College of Education

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PURPOSE

For students, choosing a professional college is a major decision. It represents the choice of a 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;
- 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 programs are listed below:

Division of Curriculum and Instruction Program Areas

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 Program Areas

Educational Administration and Supervision Educational Policy Studies Higher Education

Division of Psychology in Education Program Areas

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 following centers and offices:

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.

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.

The Office of Student Affairs assists individuals interested in teacher preparation programs through advisement, 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.

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.

The Office of Educational Services counsels students regarding College of Education scholarships and provides recruitment and support services for minority students wishing to enter the Professional Teacher Preparation Program (PTPP).

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.

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

College of Education Degrees, Majors, and Concentrations

Major	Degree	Administered by
Baccalaureate Degrees		
Early Childhood Education	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, office, and distributive education;		
chemistry; Chinese; communication; economics;		
English; family resources and human development		
(home economics); French; geography; German;		
history; humanities; Japanese; journalism;		
mathematics; mathematics/chemistry;		
mathematics/physics; physical education;		
physics; physics/chemistry; political science;		
Russian; social studies; Spanish		
Selected Studies in Education	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		
Counselor Education	Ed.D. ¹	Division of Psychology in 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
E1 .' 11 1 1' 1D1' 0' 1'	Ed.D.	Policy Studies
Educational Leadership and Policy Studies	Ph.D.	Division of Educational Leadership and
Educational Madia and Communitary	MEJ	Policy Studies
Educational Media and Computers	M.Ed.	Division of Curriculum and Instruction
Concentration: business education Educational Psychology	M.A., M.Ed.	Division of Dayahology in Education
	Ph.D.	Division of Psychology in Education Division of Psychology in Education
Educational Psychology Concentrations: lifespan developmental	I II.D.	Division of 1 sychology in Education
psychology; measurement, statistics, and		
methodological studies; school psychology		
Elementary Education	M.A., M.Ed.,	Division of Curriculum and Instruction
Concentrations: bilingual education, child	Ed.D.	Division of Currection and Instruction
development, communication arts, curriculum,	Ed.D.	
early childhood education, Indian education,		
mathematics, multicultural education, reading,		
science, social studies		
Elementary Education	Ph.D. ¹	Division of Curriculum and Instruction
Higher and Adult Education	M.Ed., Ed.D.	Division of Educational Leadership and
Concentrations: adult education ¹ , higher education	•	Policy Studies
Learning and Instructional Technology	M.A., M.Ed.,	Division of Psychology in Education
	Ed.D.	
Learning and Instructional Technology Concentrations: instructional technology, learning	Ph.D.	Division of Psychology in Education

Applications are not being accepted.
 This program is administered jointly by the College of Education and the Graduate College. See the "Graduate College" section of this catalog.

Major	Degree	Administered by
School Library Science	M.A. ¹ , M.Ed. ¹	Division of Curriculum and Instruction
Secondary Education	M.A.	Division of Curriculum and Instruction
Secondary Education	M.Ed.	Division of Curriculum and Instruction
Concentrations: bilingual education, English as a second language, Indian education, subject matter fields		
Secondary Education	Ed.D.	Division of Curriculum and Instruction
Concentrations: art education, business education, curriculum and instruction, mathematics education, music education, physical education, science education		
Social and Philosophical Foundations of Education	M.A.	Division of Educational Leadership and Policy Studies
Special Education	M.A., Ph.D. ¹	Division of Curriculum and Instruction
Special Education Concentrations: gifted, mildly handicapped, multicultural exceptional, severely/multiply handicapped	M.Ed.	Division of Curriculum and Instruction

¹ Applications are not being accepted.

issues. Counseling is conducted by graduate students in counseling and counseling psychology under the supervision of certified psychologists.

The Reading Tutoring Program assesses causes of reading problems and offers one-to-one tutoring or small group instruction by experienced teachers in public schools to students referred by parents and recommended by school districts.

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

Teacher Education

Preparation for teacher certification is available to both the undergraduate pursuing a first degree and the individual with a college degree in a noneducation field.

The teaching majors of Art, Choral Music, Dance, Instrumental Music, and Theatre with a bachelor's degree are available through the College of Fine Arts. See pages 295–322 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 Professional Teacher Preparation Program (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:

- 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 three majors areas that provide specialized instruction and preparation. These majors are

- 1. Elementary Education;
- Secondary Education; and
- Special Education.

Students in Elementary Education have these options:

- 1. to complete a general program in Elementary Education, grades K–8;
- 2. to specialize in early childhood education; or
- to complete an endorsement in either bilingual education or English as a second language.

Students in Secondary Education may be certified in a specific academic specialization. Students in art, 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, emotionally handicapped, or learning disabilities.

