Ma

# UNIVERSITY <br> Lawton, Oklahoma 



# General Catalog 

## CAMERON UNIVERSITY

## Annual Catalog

2800 Gore Boulevard


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## ACCREDITATION

Cameron University is accredited by the NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARYSCHOOLS and the OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION.

The Teacher Education and Certification programs at Cameron University are accredited by the OKLAHOMA STATE BOARD OF EDUCATION. Approved graduates are recommended for teaching certificates in the elementary and secondary schools of Oklahoma.

The Baccalaureate Degree Program of the Department of Music at Cameron University is fully accredited by the NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC.

The Associate Degree Program of the Department of Nursing at Cameron University is fully accredited by the NATIONAL LEAGUE FOR NURSING.

The Cameron University Department of Nursing is also approved by the OKLAHOMA BOARD OF NURSE REGISTRATION AND NURSING EDUCATION. Graduates of this program are eligible to write the State Board Test Pool Examination for registered nurse licensure.

The Design Drafting curriculum is certified by the AMERICAN INSTITUTE FOR DESIGN AND DRAFTING at the Design Draftsman level.

Because of the above recognition, Cameron University students and graduates are regularly accepted by other colleges and universities throughout the nation.

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## ACADEMIC CALENDARS

## DAY CALENDAR <br> 1977-1978

FALL 1977

Enrollment
Classes Begin
Holiday (Labor Day)
Holiday (Veteran's Day)
Holiday (Thanksgiving)
Semester Exams
Semester Ends

SPRING 1978
Enrollment
Classes Begin
Holiday (Washington's
Birthday)
Spring Vacation

Semester Exams
Semester Ends
Graduation

SUMMER TERM 1978
Enrollment
Classes Begin
Holiday (Independence Day)
Term Ends
Graduation

August 17-18
August 22
September 5
October 24
November 24-25
December 12-16
December 16

January 11-12
January 16
February 20

Begins 4:30 p.m. March 17
Ends 7:30 a.m. March 27
May 10-16
May 16
May 16

May 31
June 1
July 3-4
July 28
July 28

## TENTATIVE DAY SCHOOL CALENDAR <br> 1978-1979

FALL 1978
Enrollment
Classes Begin
Holiday (Labor Day)
Holiday (Veteran's Day)
Holiday (Thanksgiving)
Semester Exams
August 16-17
August 21

Semester Ends
September 4
November 10
November 23-24
December 12-18
December 18

SPRING 1979

| Enrollment | January 10-11 |
| :--- | :--- |
| Classes Begin | January 15 |
| Holiday (Washington's | February 19 |
| $\quad$ Birthday) | March 19-23 |
| Spring Vacation | May 10-16 |
| Semester Exams | May 16 |
| Semester Ends | May 16 |
| Graduation |  |

## SUMMER TERM 1979

Enrollment May 30

Classes Begin May 31
Holiday (Independence Day) July 4
Term Ends
Graduation
July 26
Graduation July 26

## EVENING SCHOOL CALENDAR 1977-1978

## FIRST FALL SESSION 1977

Enrollment
Classes Begin

Holiday (Labor Day)
Classes End

4:30-7:00 p.m. August 23
7:00 p.m. Aug. 23 (T Th Classes)
7:00 p.m. Aug. 24 (M W Classes)
September 5
Oct. 13 (T Th Classes)
Oct. 17 (M W Classes)

SECOND FALL SESSION 1977

Enrollment
Classes Begin
Holiday (Veteran's Day)
Holiday (Thanksgiving)
Classes End

WINTER SESSION 1978
Enrollment
Classes Begin
Holiday (Washington's Birthday)
Classes End

SPRING SESSION 1978
Enrollment
Classes Begin
Spring Vacation
Classes End
SUMMER SESSION
Enrollment
Classes Begin
Holiday (Independence Day)
Classes End

4:30-7:00 p.m. Oct. 19
7:00 p.m. Oct. 19 (M W Classes)
7:00 p.m. Oct. 20 (T Th Classes)
October 24
November 24-25
Dec. 14 (M W Classes)
Dec. 15 (T Th Classes)

4:30-7:00 p.m. January 16
7:00 p.m. Jan. 16 (M W Classes)
7:00 p.m. Jan. 17 (T Th Classes)
February 20
March 9 (T Th Classes) March 13 (M W Classes)

