE 478 Student Teaching in
Seme	ster I	I (7)	Seme		* 7	Special Education13
		Principles of Instruction			Field Experience I0	(one certification area)
		in Language Minority	EDP	301	Learning and Motivation in Education2	SPE 484 Internship3
DCI	202	Education	EDP	303	Human Development L2 3	SPE 311, 312, 314, 336, and 361
DCI	303	ě			Culture and Schooling2	may be taken before formal PTPP ad-
DCI	397	and Management	Seme	ctor T	T (8)	mission. Satisfactory completion of
EDP		Assessment and Evaluation			Field Experience II0	these courses does not guarantee ad-
LDI	302	in Education1			Assessment and Evaluation	mission to the PTPP.
EMC	300		LDI	302	in Education1	imission to the 1111.
	_		EMC	300		Field Experience Requirements
		II (14)	RDG		Literacy and Instruction	In addition to course work, students
BLE	401	2			in the Content Areas3	admitted to the PTPP are required to
DIE	402	Studies to Children4	SED	400	Principles of Effective	participate in directed field experiences
DLE	402	Teaching Strategies in Mathematics2			Instruction in Secondary	during each of the four semesters of the
BLE	405	Teaching Reading in			Education3	program. The field experiences
DLL	105	BLE/ESL3	Seme	ster T	II (6)	progress from short-term observation
BLE	406	Reading Practicum3			Principles, Curricula,	and participation to long-term super-
BLE		Language Arts2	522	.00	and Methods3	vised practice teaching. <i>Note:</i> Students
BLE	496	Field Experience0	SED	496	Field Experience0	should expect these field experiences to
Seme	ster T	V (14)	Metho	ods co	urse in academic	be above and beyond the class times
	478	Student Teaching in the			specialization3	listed in the Schedule of Classes for
		Elementary School12	Seme	ster I	V (14)	each semester. Such field experiences
SPF	401	Theory and Practice in			Student Teaching in the	typically take place in public schools
		Education2			Secondary Schools12	throughout the greater Phoenix area.
	171	Clair at Films 4	SPF	401	Theory and Practice in	Regular attendance is required during
		y Childhood Education			Education2	all field experiences. Students should
w	ıuı N	4–8 Teacher Certification	Sn	acial	Education (K-12) Major	plan extra travel time and expect to
	ster I					confer with placement teachers and
		Field Experience I0	Seme			field facilitators before or after sched-
ECD	308	Foundations of Early			Human Development L2 3	uled field experiences. To meet field
ECD	214	Childhood Education3	SPE	311		experience requirements, students must
ECD		The Developing Child3	CDE	214	Exceptional Children SB 3	plan to have their own transportation
EDP	301	Learning and Motivation in Education2	SPE	314	Introduction to Bilingual/ Multicultural Special	and be available during regular school
SPF	301	Culture and Schooling2			Education3	hours.
			SPE	336	Behavioral and Emotional	Teaching is a highly demanding and
	ster I		512		Problems in Children3	extraordinarily complex profession.
DCI	303	Classroom Organization	SPE	361		Students desiring to become teachers
DCI	207	and Management			Disabilities3	must maintain academic standards and
ECD		Field Experience II0 Language Arts2	SPE	496	Field Experience0	demonstrate requisite qualifications for
		Assessment and Evaluation	Seme	ster T	I (12)	successful teaching including effective
LDI	302	in Education1	SPE		Mental Retardation3	interpersonal skills, basic communica-
EMC	300	Computers in Education1	SPE		Parent Involvement and	tion skills, appropriate professional
	_				Regulatory Issues3	conduct, and satisfactory performance
		II (12) Instructional Strategies	SPE	412	Evaluating Exceptional	during field experience assignments.
LCD	1 01	Instructional Strategies: Social Studies and			Children3	Observation and participation assign-
		Creative Arts3	SPE	413		ments in the schools during first, sec-
		C. C			Reading, and Arithmetic	
ECD	402	Instructional Strategies:			0 1 1	ond and third semester field experience
ECD	402	Instructional Strategies: Math and Science3	CDE	100	for Exceptional Children3 Field Experience	ond, and third semester field experience

placements are designed to prepare students for the highly demanding performance-based student teaching during semester four.

Student Teaching. The culminating field experience, called *student teaching*, occurs in the fourth semester of the PTPP and is a full-day, full-semester obligation. Student teaching is possible only during fall and spring semesters.

Admission to Student Teaching (Semester IV). To be admitted to student teaching, a student must have attained a high level of professional standards in previous field experience assignments and meet the following requirements:

- 1. be in good standing as defined in this policy;
- 2. have no incompletes in PTPP courses;
- 3. complete all PTPP courses, with the exception of SPF 401; and
- have an approved program of study on file.

There are additional requirements for certain programs:

- Secondary Education majors may have no more than two required courses remaining in the academic specialization and have no more than two courses to complete in General Studies. Students must also receive approval from their specialization advisor.
- Elementary and Special Education majors must have completed all human development courses and may only have two additional courses to complete.

Students must complete the application procedure and approval to student teach from the Office of Professional Field Experiences at least 10 weeks before the beginning of the student teaching term. Student teachers must adhere to the calendar, regulations, and philosophy of the schools in which they are placed. Beginning and ending dates for student teaching are determined by the Office of Professional Field Experiences in cooperation with the placement schools. Because student teaching is on a full-day schedule, 8:00 a.m. to 4:00 p.m. Monday through Friday for 15 consecutive weeks, student teachers are strongly encouraged to avoid extra activities and course work that would interfere with the heavy demands placed upon them while student teaching.

GRADUATION REQUIREMENTS

Candidates for the Bachelor of Arts in Education degree are required to complete an approved program of at least 120 semester hours. The College of Education expects its degree candidates to meet individual course assessment standards, field-experience observation criteria, courses required for teacher certification, and other proficiency standards and performance criteria required to demonstrate knowledge and skill in the areas listed under the Bachelor of Arts in Education description on pages 246–247 of this catalog.

In addition, candidates must meet all university graduation requirements. See pages 66–70.

ACADEMIC STANDARDS

Preprofessional Status

Students admitted to the College of Education on *preprofessional status* are subject to the general standards of academic good standing of the university. However, students who maintain standards of academic good standing during their freshman and sophomore years do not necessarily qualify for admission to any teacher preparation program offered by the College of Education.

Professional Program Status

Students admitted to the PTPP within the College of Education must maintain academic standards and demonstrate requisite qualifications for successful teaching, including sound physical and mental health, interpersonal skills, basic communication skills, a positive attitude, appropriate professional conduct, and satisfactory performance in field

experiences. Because PTPP standards are higher than those for the university, a student who is suspended from the PTPP may still be eligible to enroll in other non-PTPP courses.

A copy of the Retention and Disqualification Policy for the PTPP may be secured in the Office of Student Affairs, EDB 7.

Students demonstrating behaviors or characteristics that make it questionable whether they can succeed in the teaching profession are reviewed by the director of the Office of Professional Field Experiences and the director of the Division of Curriculum and Instruction. If necessary, a review panel composed of faculty members who have had direct involvement with the student is convened. Following this review, the student may be referred to the Division of Curriculum and Instruction Standards and Appeals Committee. The committee's review may result in a decision to disqualify the student or the specification of conditions under which continued participation is permitted, i.e., probation.

Students who wish to appeal decisions of the Standards and Appeals Committee of the Division of Curriculum and Instruction may do so in writing to the dean of the college or the University Undergraduate Standards Committee. Any exceptions to the retention and disqualification policies and procedures must be approved by the Standards and Appeals Committee of the Division of Curriculum and Instruction and the dean of the College of Education.

Postbaccalaureate Programs for Initial Teacher Certification

Postbaccalaureate programs that prepare students for initial teacher certification by the state are designed for those who hold a bachelor's degree in an area other than education. The college offers postbaccalaureate programs in bilingual education, early childhood education, elementary education, secondary education, and special education. Special education students must qualify for and be concurrently admitted to a master's degree program in special education. Information on postbaccalaureate programs is available through the Office of Student Affairs, EDB 7. The office provides academic advising and information regarding requirements, procedures, and deadline dates.

A student who wishes to be considered for entry must meet the College of Education admission requirements for postbaccalaureate programs:

- 1. an earned bachelor's degree from an accredited institution;
- a cumulative GPA of 2.50 or better for the last 60 semester hours of credit earned; and
- 3. submission of a completed application form and supporting materials by the appropriate deadline dates during the semester before admis-

Admission to postbaccalaureate programs is selective. Note: Not all students who meet the minimum requirements are admitted to the program.

A student who also wishes to pursue a master's degree in conjunction with teacher certification by the state should contact the program area office in the intended area of study. The master's degree student must meet the admission requirements of both the College of Education and the Graduate College. No more than nine semester hours of graduate credit earned before formal admission to the Graduate College and a master's degree program can be included in a candidate's master's degree program of study.

Student Teaching

Students in a postbaccalaureate program for initial teacher certification must file student teaching applications early in the semester before the student teaching term. Application deadlines are October 15 for spring semester and February 15 for fall semester. To be accepted for student teaching, students must

- 1. attain a cumulative GPA of 2.50 or higher in required professional education course work;
- complete all required professional education course work other than one preapproved course that can be taken concurrently with student teaching (Secondary Education students must also receive approval from their academic specialization advisors):
- 3. remove all academic deficiencies such as grades of "D," "E," or "I" before placement; and

4. obtain a final approval from the Office of Professional Field Experiences (this review considers performance in field settings and academic achievement).

Certification for Teaching

The curricula for both the undergraduate and postbaccalaureate teacher education programs meet the requirements for teacher certification in the State of Arizona.

In addition to the course requirements specified in this catalog, there are other requirements for teacher certification mandated by the State of Arizona including the U.S. Constitution and Arizona Constitution requirement. Some teaching areas have specific math, science, and fine arts require-

Because these requirements vary over program areas and may be changed at any time, students are encouraged to maintain close contact with the Office of Student Affairs regarding the most current state certification requirements.