PTPP Areas and Options or Endorsements

Early Childhood Education

Elementary Education
bilingual education
English as a second language
Secondary Education
certification in specific academic
specializations
K-12 endorsements in art, music,
or physical education

Special Education emotionally handicapped learning disabilities mental retardation

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

All PTPP students 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 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 major 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 for certification in grades K-12 in one of the areas listed above. Students completing any of the above majors must also complete the human development requirements and an academic specialization.

Secondary Education prepares students for certification 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 206.

ADVISEMENT

All students pursuing teaching certificates should seek early advisement from the Office of Student Affairs in the College of Education. Careful planning and early advisement in developing an approved program of study are essential if teacher candidates are to complete certification and graduation requirements within the typical 126-semester-hour undergraduate degree program.

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

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 advisement within the College of Education through its Office of Student Affairs, EDB 7. Admission to ASU with preprofessional status in the College of Education does not guarantee admission to the Professional Teacher Preparation Program (PTPP). Admission to the PTPP is a separate process.

Professional Program Admission

Students are eligible for consideration for admission to the Professional Teacher Preparation Program if they meet the following criteria:

- admission to ASU as a classified student:
- 2. a minimum GPA of 2.50;
- 3. completion of at least 56 semester hours by the time of PTPP admission:
- submission of scores from either the ACT or PPST (a minimum score is not required. An applicant may be referred for additional skill development while matriculating through the program of study.);
- completion of ENG 101 and 102 and general studies L1 and N1 requirements with a grade of "C" or better: and
- 6. a special application with additional supporting materials.

Admission is competitive and not guaranteed to all who satisfy the minimum admission criteria.

Some academic units have additional requirements. *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 1 for fall admission; October 1 for spring admission. Applicants should contact the Office of Student Affairs for an application.

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

deadlines. In most cases, the PPST can be taken as early as the end of the freshman year.

Admission to the PTPP is selective and based on available resources. Not all students who meet minimum requirements are admitted to the program.

Transfer Students

To be considered for admission to the PTPP, transfer students must first be formally admitted to ASU (see pages 34–35). 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 advisement. The university Undergraduate Admissions office 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 ASU academic advisors during those two years for advice in planning a sequence of general studies courses that will meet ASU general studies requirements.

Program of Study

A program of study (POS) must be filed during the first semester of enrollment in the Professional Teacher Preparation Program. Students completing 87 hours (the university limit for registering without a POS) who have not been admitted to the PTPP are provided a registration waiver by the College of Education. See page 72 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 126 semester hours are required for the B.A.E. degree. Four categories of courses are required of PTPP students:

- 1. general studies;
- 2. academic specialization;
- human development (elementary and special education certification candidates only); and
- 4. Professional Teacher Preparation Program.

General Studies Requirements

All students enrolled in a baccalaureate degree program must successfully complete a minimum of 35 semester hours of specifically identified general studies courses as outlined in the ASU *General Catalog*. The required distribution of general studies courses among the core and awareness areas is outlined in this catalog on pages 50–71. Preprofessional students should complete as many of the general studies courses as possible before admission to the PTPP.

Academic Specialization

Courses in the academic specialization give students a greater depth of knowledge in one academic area. Elementary and Special Education majors complete 18 hours in a single academic subject. 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 individual academic specializations:

Academic Specialization	Page(s)
art education ¹	300–301
biological sciences	96
business education	See advisor
chemistry	101
Chinese	123
communication	340
dance education ¹	308
economics	See advisor
English	104
family resources and	
human development	110
French	123
geography	113
German	123
history	118
humanities	121-122
Japanese	123
journalism	343
mathematics	132
mathematics/chemistry	132
mathematics/physics	132
music ²	311
physical education	107
physics	142
physics/chemistry	142
political science	145
Russian	123
social studies	93, 153
Spanish	123
theatre education ¹	319

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

Human Development

The elementary and special education certification programs 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. The human development content

and credit for Secondary Education majors are incorporated into the PTPP courses. No additional credits are required in human development for Secondary Education majors.

Professional Teacher Preparation Program

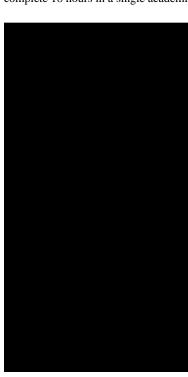
The PTPP is a four-semester sequential program consisting of 35–44 credits. Ranging from seven to 14 credits per semester, the courses for one semester must be completed before enrolling in the next semester. In other words, courses for one semester may not be taken at the same time as those scheduled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