4:30-7:00 p.m. Mar. 14
7:00 p.m. Mar. 14 (T Th Classes)
7:00 p.m. Mar. 15 (M W Classes)
March 20-24
May 11 (T Th Classes)
May 15 (M W Classes)

4:30-7:00 p.m. May 30
7:00 p.m. May 30 (T Th Classes)
7:00 p.m. May 31 (M W Classes)
July 3-4
July 25 (T Th Classes)
July 26 (M W Classes)



# BOARD OF REGENTS 

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
E. T. DUNLAP, Chancellor Oklahoma City
RUSSELL D. VAUGHT, Chairman ..... Midwest City
RUBY M. HALL, Vice-Chairman Oklahoma City
JOE F. GARY Durant
JOHN J. VATER, JR. ..... Enid
BOB F. ALLEE, Secretary Elk City
G. ELLIS GABLE ..... Tulsa
SCOTT ORBISON, Assistant Secretary ..... Tulsa
JAMES L. MILLS McAlester
JOHN H. PATTEN Norman
BOARD OF REGENTS FOR THE OKLAHOMA STATE UNIVERSITY
AND AGRICULTURAL AND MECHANICAL COLLEGES
JERRELL CHESNEY, Secretary Oklahoma City
EDWIN KETCHUM, Chairman ..... Duncan
JOHN W. MONTGOMERY, Vice-Chairman ..... Poteau
H. HARBER LAMPL, ..... Shawnee
DEAN CATON Oklahoma City
RONALD R. MARTIN ..... Checotah
JOHN W. DUNN ..... Woodward
JON FORD Oklahoma City
GARY REID ..... Hollis
CAROLYN SAVAGE Hominy

# ADMINISTRATION AND FACULTY 

## ADMINISTRATION

DON OWEN President
RICHARD MURRAY Dean of the University
BOB QUINTEN Dean of Instruction
FREEMAN McKEE Director of Institutional Research
CHARLES P. BROWN Development Officer
CHARLES ELKINS Dean of Student Services
BETTY ROUNDTREE Associate Dean of Student Services
WAYNE BEAN Associate Dean of Student Services
WILLIAM LEE Director of Counseling
FLAKE TODD Business Manager
BURL HOLMES Assistant Business Manager
JOHN STERLING Fiscal Officer
BONNIE KENDALL Chief Accountant and Personnel OfficerRAYMOND CHAPMAN ..... Director of Admissions and RecordsJACK SEYMOUR .. Assistant Director of Admissions and RecordsROBERT RICHEY ...................... Director of Financial Aids
ROBERT S. PHILLIPS Director of Library Services
RALPH WHITELEY Director of Public Relations
J. D. McLEMORE Director of Placement
BOB DELVER Director of Physical Plant
DON MATTHEWS Assistant Director of Physical Plant
JOHN DUKE Director of Security
DALE SARE Director of Data Processing

## AUXILIARY SERVICES

J. R. ALLISON Director of Auxiliary Services
SAM HENDERSON Bookstore and Student Union Manager
LOUIS WHITELEY Director of Student Housing
LOWELL WATTS Men's Residence Supervisor
PAM HENDERSON Women's Residence Supervisor
MARGARET SULTENFUSS Director of Food Services
LARRY WHITE ..... Assistant Director of Food Services


## FACULTY AND ADMINISTRATIVE STAFF

ALLEN, MARY K., (1967) Lanuage Arts, B.S., Wayland Baptist College; M.Ed., University of Oklahoma.
ALLISON, J. R., (1970) Director of Auxiliary Services, B.A., University of the Pacific. ALLISON, TONY, (1972) Speech-Drama, B.A., Abilene Christian College; M.A., Southwest Texas State University.
AMYX, JACK F., (1965) Chairman Business, B.S., M.S., Ed.D., Oklahoma State University.
ANDERSEN, MARSHALL, (1975) Biology, B.S., M.S., University of Kansas.
ANDRUS, CHARLES, (1967) Social Science, A.B., Park College; M.Div., Louisville Presbyterian Theological Seminary; Th.M., Th.D., Ph.D., International Free Protestant Episcopal University.
BARKER, GERALD, (1977) Remote Job Entry Site Supervisor, A.S., B.S., Cameron University.
BEAN, WAYNE TERRAL, (1975) Associate Dean of Student Services, B.S., Central State University; M.Ed., East Texas State University.
BEANEY, MARILYN, (1976) Language Arts, B.A., Oklahoma Baptist University; M.A., University of Oklahoma.