The College of Education is approved by the Arizona Department of Education for the preparation of elementary, secondary, and special education teachers. Students who complete an approved program of study and meet all graduation requirements of the university and the college are recommended for certification to the Arizona Department of Education. The Office of Student Affairs maintains information about current certification requirements in Arizona and other states.

The College of Education also offers courses for certified teachers leading to special endorsements by the Arizona Department of Education. Of special interest are endorsements in the areas of bilingual education, early childhood education, English as a second language (ESL), middle school education, and reading. The bilingual education endorsement is required of all teachers specifically responsible for providing bilingual instruction. The ESL endorsement is required of all teachers specifically responsible for providing ESL instruction. Students should contact the Office of Student Affairs for information and advising regarding teaching concentrations or special teaching endorsements.

Correspondence Course Work for Credit

It is the general policy of the College of Education not to accept course credit for courses in education taken through correspondence. Exceptions to this policy may be approved if the correspondence course work has been approved in advance of enrollment in the course by the student's advisor, respective program coordinator, and division director. In all such cases, an appropriate rationale must be submitted with the request to enroll.

College of Education Graduate Program Core Courses

The core courses for the College of Education graduate programs are shown below. These courses are no longer required for all graduate majors in the College of Education. Contact the division offering the degree you are seeking to obtain specific core requirements.

COLLEGE OF EDUCATION

COE 501 Introduction to Research and Evaluation in Education. (3) F, S, SS Overview of educational inquiry from controlled, quantitative to qualitative, naturalistic. Emphasis on locating and critically interpreting published research.

502 Introduction to Quantitative Methods. (3) F. S. SS

Topics in statistical analysis, measurement, and research design. Exploratory data analysis, estimation theory, and statistical inference. Use of computers for data analysis. Cross-listed as EDP 502.

503 Introduction to Qualitative Research. (3) F, S, SS

Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. Cross-listed as EDP 503.

504 Learning and Instruction. (3) F, S, SS Introduction to psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. Cross-listed as EDP 504.

505 American Education System. (3) F, S,

Political, social, historical, and philosophical analyses of American education at all levels. Examination of primary sources, legal findings, and case studies.

Omnibus Courses: See pages 44-45 for omnibus courses that may be offered.

Division of Curriculum and Instruction

Sheryl L. Santos *Director* (ED 409) 602/965–1644

PROFESSORS

BARONE, BITTER, CHRISTIE, EDELSKY, EDWARDS, FAAS, FALTIS, GRYDER, HUDELSON, McISAAC, MOYER, PRIETO, RAY, RUTHERFORD, SEARFOSS, STAHL, STALEY, VALVERDE, WALLEN, ZIMILES, ZUCKER

ASSOCIATE PROFESSORS

ANDERSON, ARIAS, BAKER, BENAVIDES, BLANCHARD, COHEN, COHN, DI GANGI, EEDS, FLORES, GOMEZ, GUZZETTI, HATFIELD, KLEIN, KNAUPP, McCOY, McGOWAN, NELSON, PETERSON, PIBURN, RADER, ROBERTS, SANTOS, SURBECK, SWISHER, VALLEJO, WILSON

ASSISTANT PROFESSORS

BLUMENFELD-JONES, FLEMISTER, KINARD, MIDDLETON, TRUJILLO

PROFESSORS EMERITI

ABRAHAM, ARMSTRONG, AXFORD, J.E. BELL, J.W. BELL, M. BELL, BOYD, BROOK, CHASEY, CHRISTINE, COOK, CROUCH, DOYLE, DUDEK, FINER, FRASIER, FULLERTON, GILL, GRIFFITH, HAGGERSON, HARDT, HIGGINS, HOOVER, JACOBS, JELINEK, JONES, KAMINS, KIESOW, KINGSBURY, KOZACIK, LAMM, MALONE, MANERA, McGRATH, MITCHELL, MOORE, O'BEIRNE, O'BRIEN, OLMSTED, PODLICH, RICE, SATTERTHWAITE, SCHALL, SHOFSTALL, STEERE, SULLIVAN, THOMAS, VEATCH. WAMACKS, WISEMAN

Program Areas

Adult Education*
Early Childhood Education
Educational Media and Computers
Elementary Education
Multicultural Education
Reading and Library Science*
Secondary Education
Special Education

Degrees: B.A.E., M.A., M.Ed., Ed.D., Ph.D.

The Division of Curriculum and Instruction offers undergraduate and graduate academic programs. The undergraduate programs are designed to prepare persons to teach effectively in early childhood, elementary, secondary, and special education settings. Concentrations available at the undergraduate level include bilingual education, English as a second language (ESL), Indian education, and multicultural education. Programs in special education lead to Arizona teacher certification in the mentally handicapped, emotionally disabled, learning disabilities, and early childhood education for the handicapped areas. Programs of study leading to special endorsements by the Arizona Department of Education are early childhood education, bilingual education, ESL, middle school education, and

Postbaccalaureate programs leading to teaching certification are available in early childhood, elementary, secondary, and special education areas. The graduate programs in this division are designed to prepare persons for roles such as master teachers, educational leaders, researchers, media and computer specialists.

Faculty within the division are engaged in research and professional training projects. Graduate students have opportunities to participate in varied teaching, research, and professional training (on- and off-campus) activities.

CURRICULUM AND INSTRUCTION

DCI 302 Principles and Applications of Effective Instruction. (3) F, S

Principles of teaching identified by research on teaching effectiveness. Application of principles to classroom practice. For majors only. Prerequisite: EDP 303.

303 Classroom Organization and Management. (2) F, S

Develops understanding and application of classroom organization and management principles, strategies, and procedures. For majors only. Prerequisites: EDP 301, 303; SPF 301.

396 Field Experience I. (0) F, S

First-semester PTPP. Observation and limited participation in a school setting. Focus on observation of development, learning, management, instruction, assessment, and motivation. 4 clock hours required per week. Corequisite: semester I of the PTPP.

397 Field Experience II. (0) F

Second-semester PTPP. Observation and limited participation in a school setting. Focus on observation of development, learning, management, instruction, assessment, and motivation. 6 clock hours required per week. Corequisite: semester II of the PTPP.

701 Curriculum Theory and Practice. (3) F,

Curriculum theory and practice as a field of study. Its current orientations and applications, modes of inquiry, and community of scholars and practitioners. Seminar. Corequisite: Master's level curriculum course.

Adult Education Program Area

ADULT EDUCATION

AED 510 Introduction to Adult Education. $(3)\ N$

Historical development, core content, and principal areas of adult education.

512 Characteristics of Adult Learners. (3) N Characteristics of the adult learner throughout the life span.

Omnibus Courses: See pages 44–45 for omnibus courses that may be offered.

Early Childhood Education Program Area

EARLY CHILDHOOD EDUCATION

ECD 300 Introduction to Early Childhood Education. (3) F, S

Examines theoretical approaches to teaching young children and social, historical, political, and educational issues that impact early child-hood education. Prerequisite: admission to the Professional Teacher Preparation Program (PTPP).

308 Foundations of Early Childhood Education. (3) F, S

The foundational basis of the early childhood field, including historical roots, current theories, professional options, and policy developments at national, state, and local levels. Prerequisite: postbaccalaureate certification program admission.

310 Educational Environments: Infants/ Toddlers. (3) F, S, SS

Organizing, planning, and implementing developmentally appropriate educational practices to provide optimal learning environments for infants and toddlers in group settings.

311 Social Studies in Early Childhood Education. (3) F

Development of democratic living in all areas of the curriculum. Objectives, problem solving, selection of content, scope and sequence, construction of instructional material, and resources. Experiences with children. Prerequisite: postbaccalaureate certification program admission.

312 Educational Environments: Preschool–Kindergarten. (3) F, S

Consideration of all aspects of curriculum. Philosophy, principles, practices, problems, and evaluation in the integrated-experience program. Prerequisite: postbaccalaureate certification program admission.

^{*}Applications are not being accepted in Adult Education or Library Science.

314 The Developing Child. (3) F, S, SS Provides a base for understanding and working with young children. Examines all aspects of development of children, birth through age

eight, with implications for teachers and par-

322 Communication Arts in Early Childhood Education. (3) F

Factors affecting language development. Setting conditions for learning in listening, speaking, reading, and writing. Prerequisite: ENG 213 or equivalent; postbaccalaureate certification program admission.

378 Practicum in Early Childhood Development. (3) F, S

Provides a field-based experience in selected early childhood settings (outside the public schools prior to student teaching). Prerequisite: ECD 314.

401 Instructional Strategies: Social Studies and Creative Arts. (3) F, S

Presents materials, techniques, and resources for a balanced program of social studies and aesthetic expression appropriate for children in preschool through 3rd grade, with emphasis on the integrated curriculum. Corequisites: ECD 402, 496; RDG 401, 402.

402 Instructional Strategies: Math and Science. (3) F, S

Emphasizes developmentally appropriate educational strategies and instructional techniques in teaching mathematics and science to children (preschool through 3rd grade), within an integrated curriculum approach. Prerequisites: BIO 100; MAT 114 or 117 or equivalent; MTE 180 or equivalent; PHS 110 or equivalent. Corequisites: ECD 401, 496; RDG 401, 402.

404 Language Arts. (2) F, S

Presents theory on the social nature of oral and written language and congruent classroom practices. Prerequisites: DCI 396; EDP 301, 303; SPF 301. Corequisites: DCI 303, 397; EDP 302; EMC 300.

496 Field Experience. (0) F, S

Application of course content in a preschool through 3rd grade setting. Emphasis on observation, focus on child-centered curriculum, planning and delivering instruction, and assessment. Corequisites: ECD 401, 402; RDG 401, 402,

522 Developmental Social Experiences in Early Childhood Education. (3) F

Materials, techniques, aesthetic expression, creative activities, and values in the integrated curriculum. Prerequisite: ECD 311 or equiva-

525 Communication Arts in Early Childhood Education. (3) S

Problems and trends of current programs and oral language development. Effort to bring together language acquisition findings with educational practices. Opportunity for self-directed learning/study. Prerequisite: ECD 322 or equivalent.