Semester

~		Semester
Seme	ster I	(7) Hours
DCI	396	Field Experience 0
EDP	301	Learning and Motivation
		in Education 2
EDP	303	Human Development 3
SPF	301	Culture and Schooling 2
Seme	ster I	I (7)
DCI	303	Classroom Organization and
201	000	Management
DCI	397	Field Experience 0
EDP	302	Assessment and Evaluation
LDI	302	in Education
EED	400	Principles of Effective
LLD	+00	Instruction in Elementary
		Education
EMC	200	Computers in Education 1
LIVIC	300	Computers in Education
Seme	ster I	II (14)
EED	401	Teaching Science and Social
		Studies to Children 4
EED	402	Teaching Strategies in
		Mathematics 2
EED	404	Language Arts 2
EED	496	Field Experience 0
RDG	401	The Teaching of Reading 3
RDG	402	Reading Practicum 3
Seme	ster I	V (14)
EED		` '
		Elementary School
SPF	401	Theory and Practice in
511	101	Education



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

Elei	nent	ary Education (K–8) Major	Seme	ster I	V (14)	Semester	· IV (12)
2.0.		th a Concentration in	EED	478	Student Teaching in the	SPE 478	8 Student Teaching in
		gual Education/English			Elementary School 12		Special Education 12
		a Second Language	SPF	401	Theory and Practice in		(one certification area)
		Semester			Education	Field-F	xperience Requirements
Seme			Sec	onda	ry Education (7–12) Major		lition to course work, students
		Field Experience 0	БСС	onua	-		to the PTPP are required to
EDP	301	Learning and Motivation	Seme	ster I	(7) Semester Hours		ite in directed field experiences
EDP	303	in Education			Field Experience 0		ach of the four semesters of the
SPF	301	-			Learning and Motivation		. The field experiences
	001	culture and sensoning			in Education 2		from short-term observation
Seme	ster I	* *	EDP	303	Human Development 3		cipation to long-term super-
BLE	400		SPF	301	Culture and Schooling 2		actice teaching. Students
		Language Minority	a		T (0)	_	_
D 01	202	Education		ster I			xpect these field experiences to
DCI	303	Classroom Organization	DCI		Field Experience 0		e and beyond the class times
DCI	207	and Management	EDP	302	Assessment and Evaluation in Education		the Schedule of Classes for
DCI EDP		Field Experience 0 Assessment and Evaluation	EMC	300	Computers in Education 1		nester. Such field experiences
EDI	302	in Education 1	RDG		Reading in the Content		take place in public schools
EMC	300	Computers in Education 1	1120	501	Areas		out the greater Phoenix area.
			SED	400	Principles of Effective		attendance is required during
		II (14)			Instruction in Secondary		experiences. Students should
BLE	401	Teaching Science and Social			Education 3	•	a travel time and expect to
D	400	Studies to Children 4	Como	atom T	II (6)		rith placement teachers and
BLE	402	Teaching Strategies in		ster I			ilitators before or after sched-
DLE	105	Mathematics	SED	403	Principles, Curricula, and Methods 3		d experiences. To meet field
BLE	403	Teaching Reading in BLE/ESL	SED	496	Field Experience 0		ce requirements, students must
BLE	406	Reading Practicum			urse in academic		ave their own transportation
BLE		Language Arts			specialization	and be a	vailable during regular school
		Field Experience 0			-	hours.	
		•			V (14)	Student	Teaching. The culminating
		V (14)	SED	478	Student Teaching in the		perience, called <i>student teach</i> -
BLE	478	Student Teaching in the	CDE	401	Secondary Schools		
CDE	101	Elementary School	SPF	401	Theory and Practice in Education		ars in the fourth semester of the
SPF	401	Theory and Practice in Education			Education 2		d is a full-day, full-semester
		Education	Sr	ecial	Education (K-12) Major		on. Student teaching is only
	Earl	y Childhood Education	•		Semester	-	during fall and spring semes-
		4–8 Teacher Certification	Seme	ster I		ters.	
a		Semester	DCI	396	Field Experience 0	Admissi	on to Student Teaching (Se-
	ster I		EDP	303	Human Development 3	mester I	(V). To be admitted to student
		Field Experience 0	EED		Language Arts 2	teaching	, a student must have attained a
EDP	301	Learning and Motivation	EMC		Computers in Education 1		el of professional standards in
EDP	303	in Education	RDG		The Teaching of Reading 3		field experience assignments
	301	Culture and Schooling	RDG	402	Reading Practicum 3	1	
		culture and believing 2				and mee	t the following requirements:
Seme			Seme	ster I	I (8)		t the following requirements:
					I (8) Teaching Strategies	1. be in	good standing in the PTPP:
DCI		Classroom Organization				1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or
	303	Classroom Organization and Management	EED	402	Teaching Strategies	1. be in a. h	good standing in the PTPP:
DCI	303 397	Classroom Organization and Management	EED	402	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or "Y" grade in each PTPP course;
DCI	303 397	Classroom Organization and Management	EED SPE	402 412	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or 'Y" grade in each PTPP