BEAVERS, WILMA, (1977) Home Economics, B.S., Oklahoma State University; M.H.Ec.Ed., University of Oklahoma.

BENNETT, ALLISON C., (1976) Agriculture, B.S., M.S., Oklahoma State University; Ph.D., Auburn University.
BENNETT, ELAINE, (1975) Nursing, B.S., Central State University; R.N., St. Joseph's Hospital School of Nursing.
BLODGETT, RALPH E., (1972), Social Science, B.S., M.A., Ph.D., University of Colorado.
BRENNAN, PATRICIA MICHELE, (1977) Nursing, B.S., Niagara University.
BREWER, ALLEN, Sergeant Major (1973) Military Science, Principal Drill Instructor. BROOKS, NANCY, (1969) Business, B.B.E., M.B.E., University of Oklahoma.
BROOKS, RICHARD S., (1976) Admissions and Records, B.S., Cameron University.
BROWN, CHARLES P., (1975) Development Officer, B.S., University of Oklahoma; M.B.A., New York University.

BRUCE, JON, (1970) Education and Psychology, B.S., Panhandle A\&M College; M.Ed., Abilene Christian College; Ed.D., Baylor University.
BRYAN, JACK, (1967) Chairman, Art, B.F.A., University of Oklahoma; M.A., University of Tulsa.
BUCKLEY, GARY S., (1977)Physical Science, B.S., Northern Illinois University; M.S., Texas A\&M University.
BURNETT, BEVERLY, (1974) Nursing, B.S., Cameron College.
BURNS, PAULETTE, (1977) Nursing, B.S., University of Maryland.
BYRD, ROY, (1965) Chairman, Technology, B.S., East Central State College; PostBaccalaureate Certificate, University of Illinois; M.S., Oklahoma State University.
CANNON, CAROL YVONNE, (1971) Counselor, B.A., Central State; M.S., University of Oklahoma.
CARDWELL, SCHERREY P., (1971) Language Arts, B.A., St. John's College; M.A., Ph.D., University of Arkansas.
CHAPMAN, RAYMOND, (1969) Director of Admissions and Records, B.S., Southwestern State College; M.Ed., University of Oklahoma.
CHENOWETH, DON W., (1972) Social Science, B.A., University of Minnesota; M.A., Indiana University; Ph.D., St. Louis University.

CHESTER, JAMES, (1976) Business, A.A., Cameron University; B.S., University of Science and Arts of Oklahoma; M.B.A., Western New England College.
COCKROFT, RICHARD, (1976) Military Science, Master Sergeant, Administrative NCO.
CONN, PATSY, (1977) Nursing, B.S.N., Central State University.
COOPER, MICKEY, (1964) Biology, B.S., East Central State College; M.S. and Ph.D., Oklahoma State University.
COSGROVE, DALE G., (1968) Business, B.S.B.A., M.B.A., University of Arkansas, C.P.A., Oklahoma.

COTTINGHAM, JAMES, (1972) Technology, B.S., Arch. Engineering University of Oklahoma; M.S., Oklahoma State University; Registered Architect in Oklahoma.
COYLE, GAYLE, (1973) Veteran's Affairs Officer, B.S., Central State University; M.S., Oklahoma State University; M.A., University of Texas at El Paso.
CRANE, JOE, (1969) Physical Science, B.S., M.S., Ph.D., Oklahoma State University.
CREED, BRUCE, (1976) Speech-Drama, A.A., Western Oklahoma State College; B.A., Southwestern Oklahoma State University; M.A., Western Kentucky University.
DELVER, BOB, (1969) Director of Maintenance, B.S., Central State College; M.A., University of Oklahoma.
DOANE, BENNIE, (1975) Agriculture, B.S., Oklahoma State University; M.S., University of Illinois.
DOVER, MONTE, (1973) Student Services, B.S., M.S., Oklahoma State University.
EDMUNDSON, JOHN N., (1976) Art, B.F.A., University of Houston; M.F.A., Stephen F. Austin State University.

ELLIS, KENNETH, (1974) Education and Psychology, B.S., East Central State College; M.S., Ed.D., University of Oklahoma.