527 Mathematics in Early Childhood Education, (3) F

Theory and practice in the use of manipulative materials for teaching mathematics to preschool and primary grade children. Prerequisite: ECD 402 or EED 380 or 402 or equiva-

544 Play Education. (3) S, SS

Theories of play and the educational implications of each. Practical applications at the early childhood level.

555 Modern Practices in Early Childhood Education. (3) F, SS

Trends and practices, instructional and resource materials, and methods and techniques in early childhood education.

733 Social and Emotional Development. (3)

Inquiry into the social and emotional development dynamics in children, such as peer relationships, self-concept, and parenting processes, with implications for teachers

744 Evaluative Procedures: Young Children. (3) S

A critical examination and use of developmentally appropriate evaluative procedures for children from birth through age eight.

Educational Media and Computers Program Area

BUSINESS EDUCATION

BUE 480 Teaching Business Subjects. (3)

Organization and presentation of appropriate content for business subjects in the secondary school

501 Principles of Business Education. (3) F History, philosophy, principles, and objectives of business and distributive education

502 Organization and Management of Cooperative Programs. (3) F

Work-study programs for business occupations in high schools and community colleges.

503 Competency-Based Business and Vocational Education. (3) S

Development and administration of competency-based individualized programs in business and vocational education.

505 Current Literature in Business and Vocational Education. (3) S Critical analyses, generalizations, and trends

in business and vocational education.

506 Information Processing for Business and Vocational Teachers. (3) SS

Development of curriculum and strategies for teaching information processing; hardware/ software evaluation and equipment acquisition techniques in business and vocational educa-

512 Technology in Business and Vocational Education. (3) SS

Emerging curricula and instructional technology in business and vocational education.

EDUCATIONAL MEDIA AND COMPUTERS

EMC 300 Computers in Education. (1) F, S An introduction to word processing, databases, spreadsheets, teacher utility programs, and evaluation of educational software. Required for majors in the College of Education.

321 Computer Literacy. (3) F, S, SS Survey of the role of computers in business and education. Laboratory experience in using word processing, database, and spreadsheet software. 2 hours lecture, 2 hours lab. General studies: N3.

323 Computer Applications. (3) F, S Introduction to computer applications such as HyperCard, Telecommunications, Authoring Languages, and Expert Systems. Lecture, lab. General studies: N3.

405 Presentation Technology for Multimedia. (3) F

An exploration of multimedia hardware and software used in creating presentations for educational, corporate, and commercial appli-

406 Computer Graphics and Animation. (3)

The study and application of design and animation techniques for use in video or computer-based presentations.

455 Animation and Special Effects. (3) F An examination of the art, science, and impact of animation and other special effects used in

502 Current Issues and Problems in Media/ Computer Education. (3) F, S

Introduction to current theory and practice in instructional media and computers. Overview of production areas.

505 Presentation Techniques for Multimedia. (3) F

An exploration of multimedia hardware and software used in creating presentations for educational, corporate, and commercial applications. Lecture, lab.

506 Computer Graphics and Animation. (3)

The study and application of design and animation techniques for use in video or computer-based presentations. Lecture, lab.

507 Computers in Educational Administration. (3) F, S

Survey of computer use and applications in educational administration. Lecture, lab. Cross-listed as EDA 507.

511 Computer Applications in Education. (3) F, SS

Use and evaluation of computers for word processing, information management, graphics, and authoring instruction in educational settinas.

513 Introduction to Multimedia. (3) F Introduction to multimedia, emphasizing applications for business, industry, and public and higher education.

521 Instructional Media Design. (3) F, S Preparing specifications for instructional television, film, slide/tape programs, and computer-based instruction. CD-ROM. Prerequisite: EMC 511 or instructor approval.

522 Evaluating Computer Materials. (3) S,

SS Soloation utilization d

Selection, utilization, design, and evaluation of instructional computer material. Focus on learning theory, criteria for evaluating educational software. Prerequisite: EMC 521 or instructor approval.

523 Telecommunication for Instruction. (3)

Introduction to Internet resources for educators. Instructional applications of distance-learning technologies.

524 Imaging Technology. (3) F

Use of optical scanning and digital data manipulation of photographs for use in educational presentations and publications.

525 Presentation Graphics. (3) S

Design, production, and display of computer graphics for group presentations. Prerequisite: EMC 521 or instructor approval.

527 Instructional Television. (3) F

Design and production of instructional programs for television. Lecture, lab. Prerequisite: EMC 521 or instructor approval.

528 Photomedia Production. (3) S

Design and production of multimedia programs. Emphasis on slide/tape format. Prerequisites: EMC 521 and 524 and 525 *or* instructor approval.

530 Development of Computer-Based Instruction. (3) $\mbox{\ensuremath{\mathsf{S}}}$

The systematic design, development, and formative evaluation of computer-based instruction. Prerequisite: EMC 511 or instructor approval.

531 Hypermedia. (3) F

The application of HyperCard and other support software in the design and production of instructional computer-based material for business, industry, and public and higher education. Lecture, lab.

532 Desktop Publishing. (3) F, SS

Design and production of educational materials using computer-based word processing, graphics, and page layout programs. Lecture,

535 Interactive Video. (3) S

The use of various authoring systems and support programs to assist in the design and production of regular and repurposed interactive video. Lecture, lab.

584 Educational Media Internship. (1–6) F, S SS

Prerequisites: EMC 521; LNT 502; instructor approval.

637 Computers in Elementary School Curriculum. (3) SS

Experiences with educational uses of computers; computer awareness, family/societal impact, classroom applications/software, and curriculum development.

701 Advanced Technologies in Education. (3) S

Examining the role and impact of artificial intelligence, expert systems, and related advanced technologies in education.

702 Research in Technology-Based Education. (3) F

Critical exposure to theories, research, and methods in technology-based education.

703 Research in Educational Telecommunications. (3) ${\sf S}$

Seminar with emphasis on research in telecommunications and distance education. Prerequisite: EMC 523 or instructor approval.

Elementary Education Program Area

ELEMENTARY EDUCATION

EED 320 Teaching Science to Children. (3) F. S. SS

Develops students' personal philosophies of the nature of elementary school science; why teach science and how children learn science. Knowledge and skills in planning instruction, using instructional models, integrating the curriculum, employing current science programs and materials, and evaluating children's learning. Prerequisite: A basic biological and physical science course. Limited to students admitted to the postbaccalaureate certification program.

333 Communication Arts in the Elementary School. (3) F, S, SS

Factors affecting language growth. Setting conditions for teaching oral and written language. Limited to students admitted to the postbaccalaureate certification program.

344 Elementary School Organization and Management. (3) F, S, SS

Overall program of the elementary school. Practical approaches to discipline and to planning, organizing, and managing the classroom. Limited to students admitted to the postbaccalaureate certification program.

355 Social Studies in the Elementary School. (3) F, S, SS

Methods and materials for teaching Social Studies in the elementary grades. Limited to students admitted to the postbaccalaureate certification program.

380 The Teaching of Mathematics in the Elementary School. (3) F, S, SS $\,$

A beginning course in methods and materials used. Laboratory experiences and computer applications with curriculum materials. Classroom observation required. Limited to students admitted to the postbaccalaureate certification program. Prerequisite: MTE 180 or equivalent.

400 Principles of Effective Instruction in Elementary Education. (3) F, S, SS

Principles and models of teaching identified by research on instructional effectiveness. Application of principles to classroom practice in elementary schools. Prerequisite: PTPP admission.

401 Teaching Science and Social Studies to Children. (4) F, S

Examines core functions, processes, concepts, materials, goals, objectives, scope and sequence, unit and lesson planning, and models of instruction. Corequisites: EED 402, 404, 496; RDG 401, 402.

402 Teaching Mathematics in the Elementary School. (2) F. S

A beginning course in the teaching of mathematics in grades K–8. Laboratory experiences, use of technology, problem solving, integration with other subjects, instructional strategies, application of learning theories, current research and trends. Classroom observation and participation required. Prerequisites: MAT 114 or 117 or equivalent; MTE 180 or equivalent.

404 Language Arts. (2) F, S

Presents theory on the social nature of oral and written language and congruent class-

room practices. Corequisites: EED 401, 402, 496; RDG 401, 402.

478 Student Teaching in the Elementary School. (3–15) F, S

Supervised teaching in the area of specialization. A synthesized experience in curriculum, instruction, and classroom management. Prerequisites: 2.50 GPA; completion of professional course sequence; approval of Professional Field Experiences.

496 Field Experience. (0) F, S

Application of course content in a (K–8) school classroom. Emphasis on observation, pupil management, planning and delivery of instruction, and assessment. Corequisites: EED 401, 402, 404; RDG 401, 402.

511 Principles of Curriculum Development. (3) F, S, SS

Contemporary curriculum theories. Curriculum as an interrelated entity. Principles of conceiving and effecting change.

526 Communication Arts in the Elementary School. (3) $\ensuremath{\mathsf{S}},\ensuremath{\mathsf{SS}}$

A critical examination of school language arts teaching, focusing on theoretical assumptions regarding oral- and written-language development

528 Social Studies in the Elementary School. (3) F, SS

Problems and trends of current programs. Development of a balanced and articulated program of social studies. Prerequisite: EED 355 or equivalent.

529 Science in the Elementary School. (3)

Problems and trends of current programs. Development of a balanced and articulated science program. Prerequisite: EED 320 or equivalent.

530 Outdoor/Environmental Education. (3) SS

Use of various outdoor settings as laboratories for classroom-related experience, study, observation, inquiry, research, and recreation. Includes strategies and materials for developing environmental literacy.

537 Mathematics in the Elementary School. (3) F. SS

Contemporary mathematics teaching. Content, materials, and approaches to instruction. Prerequisite: EED 380 or 402 or equivalent.