DCI ECD	303 397 308	Classroom Organization and Management	EED SPE	402 412	Teaching Strategies in Mathematics	1. be in a. h. c. b. h.	n good standing in the PTPP: nave earned a minimum "C" or "Y" grade in each PTPP course;
DCI ECD ECD	303 397 308 404	Classroom Organization and Management	EED SPE SPE	402412413	Teaching Strategies in Mathematics	1. be in a. h. b. h. h. h.	n good standing in the PTPP: nave earned a minimum "C" or "Y" grade in each PTPP course; nave a minimum PTPP GPA of
DCI ECD ECD	303 397 308 404	Classroom Organization and Management	EED SPE SPE	402412413	Teaching Strategies in Mathematics	1. be ir a. h b. h	n good standing in the PTPP: nave earned a minimum "C" or 'Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50;
DCI ECD ECD EDP	303 397 308 404 302	Classroom Organization and Management	SPE SPE SPE	402412413496	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or 'Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50; nave a minimum ASU GPA of 2.50; and nave maintained a high stan-
DCI ECD ECD EDP	303 397 308 404 302 300	Classroom Organization and Management	SPE SPE SPE Seme	402 412 413 496 ester I	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or 'Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50; nave a minimum ASU GPA of 2.50; and
DCI ECD ECD EDP EMC	303 397 308 404 302 300 ster I	Classroom Organization and Management 2 Field Experience 0 Foundations of Early 0 Childhood Education 3 Language Arts 2 Assessment and Evaluation 1 Computers in Education 1 II (12)	SPE SPE SPE Seme	402 412 413 496 ester I	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or 'Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50; nave a minimum ASU GPA of 2.50; and nave maintained a high stan- dard of professional conduct;
DCI ECD ECD EDP EMC	303 397 308 404 302 300 ster I	Classroom Organization and Management 2 Field Experience 0 Foundations of Early Childhood Education 3 Language Arts 2 Assessment and Evaluation 1 Computers in Education 1 II (12) Instructional Strategies:	SPE SPE SPE Seme	402 412 413 496 ster I 320	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or "Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50; nave a minimum ASU GPA of 2.50; and nave maintained a high standard of professional conduct; e no incompletes in PTPP
DCI ECD ECD EDP EMC	303 397 308 404 302 300 ster I	Classroom Organization and Management 2 Field Experience 0 Foundations of Early 0 Childhood Education 3 Language Arts 2 Assessment and Evaluation 1 Computers in Education 1 II (12) Instructional Strategies: Social Studies and	SPE SPE SPE Seme EED SPE	402 412 413 496 ster I 320 411	Teaching Strategies in Mathematics	1. be in a. h	n good standing in the PTPP: nave earned a minimum "C" or "Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50; nave a minimum ASU GPA of 2.50; and nave maintained a high standard of professional conduct; e no incompletes in PTPP ses;
DCI ECD ECD EDP EMC Seme ECD	303 397 308 404 302 300 ster I	Classroom Organization and Management 2 Field Experience 0 Foundations of Early Childhood Education 3 Language Arts 2 Assessment and Evaluation 1 Computers in Education 1 III (12) Instructional Strategies: Social Studies and Creative Arts 3	SPE SPE SPE Seme EED	402 412 413 496 ster I 320	Teaching Strategies 2 in Mathematics 2 Evaluating Exceptional 3 Children 3 Methods in Language, Reading, and Arithmetic for Exceptional Children 3 Field Experience 0 II (12) Teaching Science to Children 3 Parent Involvement and Regulatory Issues Regulatory Issues 3 Methods and Strategies in	1. be in a. h. d. d. b. h. d. d. h. d. d. h. d. c. h. d. c. h. d. d. h. d. d. d. h. d. d. d. d. h. d.	n good standing in the PTPP: nave earned a minimum "C" or "Y" grade in each PTPP course; nave a minimum PTPP GPA of 2.50; nave a minimum ASU GPA of 2.50; and nave maintained a high standard of professional conduct; e no incompletes in PTPP ses; plete all PTPP courses, with
DCI ECD ECD EDP EMC Seme ECD	303 397 308 404 302 300 ster I	Classroom Organization and Management	SPE SPE SPE Seme EED SPE SPE	402 412 413 496 ster I 320 411 414	Teaching Strategies 2 in Mathematics 2 Evaluating Exceptional 3 Children 3 Methods in Language, Reading, and Arithmetic for Exceptional Children 3 Field Experience 0 II (12) Teaching Science to Children 3 Parent Involvement and Regulatory Issues 3 Methods and Strategies in Behavior Management 3	1. be in a. h. c. b. h. c. h. c. h. c. h. c. h. c. c. h.	in good standing in the PTPP: have earned a minimum "C" or "Y" grade in each PTPP course; have a minimum PTPP GPA of 2.50; have a minimum ASU GPA of 2.50; have a minimum ASU GPA of 2.50; and have maintained a high standard of professional conduct; he no incompletes in PTPP have; he plete all PTPP courses, with exception of SPF 401;
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- 5. have no more than two courses to complete in general studies; and
- 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.