ELKINS, CHARLES R.,(1962) Dean of Student Services, B.S., Oklahoma State University; M.Ed., University of Oklahoma.
ENGELMAN, LYEVA, (1970) Music, B.F.A., Oklahoma State University; M.A., Eastman School of Music.
EPPERSON, WAYNE E., (1968) Biology, B.S., M.S., Ph.D., Oklahoma State University.
EWBANK, KATHRYN, (1968) Speech-Drama, B.A., M.A., Ph.D., University of Oklahoma.
FARMER, LOYAL, (1963) Mathematics, B.S., Northeastern State College; M.S., Florida State University; Ed.D., North Texas State University.
FARRAR, ARTHUR, (1968) Business, B.S., Southwestern State College; M.S., Colorado College of Education; Ed.D., University of Oklahoma.
FEES, BOYD, (1973) Music, B.S.M.E., Olivet Nazarene College, Kanakakee, Illinois, M.M.E., University of Oklahoma.

FINKE, WILLIAM C., (1966) Physical Science, B.S., Southeastern State College; M.T., Southwestern State College; Ph.D., University of Oklahoma.
FIRE, HELEN, (1976) Nursing, B.S., Oklahoma City University.
FLETCHER, WILLIAM, (1964) Music, B.M., M.M., University of Michigan.
FORD, BENNETT C., (1975) Librarian, B.A., Bellarmine College; M.L.S., University of Kentucky.
GILES, ROBERT H., (1967) Music, B.M.E., Baldwin Wallace College; M.M., University of Oklahoma.
GITHENS, GRACE JOHNSTON, (1966) Chairman, Home Economics, B.S., Oklahoma College for Women; M.S., Ed.D., University of Oklahoma.
GIVENS, REX J., (1975) Business, B.A., LLB, University of Oklahoma.
GOODE, DEBORAH E., (1976) Systems Analysis Programmer, A.S., B.S., Cameron University.

MARTIN, DAVID L., (1970) Chairman, Agriculture, B.S., Oklahoma A\&M; M.S., Oklahoma State University.
MARTIN, SHIRLEY, (1969) Music, B.A., University of Northern Iowa; M.A., Claremont Graduate School.
MARTINEZ, JOHN, (1973) Business, B.A., University of Texas; M.S., University of Oklahoma.
MATHIS, JANICE M., (1975) Technology, B.S., Southwestern Missouri State University; M.S., University of Missouri.
MEADERS, DAVID, (1977) Military Science, Major, B.A., University of Tampa.
MERAZ, EMMITT, (1959) Mathematics, B.S., Southeastern State College; M.E., University of Oklahoma.
MERRITT, MARTHELLE, (1967) Home Economics, B.S., M.Ed., Ed.D., University of Oklahoma.
MILLER, DAVID H., (1970) Chairman, Social Science, B.A., M.A., University of Utah; Ph.D., University of New Mexico.
MILLER, RAYMOND, (1970) Physical Education, B.A., Southwestern State College; M.E., University of Oklahoma.

MILNER, TRUDY JAN, (1977) Nursing, B.A., William Woods College; B.S.N., Baylor University.
MOOTS, JOHN, (1973) Music, B.M.Ed., M.M.Ed., Wichita State University.
MORRIS, CECIL RAY, (1977) Health and Physical Education, B.S., M.Ed., University of Oklahoma.
MORRIS, JAMES KENT, (1968) Mathematics, B.S., Southwestern State College; M.T., Central State College; EdD., North Texas State University.
MORTON, ZELDA GOODSON, (1976) Nursing, B.A., Oklahoma City University; M.S., Northeastern Missouri State University.

MUNZINGER, RICHARD C., (1976) Health and Physical Education, B.A., Colorado College; M.S., Wichita State University.
MURRAY, RICHARD, (1969) Dean of the University, B.S., Southeastern State College; M.Ed., Ed.D., University of Oklahoma.

MUSSLEWHITE, LYNN RAY, (1971) Social Science, B.A., Abilene Christian College; M.A., Ph.D., Texas Tech University.

NALLEY, ELIZABETH ANN, (1969) Physical Science, B.S., Northeastern State College; M.S., Oklahoma State University; Ph.D., Texas Woman's University.
NEELY, JAMES, (1976) Music, B.A., Cameron University; M.A., California State University at Northridge.
NETHERLAND, EDWIN LANE, (1972) Biology, B.S., Huntington College, M.S. and Ed.D., Oklahoma State University.
NEWELL, SHERRY ANNE, (1975) Language Arts, B.A., B.S., Baker University; M.A., University of Kansas.