578 Student Teaching in the Elementary School. (9-15) F, S

Supervised teaching for postbaccalaureate students, synthesized experience in curriculum, instruction, and classroom management. Prerequisites: completion of 21 hours of identified course work from an approved program of study; a GPA of 2.50 (postbaccalaureate nondegree) or 3.00 (postbaccalaureate degree); approval of Professional Field Experiences

581 Diagnostic Practices in Mathematics. (3) F. S

Specific skills in diagnosing/treating children's learning difficulties in mathematics. Includes practicum experiences, both on and off campus, in identifying strengths/weaknesses and initial remediation. Prerequisite: EED 380 or 402 or instructor approval.

720 Language in Education. (3) A

Sociolinguistic seminar on language issues in education, including language acquisition, classroom interaction, language attitudes, relation language, and class-gender ethnicity.

Multicultural Education Program Area

BILINGUAL EDUCATION

BLE 400 Principles of Instruction in Language Minority Education. (3) F, S

History, theory, and practice of educating bilingual and ESL students. Addresses second language acquisition, program models, methodology, public policy, research, and linguistic diversity. Lecture, discussion. Prerequisite: PTPP admission.

401 Teaching Science and Social Studies to Children. (4) F, S

Introduction of teaching strategies to be utilized in working in bilingual/ESL classroom settings. Corequisites: BLE 402, 405, 406, 407, 496.

402 Teaching Strategies in Mathematics. (2) F, S

Introduction and implementation concepts for teaching mathematics to minority language populations. Prerequisites: MAT 114 or 117 or equivalent; MTE 180 or equivalent. Corequisites: BLE 401, 405, 406, 407, 496.

405 Teaching Reading in BLE/ESL. (3) F, S Teaching reading in BLE/ESL settings. An integrated classroom curriculum and literaturebased instruction will be emphasized. Strategies for teaching decoding (phonics), vocabulary, comprehension, study skills, and area reading are also included. Prerequisite: ENG 213 or equivalent. Corequisite: BLE 406.

406 Reading Practicum. (3) F. S

Supervised school-based experience in teaching reading to bilingual/ESL students. Prerequisite: ENG 213 or equivalent. Corequisite: BLE 405.

407 Language Arts. (2) F, S

Theory of the social nature of oral and written language and congruent classroom practices for students preparing to teach bilingual and ESL students. Corequisites: BLE 401, 402, 405, 406, 496.

478 Student Teaching in the Elementary School. (3-15) F, S

Supervised teaching in the area of specialization. A synthesized experience in curriculum instruction and classroom management in a bilingual education/ESL setting. Prerequisites: 2.50 GPA; completion of professional course sequence; approval of Office of Professional Field Experiences.

496 Field Experience. (0) F, S

Application of course content in a bilingual/ ESL school setting. Emphasis on observation, pupil management, planning and delivering instruction, and assessment. Corequisites: BLE 401, 402, 405, 406, 407.

511 Introduction to Language Minority Education. (3) A

Historical, philosophical, theoretical, and pedagogical foundations of language minority education in the United States.

514 Bilingual/Multicultural Aspects of Special Education. (3) S

Theories and issues related to the education of bilingual and culturally diverse exceptional children.

515 Instructional Methods for Bilingual Students. (3) F, S

An introduction to general dual language teaching approaches. Focuses on the effective teaching of limited English proficient populations. Prerequisite: BLE 511.

520 ESL For Children. (3) S

Examines approaches to second language development for children congruent with recent research in second language acquisition in children. Prerequisite: BLE 511.

521 Primary/Elementary Communication Arts in Bilingual Education. (3) S

Examination of bilingual/biliterate development of elementary school children, bringing together native and second language, oral language, and literacy development findings with educational practices. Prerequisite: BLE 511.

522 Literacy/Biliteracy Development. (3) S Examines approaches to first and second language reading and writing for bilingual/second language learners from a whole language perspective (Spanish-English emphasis). Prerequisite: BLE 511.

528 Social Studies for Bilingual/ESL Teachers. (3) S

Provides language and instructional methodologies relevant to bilingual/multicultural students in social studies content delivered in Spanish and English. Prerequisite: BLE 511.

533 Reading-Teaching Bilingual Students. (3) F, S

Acquaints teachers with a sociopsycholinguistic perspective on first and second language reading and with strategies for reading development (Spanish-English emphasis). Prerequisite: BLE 511.

535 Sociolinguistic Issues in Bilingual Education. (3) F

Survey of major theoretical issues (e.g., language situations, communicative competence. language attitudes) interrelating language, social processes, and bilingual education. Prerequisite: BLE 511.

541 Nature of Bilingualism/Second Language Acquisition. (3) A

Bilingual and second language acquisition, with emphasis on children and adolescents. Cognitive, social, and cultural aspects will be stressed. Prerequisite: BLE 511.

543 Bilingual Education Models. (3) A Bilingual education programs in other countries; analysis of political, social, economic, and educational implications; practice in planning bilingual education curricula. See also offerings under MCE, SED, SPE, and SPF. Prerequisite: BLE 511.

561 Parent Involvement in Language Minority Education Programs. (3) F, S

Examines issues, approaches, and strategies for improving parental and community involvement in the schooling of language minority children and youth. Prerequisite: BLE 511.

580 Practicum. (1-6) F, S

Provides for practical application in school settings of principles of bilingual education or English as a Second Language. Special permission required.

INDIAN EDUCATION

IED 411 Foundations of Indian Education. (3) F, S

Historical development of Indian affairs and Indian education, including contemporary educational issues, traditional Indian concepts of education, and Indian cultures.

422 Methods of Teaching Indian Students.

Philosophies, methodologies, and materials used in Indian education. Examination of local and tribal classroom materials. Experimentation with new teaching concepts. Prerequisite: IED 411.

433 Counseling the Indian Student. (3) A Techniques and methods used in counseling, with emphasis on understanding Indian cultures and values. Experimentation with new counseling concepts. Prerequisite: IED 411.

500 PS: Administration and Management of Indian Education Programs. (3) A

Examination of administrative and programmatic practices related to the schooling of American Indian populations.

594 Workshop in Indian Education. (6) SS Practical approaches to teaching Indian students. Curriculum and materials development, community involvement, current issues, and research examined.

MULTICULTURAL EDUCATION

MCE 446 Understanding the Culturally Diverse Child. (3) A

Survey of cultural and linguistic diversity in American education, including education equity, pluralism, learning styles, and roles of schools in a multiethnic society. General stud-

Reading and Library Science Program Area

LIBRARY SCIENCE

LIS 410 Children's Literature. (3) F, S, SS Selecting, analyzing, and using modern and classic literature with young readers.

510 Computers and Technology in the School Library. (3) F

Library uses of technology and computers. Fundamental concepts and issues in library media centers. Prerequisites: LIS 571 and 581 or instructor approval.

533 Current Library Problems. (3) F

Critical analysis of current practices and problems in school librarianship. Prerequisites: LIS 540 and 561 and 571 and 581 or instructor approval.

540 Classification and Cataloging. (3) F Descriptive cataloging and Dewey Decimal Classification of print and nonprint library materials.

561 Selection of Library Materials. (3) F Principles and procedures used in the selection of materials for the school library.

563 Children's Literature. (3) F, S, SS Selecting and using children's literature and related nonprint media to support the elementary school curriculum. Cross-listed as RDG 563.

565 Literature for Hispanic Youth/ Literatura para Jóvenes Hispanoparlantes.

Selecting, analyzing, and utilizing literature for Hispanic and Spanish speaking children and adolescents.

571 Basic Reference Resources. (3) S Providing reference service in the school library. Content and use of basic resources.

581 School Library Administration. (3) S Administration of K–12 libraries and media centers.

584 School Library Internship. (1–6) F, S Prerequisites: LIS 410, 540, 561, 571, 581; instructor approval.

READING EDUCATION

RDG 301 Literacy and Instruction in the Content Areas. (3) F, S, SS

Required course for all Secondary Education candidates. Introduces theory and instructional strategies for learning written and oral texts across academic disciplines.

314 Introduction to Teaching of Reading. (3) F, S, SS

For elementary teachers-in-training. Survey course provides basic teacher skills (including decoding/phonics), evaluation, classroom environments, and reading methods. Limited to students admitted to the postbaccalaureate certification program. Prerequisite: ENG 213 or equivalent.

315 Integrated, Holistic Approaches to Reading Instruction. (3) F, S, SS Emphasizes literature-based, integrated, and bolistic approaches to reading instruction

holistic approaches to reading instruction. Limited to students admitted to the postbaccalaureate certificate program. May be taken concurrently with RDG 481. Prerequisite: RDG 314.

401 The Teaching of Reading. (3) F, S Teaching reading as part of an integrated classroom curriculum and literature-based instruction will be emphasized. Strategies and skills for teaching decoding (phonics), vocabulary, comprehension, study skills, and content area reading are also included. Prerequisite: ENG 213 or equivalent. Corequisites: RDG 402; DCI 396 and EDP 303 and EMC 300 or ECD 401 and 402 and 496 or EED 401 and 404 and 496.

402 Reading Practicum. (3) F, S

Application of concepts from RDG 401 The Teaching of Reading in classroom settings. Students will demonstrate teaching strategies under supervision. Required for Elementary, Early Childhood, and Special Education candidates. Corequisites: RDG 401; DCI 396 and EDP 303 and EMC 300 or ECD 401 and 402 and 496 or EED 401 and 402 and 496.

481 Practicum: Elementary Reading. (3) F, S, SS

Practicum experience through supervised tutoring of K-8 public school students experiencing reading difficulty. Conducted in public school setting. Limited to students admitted to postbaccalaureate program. May be taken concurrently with RDG 315. Prerequisite: RDG 314

505 Developmental Reading. (3) F, S, SS For classroom and special reading teachers. Specific professional skills in decoding, comprehension, and evaluation. Required for Special Reading Endorsement. Prerequisite: teaching certificate.