Secondary Education majors must have no more than two required courses remaining in the academic specialization and receive the approval of the specialization advisor.

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 degree of Bachelor of Arts in Education are required to complete an approved program of at least 126 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 page 204 of this catalog.

ACADEMIC STANDARDS

Retention and Disqualification

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.

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 PTP Program may still be eligible to enroll in other non-PTPP courses.

To be considered in good standing, students must maintain an overall cumulative GPA *or* a GPA in PTPP course work of 2.50 or higher with at least a grade of "C" in each PTPP course. Any first- or second-semester PTPP student who fails to satisfy these requirements may be placed on academic probation or suspended from enrollment in the next semester of the PTPP program. By the end of the third semester, PTPP students must meet the requirements for student teaching described earlier.

Students on academic probation or suspension from the university and/or PTPP must seek advice from the Office of Student Affairs before registering for additional course work. A complete copy of the retention policy for the PTPP is available from the Office of Student Affairs in EDB 7.

Probation and suspension status for academic reasons begins on the first day of classes of the semester after the probation or suspension action. Students placed on probation for any reason are subject to disqualification by the College of Education at the end of the following semester if the conditions imposed for reinstatement are not met. The status of a student placed on probation or suspension for any reason is reviewed at the end of the following semester.

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 de-

cision 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 Initial Teacher Certification (ITC) Programs

Postbaccalaureate programs that lead to initial teaching certification are designed for those who hold a bachelor's degree in an area other than education. The college offers postbaccalaureate programs in 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 (OSA), EDB 7. The OSA provides academic advisement 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
- submission of a completed application form and supporting materials by the appropriate deadline dates during the semester before admission

Admission to postbaccalaureate programs is selective and based on available resources. Not all students who meet the minimum requirements are admitted to the program.

A student who also wishes to pursue a master's degree should contact the program coordinator 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 can be included in a candidate's master's degree program of study.

Student Teaching

Students in the Postbaccalaureate Initial Teacher Certification Program 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

- 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);
- remove all academic deficiencies such as grades of "D," "E," or "I" before placement; and
- attain 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 requirements.

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 (EDB 7) 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 (BLE), 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 English as a second language endorsement is required of all teachers specifically responsible for providing ESL instruction. Students should contact the Office of Student Affairs for information and advisement regarding teaching concentrations or special teaching endorsements.

Selected Studies in Education

An undergraduate student who is interested in a career in education other than public-school teaching can elect to develop an individualized degree program. A student who wants to develop a program of selected studies must fulfill College of Education admission requirements and should contact the Office of Student Affairs for program advisement. A program of study must be filed during the first semester of a student's program and be approved by the Standards and Appeals Committee of the Division of Curriculum and Instruction. The Selected Studies major is not designed to lead to teacher certification.

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

All graduate programs of the College of Education include a core of courses designed to give students an understanding of the context of American education and of the methods of scholarship by which an understanding of the educational system is deepened.

Candidates for M.Ed. and M.C. degrees must complete courses COE 501, 504, and 505 for a total of nine semester hours. Doctoral candidates must complete COE 502, 503, 504, and 505 for a total of 12 semester hours. The core courses are offered each semester and during the summer session. Students are urged to take the core courses early in the program since these courses form the foundation on which many subsequent courses are built.

The core courses follow.

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, SS

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

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Division of Curriculum and Instruction

Sheryl L. Santos Interim Director (ED 409) 602/965-1644

PROFESSORS

BERLINER, BITTER, CHRISTIE, EDELSKY, EDWARDS, FAAS, GRYDER, HIGGINS, MOYER, PRIETO, RAY, RUTHERFORD, SATTERTHWAITE, SEARFOSS, VALVERDE, WALLEN, ZIMILES, ZUCKER

ASSOCIATE PROFESSORS

ANDERSON, ARIAS, BAKER,
BARONE, BENAVIDES, BLANCHARD,
COHEN, COHN, EEDS, FALTIS,
FINER, FLORES, GOMEZ, GUZZETTI,
HATFIELD, HUDELSON, KLEIN,
KNAUPP, McCOY, McGOWAN,
McISAAC, NELSON, PETERSON,
PIBURN, RADER, ROBERTS,
SANTOS, STAHL, STALEY, SURBECK,
SWISHER, THOMAS, VALLEJO,
WILSON, WISEMAN

ASSISTANT PROFESSORS

BLUMENFELD-JONES, DI GANGI, KINARD. SERNA

PROFESSORS EMERITI

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

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 handicapped, 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 (BLE), English as a second language (ESL), middle school education, and reading.