507 Content Area Literacy. (3) F, S, SS Theory, teaching strategies, and practical application concerning learning from text across subject matter disciplines.

533 Reading-Teaching Bilingual Students. (3) F, S

Acquaints teachers with theory and practice in second language acquisition and with strategies for developing word recognition and comprehension in native language and second language reading (Spanish-English emphasis)

544 Secondary Reading Programs. (3) S Examines rationale for secondary reading programs (grades 7–12), teaching strategies, research, and program assessment. Prerequisite: RDG 507.

550 Practicum Experiences in Reading. (3) F. S. SS

Practicum experience utilizing assessment and instructional techniques for classroom settings. (See RDG 557 for State of Arizona reading endorsement.) Prerequisite: RDG 505 or equivalent.

556 Assessment Procedures in Reading. (3) F, S

Techniques for classroom and clinical reading assessment and instruction. Emphasis on continuous assessment. May be taken concurrently with RDG 557. Recommended for State of Arizona reading endorsement. Prerequisite: RDG 505.

557 Advanced Reading Practicum. (3) F, S Advanced practicum experience utilizing specialized reading and other assessment and instruction techniques for classroom and clinic settings. Lab sections. Recommended for State of Arizona reading endorsement. May be taken concurrently with RDG 556. Prerequisites: RDG 505; instructor approval.

563 Children's Literature. (3) F, S, SS Selecting and using children's literature and related nonprint media to support the elementary school curriculum. Cross-listed as LIS 563.

581 Literature-Based Reading Programs. (3) F, S, SS

For classroom and special reading teachers. The role of literature in the acquisition and development of literacy. Specific suggestions for helping students learn to read and/or expand their reading ability with literature. Introduction to literature studies. Prerequisite: teaching certificate.

582 Practicum: Literature Studies. (3) S Practical application of literature study group principles in field sites or through on-campus simulations. Lecture, supervised practice. Prerequisite: RDG 581 or instructor approval.

629 Seminar: History of Reading Instruction and Research. (3) S

Recurrent themes, prominent authorities, and significant research and publications in the history of reading education and related curricula. Prerequisite: instructor approval.

630 Research in Reading. (3) F

For advanced graduate students interested in applied research problems, literature of reading instruction, and major issues related to reading research. Prerequisite: instructor approval.

Secondary Education Program Area

HUMANITIES EDUCATION

HUE 101 Ideas and Values in the Humanities. (4) $F,\,S$

Interrelation of art, architecture, literature, music, philosophy, religion, theatre, and other performing arts in the modern world. 2 hour lectures, 2 hour discussion meetings per week. *General studies: HU*.

102 Ideas and Values in the Humanities. (4) F, S

See HUE 101. General studies: HU.

118 Encountering the Arts. (3) F, S Introductory course emphasizing personal contacts with the fine and performing arts. Attendance of a wide range of events, with analysis and evaluation.

130 Introduction to Popular Culture. (3) F,

Reflections of American values in 20th-century popular arts. Music, print, art, television, radio, movies, and the esthetics of popular culture. *General studies: HU*.

SECONDARY EDUCATION

SED 400 Principles of Effective Instruction in Secondary Education. (3) F, S, SS Different models of education are examined. Appropriate teaching practices for each model

are developed and applied to secondary school classrooms. Lecture, discussion. Prerequisite: PTPP admission.

403 Principles, Curricula, and Methods. (3) F, S, SS

Advanced level of development of knowledge and skills of instructional planning and methods of teaching and evaluating in the secondary school. Observation/participation required. Corequisite: SED 496.

478 Student Teaching in the Secondary Schools. (3–12) F, S

The practice of teaching. The relationship of theory and practice in teaching. Prerequisites: SED 403; special methods; approval of Office of Professional Field Experiences.

480 Special Methods of Teaching Social Studies. (3) F, S

Interdisciplinary approaches; production and collection of materials.

496 Field Experience. (0) F, S

Application of course content in a secondary school setting. Emphasis on observation, pupil management, planning and delivering instruction, and assessment. Corequisite: SED 403.

501 Introduction to Effective Instruction. (6) F, S, SS

Introductory course for postbaccalaureate certification program in secondary education. Emphasis upon developing basic classroom management, instruction, and evaluation. Includes a field assignment of at least 120 hours. Prerequisite: admission to postbaccalaureate certification program.

522 Secondary School Curriculum Development. (3) F, S, SS

Social processes, issues, principles, patterns, and procedures in curriculum development.

533 Improving Instruction in Secondary Schools. (3) F, S, SS

Analyses of procedures, methods, techniques, and experiments in teaching in secondary schools. Prerequisites: SED 478, 578.

577 Issues and Trends in Secondary Education. (3) N

Analyses of lay and professional reports; problems and issues in American secondary education. Prerequisites: SED 478, 578.

578 Student Teaching in the Secondary Schools. (3–12) F, S

The practice of teaching. The relationship of theory and practice in teaching. Post Baccalaureate students only. Prerequisites: completion of approved post baccalaureate program; a minimum 2.50 GPA; approval of Office of Professional Field Experiences.

588 Human Relations in the Secondary Schools. (3) A

Problems in human relations inherent in the interaction of pupils, teachers, administrators, nonprofessional staff, and laymen. Prerequisites: SED 478, 578.

711 Secondary Curriculum Development. (3) S, SS

Theories and processes of developing curriculum; evaluation of research. Prerequisites: SED 478, 522 (or equivalent), 578.

722 Improvement of Instruction in the Secondary School. (3) F

Evaluation of the research; issues and theories related to the improvement of instruction. Prerequisite: SED 533.

Special Education Program Area

SPECIAL EDUCATION

SPE 311 Orientation to Education of Exceptional Children. (3) F, S, SS $\,$

Includes gifted, mildly handicapped, severely handicapped, and the bilingual/multicultural exceptional child. *General studies: SB.*

312 Mental Retardation. (3) F, S, SS Characteristics and assessment specific to mental retardation. Terminology, development, educational programming, and therapeutic procedures will be emphasized. Prerequisite: SPE 311.

314 Introduction to Bilingual/Multicultural Special Education. (3) F, S, SS

Theoretical background and practical application of general issues regarding the education of bilingual/multicultural handicapped children. Prerequisite: SPE 311.

336 Behavioral and Emotional Problems in Children. (3) F, S, SS

Characteristics and assessment specific to emotionally and behaviorally disturbed children. Terminology, development, and educational programming emphasized. Prerequisite: SPE 311.

361 Introduction to Learning Disabilities. (3) F, S, SS

Characteristics and assessment specific to learning disabilities. Terminology, development, and educational programming emphasized. Prerequisite: SPE 311.

411 Parent Involvement and Regulatory Issues. (3) F, S

Emphasis on parent and school relations through effective communication and state and federal regulations impacting services for the handicapped. Prerequisites: SPE 311; majors only.

412 Evaluating Exceptional Children. (3) F,

Normative and criterion-referenced diagnostic techniques, including formative evaluation. Emphasis upon application. Daily practicum required. Prerequisites: DCI 396; EDP 303; EED 404; EMC 300; RDG 401; SPE 311. Corequisites: EED 402; SPE 413, 496.

413 Methods in Language, Reading, and Arithmetic for Exceptional Children. (3) F,

Methods, techniques, and materials for use in prescriptive teaching. Daily practicum required. Prerequisites: DCI 396; EDP 303; EED 404; EMC 300; RDG 401; SPE 311.
Corequisites: EED 402: SPE 412, 496.

414 Methods and Strategies in Behavior Management. (3) F, S

The organization and delivery of instruction, including formative evaluation techniques. Techniques of behavior management. Daily practicum required. Prerequisites: RDG 401, 402; SPE 412, 413. Corequisites: SPE 415, 496.

415 Social Behavior Problems of Exceptional Children. (3) F, S

Analysis and intervention into social behavior problems of exceptional populations. Daily practicum required. Prerequisites: RDG 401, 402; SPE 412, 413. Corequisites: SPE 414, 496

455 Early Childhood and the Handicapped. (3) F

Early childhood education as it applies to the handicapped child.

478 Student Teaching in Special Education. (3-15) F, S

"Y" grade only. Prerequisites: approval of Special Education program coordinator; completion of Special Education prerequisites.

496 Field Experience. (0) F, S

Application of course content in a special education setting. Emphasis on observation pupil management, planning and delivering instruction, and assessment. Corequisites: SPE 411 (or 413), 412, 414, 415.

511 The Exceptional Child. (3) F, S, SS Educational needs of exceptional children and adults. Not recommended for students who have completed SPE 311.

512 Individuals with Mental Retardation. (3) F. SS

Etiology, diagnosis, and management of individuals with mental retardation. Current trends in prevention, programming, and teacher preparation. Not recommended for students who have completed SPE 312.

514 Bilingual/Multicultural Aspects of Special Education. (3) ${\sf S}$

Theories and issues related to the education of bilingual and culturally diverse exceptional children.

515 Methods for the Remediation of Learning Problems of Exceptional Children. (3) S. SS

Methods and materials for remediating the basic academic problems of exceptional children. Prerequisites: SPE 511; a methods course in the teaching of reading and mathematics.

522 Academic Assessment of Exceptional Children. (3) F

Normative and criterion referenced assessment of learning problems in exceptional children. Formative evaluation included. Practicum required. Lecture, practicum. Prerequisites: SPE 311 or 511; elementary methods courses; program approval.

523 Prescriptive Teaching with Exceptional Children. (3) F

Language, reading, and arithmetic methods, techniques, and materials used in individualized instruction. Practicum required. Lecture, practicum. Prerequisites: elementary methods courses; SPE 311 (or 511), 522 (or concurrent and program approval).

524 Effective Classroom Behavior Management. (3) S

Organization and delivery of instruction including formative evaluation and techniques of academic behavior management for exceptional children. Practicum required. Lecture, practicum. Prerequisites: SPE 311 (or 511), 522, 523 and program approval.

525 Social Behavior Interventions. (3) S Analysis and intervention into social behavior problems of exceptional students. Focus on strategies to change maladaptive social behavior. Practicum required. Prerequisites: SPE 311 or 511 or 522 or 523; program approval.

531 Behavior Management Approaches with Exceptional Children. (3) F, SS

Behavior management approaches for classroom behavior of exceptional children. Prerequisite: SPE 511 or equivalent.

536 Characteristics of Children with Behavioral Disorders. (3) F, SS

Variables contributing to behavior patterns of behaviorally disordered children.

551 Teaching Young Children with Special Needs. (3) $\ensuremath{\mathsf{S}}$

Methods, materials, and curriculum for preschool and primary-aged children with special needs. Prerequisites: SPE 455 and 511 *or* equivalents.

552 Management of Individuals with Severe Handicaps. (3) \mbox{S}

Instruction and management of school-aged and adult individuals with severe, physical, or multiple handicaps. Prerequisites: SPE 511 or equivalent; instructor approval.

553 Developmental/Functional Assessment. (3) F

Teacher-focused developmental/functional assessment of preschool and severely, physically, and multiply handicapped individuals. Field experience required. Prerequisites: SPE 511 and 512 and 574 *or* equivalents.

554 The Parent/School Partnership. (3) S Includes knowledge and procedures for involvement and training of parents and caregivers of preschool and severely handicapped individuals. Field experience required. Prerequisites: SPE 455 and 511 or equivalents.

561 Characteristics/Diagnosis of Learning Disabilities. (3) F, SS

Theories related to learning disabilities, including identification and characteristics.

562 Methods of Teaching Students with Learning Disabilities. (3) N

Various methods and intervention strategies for remediating learning disabilities of children and youth. Prerequisite: SPE 361 or 561.

574 Educational Evaluation of Exceptional Children. (3) F, SS

Design and statistical considerations of normative and criterion-referenced tests. Collection, recording, and analysis of data from formative evaluation. Prerequisites: SPE 511 or equivalent; a methods course in the teaching of reading and mathematics.

575 Current Issues in the Education of Exceptional Children. (3) F, SS

Mainstreaming, noncategorical, financing, legal diagnostic, labeling, legislative, and other critical and controversial issues related to the education of exceptional children.

577 Mainstreaming Methods. (3) S Successful mainstreaming methods, practical problem-solving sessions related to teacher's classroom needs, and individual contracts focusing on mainstreaming issues are addressed. General educators encouraged.

578 Student Teaching in Special Education. (9–15) F, S

"Y" grade only. Prerequisites: completion of specified courses; approval by the special education program coordinator.

582 Classroom Research with Exceptional Children. (3) ${\sf S}$

Introduction to interpreting research. Specific research techniques with primary emphasis on classroom research, including applied behavior analysis.

585 Creativity: Research and Development. (3) $\ensuremath{\mathsf{S}}$

Nature of creativity explored in terms of philosophical underpinnings, empirical evidence, human development, self-actualization, and the ecology surrounding the creative event.

586 Advising the Gifted Child. (3) A

Focus on educational planning and guidance, social and emotional development, and family problem solving regarding needs of gifted children

587 Controversies in Educating the Gifted. (3) F

In-depth analysis of major controversies in educating the gifted, including nature/nurture, the role of mental tests, and sex differences.

588 The Gifted Child. (3) F, SS

Gifted children's characteristics, identification, needs, school and home environments, definitions, and misunderstandings. Research by Pressey, Stanley, Terman, and others.

589 Methods in Teaching the Gifted. (3) S, SS

Methods in teaching elementary and secondary school gifted children, including individualized and computer-assisted instruction, team teaching. Prerequisite: SPE 588.

774 Characteristics and Causation of Exceptionality. (3) F

In-depth analysis of literature pertaining to causes of exceptionality and learning, educational, personal-social, and cognitive characteristics. Lecture, discussion.

775 Evaluation and Intervention in Special Education. (3) ${\sf S}$

In-depth analysis of research and literature on evaluation procedures and intervention approaches for exceptional individuals at all age levels. Lecture, discussion.

781 Research and Evaluation in Special Education. (3) $\mbox{\ensuremath{\mathbb{S}}}$

Issues and problems in conducting research and/or evaluation programs involving exceptional children.

Division of Educational Leadership and Policy Studies

Thomas H. Metos *Director* (ED 108) 602/965–6248

REGENTS' PROFESSOR BERLINER

PROFESSORS

APPLETON, FENSKE, GLASS, METOS, NORTON, PADILLA, RENDÓN, RICHARDSON, SIMMONS, SMITH, R. STOUT, TIPPECONNIC, VALVERDE, WEBB

ASSOCIATE PROFESSORS

CASANOVA, HARTWELL-HUNNICUTT, LEVAN, NOLEY, WILKINSON

ASSISTANT PROFESSORS

MORGOLIS, PENA

PROFESSORS EMERITI

ASHE, BELOK, BOGART, DEMEKE, DRAKE, HUFF, HUNNICUTT, JORDAN, MENKE, SHAFER, M. STOUT, WALKER, WARREN, WOCHNER, WOOTON

Program Areas

Educational Administration and Supervision Education Policy Studies Higher Education

Degrees: M.A., M.Ed., Ed.D., Ph.D.

Programs of the Division of Educational Leadership and Policy Studies are designed to develop leaders, researchers, and policy analysts for careers in schools, colleges, and private and government agencies. Graduates are able to examine educational institutions, theories, and practices within broad economic, historical, political, and social contexts in this country and abroad.

Three basic emphases exist within the division's programs. One strand focuses on the administration and policies of educational institutions and practices from preschool through secondary education. The second strand focuses on the administration and policies of post-secondary education. The third strand emphasizes inquiry into the processes by which educational policy is formulated and evaluation of policy decisions. Each strand brings together the methods and perspectives of the social sciences and the social and philosophical foundations of education.

Faculty within the division are involved in both empirical and theoretical research. Qualitative and quantitative methods are employed. Students have the opportunity to work on research projects in the College of Education and in school districts and educational agencies throughout the country.

The division is a member of the University Council for Educational Administration.

EDUCATIONAL ADMINISTRATION AND SUPERVISION

EDA 501 Competency/Performance in Educational Administration. (3) F, SS

The nature of educational administration and the concept of competency as it applies to educational administration.

507 Computers in Educational Administration. (3) F, S

Survey of computer use and applications in educational administration. Lecture, lab. Cross-listed as EMC 507.

510 Introduction to Organization and Administration of American Public Schools.

Organizational structure and administration of public education are explored through the application of legal and ethical concepts and relevant information of the social sciences. Cross-listed as SPF 510.

511 School Law. (3) S

Constitutional, statutory, and case law that relates to all school personnel, pupils, the school district, and other governmental units. Contracts, dismissals, tenure, retirement, pupil injuries, liability of personnel and district, school district boundary changes, and bond-

521 Evaluation of Teaching Performance.

In-depth analysis of legal basis of teacher appraisal, teacher competency, measurement of teacher performance, and application of performance appraisal systems. Prerequisite: COE 504.

524 Theory and Application of Educational Administration. (3) F, SS

History and development of public school administration in the United States; current organizational patterns for public education at local, intermediate, state, and national levels; current theoretical positions in educational ad-

525 Human Relations and Societal Factors in Education. (3) N

Interrelations between problems of educational administration and interdisciplinary social sciences. Communications skills, morale, authority, and perception. Concepts from political science, economics, and social-psychology useful to the administrator.

526 Instructional Supervision. (3) F, S, SS Administering curriculum improvement, in-service education, evaluating, and improving teaching competence; administrative instructional responsibilities.

527 Managerial Functions in School Administration. (3) N

Relates to the work of the central district office staff and the school principal. Use of human resources, educational planning, and organization and management of time.

538 Administration of the Community School. (3) N

Philosophy, history, organization, and operation of the community-centered school. Introduction of the community education concept into a school system and making it opera-

544 Public School Finance. (3) F

Measures of ability, efforts, and educational need; capital outlay funding; tax revenues; federal, state, and local financing alternatives; major issues and trends in the financing of public education.

548 Community Relations in Education. (3)

Administrative factors of primary importance in developing community involvement in public schools. Emphasis on theory and skill of school system and individual communication.

555 Educational Facility Planning. (3) N School building needs, educational planning for facilities, responsibilities of architects, duties of contractors, and equipping and furnishing of school buildings.

571 School Business Management. (3) F, S,

Purchasing, budgeting, accounting, payroll management, auditing, financial reporting, insurance, and administration of nonteaching personnel and services.

573 School Personnel Administration. (3) S Organization for personnel services; development of policy to govern selection, orientation, placement, remuneration, transfers, separations, and development of morale among instructional and noninstructional personnel.

576 The School Principalship. (3) F Problem and laboratory approaches used to provide application of administrative activities of elementary and secondary schools. Prerequisites: EDA 501, 526.

634 Instructional Leadership. (3) N Curricular practices and processes used by instructional leaders who plan, organize, and coordinate the professional activities in elementary and secondary schools. Prerequisite: EDA 526.

675 Politics of Education. (3) S Social science theory and research are used

to consider the political context of educational policy making. Prerequisite: COE 505.

676 The School Superintendency. (3) S Critical examination of the school superintendency and the primary functions of this educational position. The duties, responsibilities, activities, and problems of the school superintendent are included. The unique leadership role of the school superintendent is examined. Prerequisite: instructor approval.

679 Administration of Special Programs in Education. (1-3) N

For personnel administering special educational services; responsibilities of superintendents, principals, supervisors, and directors for special education, student personnel, audiovisual, library science, and others.

711 Administrative Leadership. (3) F Emphasis on research in leadership; application of research findings to administrative and supervisory functions in educational endeav ors. Prerequisites: EDA 524; 30 semester hours in educational administration; admission

722 Administration of Instructional Improvement. (3) S

to doctoral program.