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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Adult Education Program Area

ADULT EDUCATION

AED 510 Introduction to Adult Education. (3) N

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

511 Program Development in Adult Education. (3) N

An andragogical approach to planning programs for adults. Emphasis on agencies.

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

566 International Adult Education. (3) A Review and comparison of adult education programs and facilities in selected countries.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Early Childhood Education Program Area

EARLY CHILDHOOD EDUCATION

ECD 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.

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.

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

Considers all aspects of curriculum. Philosophy, principles, practices, problems, and evaluation in the integrated-experience program.

^{*} 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 parents.

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.

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: FCD 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.

411 Early Childhood Education: Programs and Materials. (3) F, S, SS

Principles, experiments, research studies, and recent trends as factors related to the education of children through age eight. Prerequisite: ECD 312 or equivalent.

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

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

Examination of bilingual/biliterate development of elementary school children, bringing together native and second language, oral language, and literacy development findings with educational practices. Lecture, lab. Cross-listed as BLE 521. Prerequisite: BLE

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 equivalent.

525 Communication Arts in Early Childhood Education. (3) $\mbox{\ensuremath{\mathsf{S}}}$

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 equivalent.

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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Educational Media and Computers Program Area

BUSINESS EDUCATION

BUE 480 Teaching Business Subjects. (3) S

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) ${\sf S}$

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

505 Current Literature in Business and Vocational Education. (3) $\ensuremath{\text{S}}$

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 education.

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

Emerging curricula and instructional technology in business and vocational education.

515 Distributive Education. (3) F

Planning, organizing, and implementing marketing and distributive education programs in secondary schools and community colleges.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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 Education majors.

321 Computer Literacy. (3) F, S, SS Survey of the role of computers in business and education. Emphasis on word processing, database, and spreadsheets. *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.

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

of animation and other special effects used in film.

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

Critical analysis of current practices in instructional media/computer.

505 Amiga Technology. (3) F

The Amiga computer as a multimedia system. Graphics and animation with Deluxe Paint IV and authoring with Amigavision. Lecture, lab.

506 Amiga Animation. (3) F

The Amiga computer as an animation system. Creating animation using a wide range of 2- D and 3-D technologies. Lecture, lab. Prerequisite: EMC 505.

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 settions

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.

522 Evaluating Computer Materials. (3) S, SS

Selection, utilization, design, and evaluation of instructional computer materials.

523 Telecommunication for Instruction. (3)

Instructional uses of satellite, teleconference, and electronic networks for distance learning.

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) \mbox{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 Advanced Photographic Media Production. (3) S

Design and production of multimedia instructional programs. Emphasis on slide/tape format. Lecture, lab. Prerequisite: EMC 521 or instructor approval.

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

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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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.

366 Observation and Participation. (1-3) F, S SS

Students observe and work directly with elementary children in a classroom situation. Includes a critical evaluation. 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 Strategies in Mathematics.

Strategies and methodologies of teaching elementary mathematics integrating modern technologies, problem solving, manipulatives, current research, and learning theories. Prerequisite: MAT 114 or 117 or equivalent; MTE 180 or equivalent. Corequisites: EED 401, 404, 496; RDG 401, 402 or SPE 412, 413, 496

404 Language Arts. (2) F, S

Presents theory on the social nature of oral and written language and congruent classroom 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.

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

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

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

530 Outdoor Education. (3) SS

Use of various outdoor settings as laboratories for classroom-related experience, study, observation, inquiry, research, and recreation.

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.

585 Contemporary Issues in Elementary Education. (3) S, SS

A seminar which develops an understanding of a broad range of contemporary issues. Assists in establishing an informed professional view. Prerequisite: EED 511 or equivalent.

670 Qualitative Research in Elementary Education. (3) S

Survey of ethnographic and naturalistic studies of literacy; microethnographic,

ethnomethodological, and sociolinguistic studies of classroom interaction; ethnographies of elementary schooling. Prerequisite: COE 503.

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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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 feaching 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 literature-based 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) ${\sf S}$

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.

516 Teaching Strategies for Native American ESL Programs. (3) A

Includes instructional activity development, cultural characteristics, and infusion of culturally relevant content in ESL programs of instruction. 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) $\ensuremath{\mathsf{S}}$

Examination of bilingual/biliterate development of elementary school children, bringing together native and second language, oral language, and literacy development findings with educational practices. Cross-listed as ECD 521. 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) $\mbox{\ensuremath{\mathsf{S}}}$

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 socio-psycholinguistic 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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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. (3) F

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

424 Curriculum and Practices for Indian Education. (3) S

Curricula, philosophies, and research in Indian education. Techniques for curriculum development, change, and improvement. 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.

490 Problems of Teachers of Indian Students. (3) S

Current issues, trends, and problems encountered by teachers. Viable solutions discussed. Research reviewed and evaluated. Prerequisite: IFD 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.

502 PS: Development of Indian Cultural and Language Materials. (3) A

Provides a cultural/language approach to curriculum development. Examination of instructional materials used in American Indian bilingual/bicultural education programs.

511 Community Schools in Indian Education. (3) A

Development, implementation, and administration of Indian community schools. Techniques and methods for effective school-community relations.

522 Family Literacy in Language Minority Communities. (3) F, S, SS

Examines theories and practices related to literacy development in adults. Special emphasis is given to Native American families.

544 Role of Tribal, State, and Federal Government in Indian Education. (3) A

Examines responsibilities and relationships of each agency in the operation of Indian education programs. Analyzes legislation, financial resources, and tribal control.

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

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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 studies:* C.

447 Methods of Teaching the Culturally Diverse Child. (3) A

Techniques for organizing and providing special educational experiences for students from culturally and linguistically different populations. Prerequisite: MCE 446.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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 Library Automation. (3) \mbox{S}

Library uses of computers. Fundamental concepts and issues in the field of library automation. 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.

534 Evaluation of Literature for Young Readers. (3) \mbox{S}

Applying standards of literary criticism to literature for young readers. Prerequisite: LIS 410 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 Library Materials for Children. (3) F Selecting and using print and nonprint materials to support the elementary school curriculum

564 Library Materials for Adolescents. (3) F Selecting and using print and nonprint materials to support the secondary school curriculum

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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

READING EDUCATION

RDG 301 Reading in the Content Areas. (3) F, S, SS

Required course for all Secondary Education candidates. Introduces theory and instructional strategies for learning from text across academic disciplines.

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

For elementary teachers-in-training. Survey course provides basic teacher skills, 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 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. Corequisite: RDG 402; DCI 396 and EDP 303 and EMC 300 or ECD 401 and 402 and 496 or EED 401 and 402 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. Corequisite: RDG 401; DCI 396 and EDP 303 and EMC 300 *or* ECD 401 and 402 and 496 *or* EED 401 and 402 and 404 and

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

533 Reading-Teaching Bilingual Students.

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.

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) ${\sf S}$

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 ap-

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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)

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.

401 Humanities in World Cultures. (3-6) N A humanities study program of foreign travel. Fine and performing arts of the various world cultures. May be repeated for credit. Prerequisite: instructor approval.

480 Methods of Teaching the Humanities. (3) N

Methods of instruction, organization, discussion, and presentation of the courses in the interdisciplinary humanities. Prerequisites: HUE 101 and 102 or instructor approval.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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. Prereq-

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; ma-

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 and 404; 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, 404; 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 specified prerequisites in special education

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.

513 Teaching Students with Mental Retardation. (3) N

Specific methods, materials, and curriculum for students with mild or moderate retardation. Prerequisite: SPE 312 or 512.

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

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)

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 ap-

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.

538 Methods of Teaching Students with Behavioral Disorders. (3) N

Development of methods for managing the academic and social behavior of behaviorally disordered children and youth in educational settings. Prerequisite: SPE 336 or 536.

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.

579 Supported Employment for Individuals with Severe Handicaps. (3) F

Emphasis on transition from school to integrated community and work settings for the severely and profoundly handicapped. Practicum required. Lecture, practicum. Prerequisites: SPE 552 and courses on severely handicapped.

582 Classroom Research with Exceptional Children. (3) $\mbox{\ensuremath{\mathsf{S}}}$

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

585 Creativity: Research and Development. (3) 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) ${\sf F}$

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) 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) S

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

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Division of Educational Leadership and Policy Studies

K. Forbis Jordan Interim Director (ED 108) 602/965-6248

PROFESSORS

FENSKE, GLASS, HUNNICUTT, JORDAN, METOS, NORTON, PADILLA, RICHARDSON, SMITH, R. STOUT, VALVERDE, WEBB

ASSOCIATE PROFESSORS

BOGART, CASANOVA, HARTWELL-HUNNICUTT, LEVAN, NOLEY, RENDÓN, WALKER, WILKINSON

PROFESSORS EMERITI

ASHE, BELOK, DEMEKE, DRAKE, HUFF, MENKE, SHAFER, M. STOUT, 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 bonding.

521 Evaluation of Teaching Performance. (3) F

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 administration.

525 Human Relations and Societal Factors in Education. (3) $\mbox{\ensuremath{N}}$

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, S_{r}

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) \mbox{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 endeavors. Prerequisites: EDA 524; 30 semester hours in educational administration; admission to doctoral program.