Recent research relating to administrative and supervisory responsibilities for the improvement of the educational program. Effective processes by administrators, supervisors, consultants, and coordinators. Prerequisites: 30 semester hours in educational administration; admission to doctoral program

733 Administrative Management. (3) S Recent research relating to school management. School finance, law, buildings, transportation, food services, and supply management. Prerequisites: EDA 527, 544, 571; 30 semester hours in educational administration; admission to doctoral program.

Omnibus Courses: See pages 44-45 for omnibus courses that may be offered.

EDUCATIONAL POLICY STUDIES

SPF 111 Exploration of Education. (3) F, S Education as an instrument in the development of the individual and society, and its significance as an American institution

301 Culture and Schooling. (2) F, S For the professional teacher preparation program: an overview of the cultural, social, and political milieus in which formal schooling takes place in the United States. For education majors only

401 Theory and Practice in Education. (1-2) F, S

For the professional teacher preparation program. The analysis and interpretation of classroom behavior from perspectives derived from philosophy, social science, and law. For education majors only.

457 Women in Developing Countries. (3) F Economic, sociopolitical, and demographic context for understanding the roles of women in developing countries in health, family, work, education, and community. Cross-listed as NUR 457/WST 457. Prerequisite: 6 hours of social science credit or instructor approval. General studies: SB, G.

510 Introduction to Organization and Administration of American Public Schools. (3) F, S

Organizational structure and administration of public education are explored through the application of legal and ethical concepts and relevant information of the social sciences. Cross-listed as EDA 510.

511 School and Society. (3) F, S, SS Interrelationship of school and society and the role of education in social change.

515 Education of Women. (3) N

Analysis of roles and status of women, educational practices, and alternatives.

520 Cultural Diversity in Education. (3) S Philosophic and sociological investigation of cultural diversity in the United States and how it relates to education.

533 Comparative Education in the Western World. $(3)\ N$

Educational practices and traditions in the leading nations of Europe and the Soviet Union.

534 Education and Change: Developing Nations. (3) N

Education as economic and sociopolitical change agent in Africa, Asia, the Middle East, and Latin America.

543 Bilingual Education Models. (3) N Bilingual education programs in other countries; analysis of political, social, economic, and educational implications; practice in planning bilingual education curricula.

544 Philosophical Foundations of Education. (3) ${\sf F}$

Theories of education in ancient, medieval, and modern classical and contemporary philosophies.

566 History of Education. (3) S

Development of educational institutions and ideas in the Western World, from ancient times to the 20th century.

612 Evaluation Theory. (3) F

Explores the major theories of evaluation (inquiry leading to value judgments) in educational policy through examination of cases.

622 Theory of Educational Organizations. (3) S

An investigation of how educational organizations function and the implications of these

views on role definition and performance of administrators as they design organizational processes. Cross-listed as HED 688.

711 Social and Historical Foundations of Education. $(3)\ N$

Problems of American education and their sociohistorical context.

HIGHER EDUCATION

HED 510 Introduction to Higher Education. (3) F

An overview of American higher education, including philosophical, political, and social aspects

533 The Community-Junior College. (3) F, S History, functions, organization, and current issues. Meets Arizona community college course requirement for certification.

602 Institutional Research/Strategic Planning. (3) F

Provides an overview of policy research and planning in higher education at the campus system and governing/coordinating agency levels. Lecture, group discussion, and research projects. Prerequisite: HED 510.

603 Computer-Assisted Qualitative Data Analysis. (3) S

Emphasizes the applied and computing aspects of qualitative research design, data analysis, and reporting of results. Lecture, lab, demonstrations. Prerequisite: COE 503 or equivalent.

611 Curriculum and Instruction. (3) S Curriculum development, instructional organization, and improvement of instruction in higher education. Prerequisite: HED 510.

644 Higher Education Finance and Budgeting. (3) $\ensuremath{\text{S}}$

Financial planning and budgeting in higher education institutions. Issues related to financing public and private colleges and universities. Prerequisite: HED 510.

649 Law of Higher Education. (3) F Analysis of legal issues related to higher education; examination of key court decisions. Prerequisite: HED 510.

679 The American College Student. (3) S Provides overview of American college student from demographic, background characteristics and values/attitudes/perspectives. Includes access, persistence, and degree completion. Lecture, group discussion, and research projects. Cross-listed as CED 656. Prerequisite: HED 510.

687 Governance, Coordination and External Influences in Higher Education. (3) S

Study of governance and coordination in higher education systems and the impact of external forces on them. Lecture, discussion.

688 Organizational Theory. (3) S Major views of organizations and their influence on role definition and participant behaviors in educational organization. Seminar, discussion. Cross-listed as SPF 622.

689 Leadership in Higher Education. (3) F Theory and practice of leadership and administration in higher education institutions.

Omnibus Courses: See pages 44–45 for omnibus courses that may be offered.

Division of Psychology in Education

Gail Hackett

Director
(EDB 301) 602/965–3384

REGENTS' PROFESSORS

BERLINER, KULHAVY

PROFESSORS

BARONA, BERNSTEIN, CABIANCA, FREEMAN, GLASS, GRINDER, GROSS, HACKETT, HARRIS, HORAN, B. KERR, N. KERR, KRUS, KURPIUS, McWHIRTER, NELSEN, SMITH, STROM,

ASSOCIATE PROFESSORS

ARCINIEGA, BETZ, BROWN, COHN, KINNIER, KLEIN, METHA, MOORE, SANTOS DE BARONA, SAVENYE, SHELL

ASSISTANT PROFESSORS

BEHRENS, FISHER, HOOD, ROBERTS, M. STAFFORD

PROFESSORS EMERITI

BENEDICT, BLACKHAM, BLAESSER, BOETTO, CHURCHILL, CLAIBORN, CUMMINGS, DAANE, DAVIS, GAFFNEY, GERLACH, GUINOUARD, HELMSTADTER, KIMLER, MAZEN, MOULTON, SATTLER, SNYDER, K. STAFFORD, SULLIVAN, VAN WAGENEN, VERGIS, WRENN

Program Areas

Counseling Psychology Counselor Education Learning and Instructional Technology Lifespan Development Psychology Measurement, Statistics, and Methodological Studies School Psychology

Degrees: M.A., M.C., M.Ed., Ed.D., Ph.D.

The faculty in the Division of Psychology in Education offer graduate degrees in a number of majors. The Master of Counseling (M.C.) degree is offered and is accredited by the Council for the Accreditation of Counseling and Related Educational Programs. The Master of Education (M.Ed.) degree in Counselor Education is also available. The Master of Arts (M.A.) and M.Ed. degrees are offered in Educational Psychology and Learning and Instructional Technology. The Doctor of Education (Ed.D.) and Doctor of Philosophy (Ph.D.) degrees are offered in Learning

and Instructional Technology. The Ed.D. is offered in Counselor Education, but applications for the program are not being accepted. The Ph.D. is offered in Counseling Psychology and Educational Psychology. The program in Counseling Psychology is accredited by the American Psychological Association. In the Ph.D. program in Educational Psychology, the following concentrations are available: lifespan developmental psychology; measurement, statistics, and methodological studies; and school psychology, accredited by the American Psychological Association.

Students applying to the graduate programs in Counseling Psychology or Educational Psychology are required to submit scores on the Graduate Record Examination (GRE). All degree programs require the successful completion of comprehensive examinations.

Additional information on graduate programs may be obtained directly from the division office. Persons requesting information should specify the program of interest.

COUNSELING PSYCHOLOGY

CPY 613 Child Counseling. (3) N Applications of counseling theory in working with children in clinics and elementary schools. Integrated practicum available with permission of instructor. Prerequisite: CED 577 or equivalent.

622 Group Counseling. (3) F, S Theories and methodologies used in group counseling. Prerequisites: CED 567 and 577 or equivalents.

634 Organizational Development and Planned Change. (3) N

Organizational/individual dynamics, including theory, analysis, techniques, and consultation/ intervention strategies used in organizational development. Field consultation projects. Prerequisites: CED 567 and 577 or equivalents.

644 Psychology of Careers. (3) S Advanced career counseling, including theory, research, and practice. Prerequisite: CED 577 or equivalent.

645 Professional Issues and Ethics. (3) F, S Ethical, legal, and professional issues of concern to practitioners and researchers functioning in a variety of settings. Prerequisites: CED 512 and 523 or equivalents.

667 Patterns of Behavior Disorders. (3) A Etiology and treatment of a variety of psychological problems, particularly those represented in DSM III-R. Prerequisite: CED 577 or equivalent.

672 Human Diversity: Social Psychological Perspectives. (3) A

Implications for psychological practice of social, psychological, and biological factors in the development of behavioral differences.

674 Counseling Women. (3) F

Explores women's development and its implications for counseling. Sexism in mental health, sex differences in diagnosis and psychopathology, and women's particular treatment needs.

675 Counseling Interventions in Stress Management. (3) N

Theory, procedures, and application of stress management techniques, including biofeedback, meditation, relaxation, autogenic therapy, visualization, and imagery. Prerequisites: CED 577 or equivalent; instructor approval.

677 Advanced Counseling. (3) N Advanced topics in counseling theory, research, and practice. Prerequisite: CED 577 or equivalent

679 History and Systems of Psychology.

Examination of the development and differentiation of the discipline of psychology from its origins in philosophy to the present

701 Science and Practice of Counseling Psychology. (3) F

Directed experiences involving the integration of theory, research, and practice in counseling psychology. Prerequisite: instructor approval.

702 Research Methods in Counseling Psychology. (3) A

The application of experimental and/or quasiexperimental methods to theory construction and treatment evaluation in counseling psychology. Prerequisite: COE 502 or equivalent.

Omnibus Courses: See pages 44-45 for omnibus courses that may be offered.

COUNSELOR EDUCATION

CED 512 Introduction to Helping Relationships and Community Counseling. (3) F, S,

Introduction to the skills used in the helping professions and an examination of the settings in which they occur.

522 Personality Development. (3) F, S, SS Interaction of affective and cognitive factors in personality development at different age levels. Various personality theories examined.

523 Psychological Tests. (3) F. S. SS Standardized tests in the study of the individual, with emphasis on test score interpretation in counseling.

534 Occupations and Careers. (3) F, S, SS The world of work, career development, education, and training for occupational entry and

545 Analysis of the Individual. (3) F, S, SS Theory and methods commonly used in studying the individual. Observational methods, diagnostic interviews, structured, and semistructured methods for assessing personality. Pre- or corequisite: CED 523.

567 Group Procedures. (3) F, S, SS Social psychological factors determining interaction, effectiveness, and morale in small groups. Techniques of observation, assessment, and leadership.

577 Counseling. (3) F, S, SS Principles and application of counseling with particular emphasis on counseling theories. Prerequisites: CED 512, 534, 545; admission to M.C. or school counselor certification pro-

655 Student Development Programs in

Higher Education. (3) A

Emerging conceptual models of student development. Overview of student personnel and student affairs programs in community colleges, four-year colleges, and universities. Observation on campuses.

656 The American College Student. (3) A Selected theories of human development with application to academic/sociopsychological learning tasks of postsecondary environmental influences, including faculty expectations and campus subcultures. Cross-listed as HED

672 Marriage and Family Counseling I. (3) F Introduction to marriage and family counseling theories. Emphasis is on a systems-communication model utilizing cocounseling.

681 Supervised Practice. (3) F, S Supervised experiences in schools or community agencies. Prerequisite: instructor ap-

proval. 684 Internship in Community Counseling. (3-6) F, S, SS

Omnibus Courses: See pages 44-45 for omnibus courses that may be offered.

EDUCATIONAL PSYCHOLOGY

EDP 301 Learning and Motivation in Education. (2) F, S

Using a case format, learning and motivation principles are applied to education contexts. Education majors only.

302 Assessment and Evaluation in Education. (1) F, S

Using a case format, assessment and evaluation principles are applied to education contexts. Education majors only.

303 Human Development. (3) F, S Selected aspects of child and adolescent development Emphasis on possibilities for influence by teachers and parents. For majors only. Prerequisite: CDE 232 or equivalent. General studies: L2.

310 Educational Psychology. (1-6) F, S, SS Human behavior in educational situations presented through instructional modules. Students may re-enroll for credit to a total of 6 hours. General studies: SB.

313 Childhood and Adolescence. (3) F, S,

Principles underlying total development of preand early-adolescent children. Emphasis on physical, intellectual, social, and emotional development with practical implications for teachers grades 5-9. Prerequisite: EDP 303 or admission to College of Education postbaccalaureate program.

454 Introduction to Statistical Data Analysis in Education. (3) F, S, SS

The role of statistics in research. Tabular and graphic data presentation. Frequency distributions, descriptive indexes, and introduction to statistical inference. Prerequisite: MAT 117. General studies: N2.

502 Introduction to Quantitative Methods. (3) F, S, SS

Topics in statistical analysis, measurement, and research design. Exploratory data analysis, estimation theory, and statistical inference. Use of computers for data analysis. Cross-listed as COE 502.

503 Introduction to Qualitative Research. (3) F, S, SS

Terminology, historical development, approaches (including ethnography, ethnomethodology, critical theory, grounded theory, and hermeneutics), and qualitative versus quantitative social sciences; methods of inquiry. Cross-listed as COE 503.

504 Learning and Instruction. (3) F, S, SS Introduction to psychology of learning and instruction. Includes the foundations of learning theories and their application to educational practice. Cross-listed as COE 504.

510 Essentials of Classroom Learning. (3) F, S, SS

Theoretical and empirical foundations of learning in the classroom milieu. Critical exposure to research and method in instructional psychology. Cross-listed as LNT 510.

513 Child Development. (3) F, S, SS Examination of problems and achievements experienced by children growing up in a technological society. Emphasis on discovering the child's perspective.

514 Psychology of the Adolescent. (3) F, S, SS

Cognitive, physical, and social development of adolescents in contemporary society. Impact of family, school, and work place on adolescent development. Prerequisite: EDP 310 or PGS 100 or equivalent.

530 Theoretical Issues and Research in Human Development. (3) F

Psychological theories, research, and methods relevant to human development, emphasizing the relations between early development and later performance.

532 Psychology of Exceptionality. (3) S General psychological theory and experimental research relevant to exceptionality, emphasizing implications for educational programs that recognize unique learner characteristics. Field work.

534 Principles of Behavior Modification. (3)

Principles of conditioning as applied to behavior modification; current research on the experimental analysis of behavior in educational psychology.

540 Theoretical Views of Learning. (3) F, S Classical and cognitive theories of learning, plus recent orientations. Illustrative experimental and rational foundations; implications for educational practice. Cross-listed as LNT 540.

542 The Psychology of Learning and Instruction. (3) $\ensuremath{\mathsf{S}}$

Critical review and evaluation of research on learning variables relevant to acquisition and retention of instructional materials. Lab. Cross-listed as LNT 542.

543 Psychological Research on Life-Span Development. (3) ${\mathbb S}$

Critical review and evaluation of contemporary research on cognitive and affective development across the life span. Prerequisite: EDP 530 or equivalent.

550 Introduction to Measurement in Education. (3) F, S

Nature and types of educational measures. Critiquing and selecting appropriate measuring devices. Constructing measuring devices. Social controversies about tests.

551 Expository Writing and Research Heuristics. (3) F

Weekly writing practice making use of heuristic concepts and expository principles. The construction of rationales for research problems. Logic and coherence in rhetoric. Writing style appropriate to exposition.

552 Basic Statistical Analysis in Education. (3) F. S. SS

Nature of educational data and statistical analysis. Frequency distributions and descriptive indexes. Introduction to hypothesis testing, ANOVA and regression.

554 Intermediate Statistical Data Analysis in Education. (3) F, S, SS

Multiple regression, ANOVA by multiple regression, repeated measures and other designs, covariance analysis, and introduction to MANOVA. Prerequisite: COE 502 or EDP 552 or passing grade on a qualifying exam.

556 Data Processing Techniques in Measurement and Research. (3) $\ensuremath{\text{S}}$

Advancement of statistical design and measurement skills through development of dataprocessing techniques and usage of special programs and data-processing programs. Prerequisite: EDP 554.

560 Individual Intellectual Assessment. (1– 6) F, S

Experience in administering and interpreting individual tests. Theoretical basis for ability testing, ethical considerations, and diagnostic use of test results. Initial enrollment, 3-hour minimum. Lab experience. Prerequisites: EDP 454 and admission to a program in professional psychology *or* instructor approval.

562 School Psychology: Theory and Practice. (3) F

Development and present status of school psychology, including an overview of assessment and intervention strategies and professional issues.

563 Interventions in School Psychology. (3)

Examination of case-based consultation and consultation research relevant to school psychology practice. Field experience. Prerequisite: school psychology program or instructor approval.

566 Diagnosis of Learning Difficulties. (3) S Clinical diagnosis of learning difficulties, emphasizing specific academic problems. Use and interpretation of diagnostic instruments in practical school situations. Prerequisites: EDP 560 and 562 *or* equivalents; instructor approval.

567 School Psychological Services to Minority Students. (3) $\ensuremath{\mathsf{S}}$

Historical perspectives and major issues in psychological and academic assessment and interventions with minority school children.

568 Organizational Development: School Psychological Perspectives. (3) F

Applications of organization development strategies and techniques in facilitating the positive impact of schools on students' learning and social functioning.

651 Methods and Practices of Qualitative Research. (3) $\ensuremath{\mathsf{S}}$

Advanced course for students familiar with theory and extant work. Topics include data collection, analysis, reporting, and an extensive fieldwork project. Prerequisite: COE 503.

652 Multivariate Procedures in Data Analysis I. (3) F

Multivariate analysis of variance and covariance, multivariate multiple comparison procedures, power analysis and effect size, discriminant analysis, and repeated measures analysis. Prerequisite: EDP 554 or passing score on qualifying exam.

654 Multivariate Procedures in Data Analysis II. (3) S

Multivariate multiple regression, canonical correlation, factor analysis, categorical data analysis, log linear models, and structural equation models. Prerequisite: EDP 554 or passing score on qualifying exam.

LEARNING AND INSTRUCTIONAL TECHNOLOGY

LNT 501 Foundations of Educational Technology. (3) F, S

Introduction to instructional development. An examination of accomplishments and problems in the field.

502 Design and Development of Instruction. (3) F, S

Design, development, and formative evaluation of objectives-based instructional materi-

503 Research Techniques for Instructional Development. (3) F

Procedures for analyzing the effects of alternative instructional practices.

504 Educational Evaluation. (3) S

Evaluation procedures in instruction and training.

510 Essentials of Classroom Learning. (3) F. S. SS

Theoretical and empirical foundations of learning in the classroom milieu. Critical exposure to research and method in instructional psychology. Cross-listed as EDP 510.

540 Theoretical Views of Learning. (3) F, S Classical and cognitive theories of learning, plus recent orientations. Illustrative experimental and rational foundations; implications for educational practice. Cross-listed as EDP

542 The Psychology of Learning and Instruction. (3) ${\mathbb S}$

Critical review and evaluation of research on learning variables relevant to acquisition and retention of instructional materials. Lab. Cross-listed as EDP 542.

545 Cognition and Instruction. (3) F Current developments in research relating

current developments in research relating cognitive models to the instructional process. Seminar. Prerequisites: EDP 552; LNT 540.

584 Educational Technology Internship. (1–6) F, S, SS

Prerequisites: LNT 501, 502; instructor approval. Pre- or corequisite: EMC 521.

780 Advanced Instructional Development. (1-3) S

Conducting and documenting selected instructional development activities. Prerequisites: LNT 502; instructor approval.

792 Advanced Instructional Research. (3) F Design and execution of instructional research on selected topics. Prerequisites: LNT 503; instructor approval.

Omnibus Courses: See pages 44–45 for omnibus courses that may be offered.