722 Administration of Instructional Improvement. (3) S

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 page 44 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 Third-World Women. (3) F

Economic, sociopolitical, and demographic context for understanding the roles of thirdworld women 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) $\ensuremath{\mathsf{N}}$

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) 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.

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.

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

Problems of American education and their sociohistorical context.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

HIGHER EDUCATION

HED 510 Introduction to Higher Education. (3) F

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

516 Management Concepts in Higher Education. (1) $\ensuremath{\text{N}}$

Introduction to concepts of management theory and practice.

533 The Community-Junior College. (3) F,

History, functions, organization, and current issues. Meets Arizona community college course requirement for certification.

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) $\ensuremath{\mathbb{S}}$

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.

689 Administration. (3) F

Theory and practice of administration in higher education institutions. Prerequisite: HED 510.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

Division of Psychology in Education

Gail Hackett
Interim Director
(EDB 301) 602/965-3384

REGENTS' PROFESSOR

KULHAVY

PROFESSORS

BERLINER, BERNSTEIN, CABIANCA, CLAIBORN, DRISCOLL, GLASS, GRINDER, GROSS, HACKETT, HARRIS, HORAN, B. KERR, N. KERR, KRUS, McWHIRTER, NELSEN, ROBINSON, SMITH, SNYDER, STROM, SULLIVAN

ASSOCIATE PROFESSORS

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

ASSISTANT PROFESSOR HOOD

PROFESSORS EMERITI

BENEDICT, BLACKHAM, BLAESSER, BOETTO, CHURCHILL, CUMMINGS, DAANE, DAVIS, GAFFNEY, GERLACH, GUINOUARD, HELMSTADTER, KIMLER, MAZEN, MILLER, MOULTON, NICHOLS, NOBLE, SATTLER, STAFFORD, 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 program majors. Master's degrees are offered in Counseling Psychology, Counselor Education, Educational Psychology, and Learning and Instructional Technology. Doctoral degrees are offered in the program majors of Counselor Education (applications for the doctorate in Counselor Education are no longer being accepted), Counseling Psychology (a program accredited by the American Psychology in Education and Psychology in Education are no longer being accepted).

chological Association), Educational Psychology, and Learning and Instructional Technology. In the Ph.D. program in Educational Psychology, the following concentrations are available: school psychology (a program accredited by the American Psychological Association); measurement, statistics, and methodological studies; and life-span developmental psychology.

Students applying to the graduate programs in Counseling Psychology or Educational Psychology are required to submit scores on the Graduate Record Examination (GRE). The Miller Analogies Test may be substituted for the GRE in the concentrations of counselor education and educational technology. 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.

666 Comparative Theories of Personality.
(3) F

Comparative analysis of personality theories in relation to counseling practices. Prerequisite: CED 577 or equivalent.

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.

670 Behavioral Counseling. (3) N

Theory, procedures, and applications of behavior modification and therapy in working with children, parents, and adult clients in school, clinic, and institutional settings. Didactic instruction and analysis of individual and group problems and directed experiences.

Prerequisite: CED 577 or equivalent.

671 Multicultural Counseling. (3) N Provides awareness of the influence of sociocultural variables on human development and explores implications for counseling minority populations. Prerequisite: CED 577 or equivalent.

672 Human Diversity: Social Psychological Perspectives. (3) ${\sf A}$

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 biofeed-back, 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) \mbox{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 page 44 for omnibus courses that may be offered.

COUNSELOR EDUCATION

CED 512 Introduction to the Helping Relationship. (3) F, S, SS

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 mobility.

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 program.

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.

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

673 Marriage and Family Counseling II. (3)

Advanced analysis and application of systems communication counseling. Focus on marital and sexual counseling. Practicum recommended.

681 Supervised Practice. (3) F, S

Supervised experiences in schools or community agencies. Prerequisite: instructor approval.

Omnibus Courses: See page 44 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, SS

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) ${\sf S}$

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

544 Psychology of Reading. (3) N

Alternate analyses of the reading process; designs and procedures for investigating instructional and noninstructional variables related to reading achievement.

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) $\mbox{\ensuremath{S}}$

Advancement of statistical design and measurement skills through development of data-processing 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.

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) ${\sf S}$

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) $\mbox{\ensuremath{S}}$

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.

Omnibus Courses: See page 44 for omnibus courses that may be offered.

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 materials

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 540.

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

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 cognitive models to the instructional process. Seminar. Prerequisites: EDP 552; LNT 540.

(1–6) F, S, SS Prerequisites: LNT 501, 502; instructor approval. Pre- or corequisite: EMC 521.

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

780 Advanced Instructional Development.

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 page 44 for omnibus courses that may be offered.