NICHOLS, LONNIE, (1973) Health and Physical Education, B.S.Ed., Midwestern University; M.Ed., West Texas State University.
NORRIS, JAMES ROBERT, (1970) Social Science, B.A., Centenary College; M.A., University of Denver; Ph.D., Washington State University.
O'DONNELL, TIMOTHY E., Staff Sergeant, (1973) Military Science, Supply Supervisor.
OLSON, DWIGHT, (1970) Mathematics, B.S., Jamestown College; Ph.D., University of Wyoming.
ORR, JACK, (1967) Biology, B.A., Harding College; M. Nat. Sci., University of Oklahoma.
OVERTON, JERRY V., (1972) Social Science, B.S., M.S., Oklahoma State University.

OWEN, DON, (1969) President, B.S., Central State College; EdM., EdD., University of Oklahoma.
PARKER, DEWEY, (1970) Education and Psychology, B.A., Central State University; M.Ed., Ed.D., University of Oklahoma.

PATE, EUGENE F., (1964) Speech-Drama, B.S., State College of Arkansas; M.A., University of Arkansas.
PAYNTER, JOHN, (1973) Reference Librarian, B.A., Central State University; M.L.S., University of Oklahoma.
PHILLIPS, EDDIE, (1967) Mathematics, B.S., M.E., University of Oklahoma; M.A., Louisiana State University.
PHILLIPS, ROBERT S., (1974) Director of Library Services, B.A., Bethany Nazarene College; M.L.S., University of Oklahoma.
PICKTHORN, BARBARA, (1977) Serials and Acquisitions Librarian. B.A., M.L.S., North Texas State University.
PICKTHORN, DAVID, (1975) Music, B.M., North Texas State University; M.S., Kansas State University.
POGUE, DWIGHT, (1971) Art, B.F.A., Kansas State College; M.F.A., University of Oklahoma.
POLSTON, RONALD, (1976) Health and Physical Education, B.S., M.T., Southwestern Oklahoma State University.
PRICHARD, CHARLES H., (1971) Education \& Psychology, B.A., M.T., Central State University; Ed.D., Oklahoma State University.
PROPHET, DONALD P., (1947) Agriculture, B.S., M.S., Oklahoma State University.
QUINTEN, BOB, (1969) Dean of Instruction, B.A., East Central State College; M.A., Oklahoma State University; Ph.D., University of Oklahoma.
RABURN, JOSEPHINE, (1967) Language Arts, B.S., M.L.S., University of Oklahoma.
RADCLIFFE, STANLEY, (1968) Music, B.A., M.A., Colorado State College.
RAMSEY, ALLAN, (1975) Language Arts, B.S., East Texas State University; M.A., Stephen F. Austin State University.
REDDOUT, DONNA, (1976) Language Arts, B.A., Oklahoma State University; M.A., University of Arkansas.
RICHEY, ROBERT, (1970) Director of Financial Aids, B.S., M.T., Southwestern State College.
RIECKE, CAROLL, (1970) Mathematics, B.S., Central Missouri University; M.S., Oklahoma State University; Ph.D., University of Houston.
ROUNDTREE, BETTY L., (1967) Associate Dean of Student Services, B.S., East Central State College; M.Ed., University of Oklahoma.
RUBIN, MARY, (1973) Education and Psychology, B.S.Ed., Arizona State University; M.Ed., University of Arizona.

RULISON, RONALD A., (1977) Military Science, Captain, B.S., Cameron University.
RUSSELL, TOM, (1974) Assistant Director of Data Processing, A.S., B.S., Cameron University.
SALE, DALE IRVING, (1970) Director of Data Processing, B.S., Oklahoma State University; M.S., Kansas State University.
SCOTT, JERALD R., (1973) Technology, B.S., Southwestern State College; M.S., Fort Hays Kansas State College.
SEALS, THELMA JOLLY, (1959) Physical Science, B.S., Oklahoma State University; M.Ed., University of Oklahoma; M.S., Oklahoma State University.

SEAMANS, ELDON L., (1968) Social Science, B.A., Maryville College; M.Div., McCormick Theological Seminary; Ph.D., International Free Protestant Episcopal University.

SEYMOUR, C. JACK, (1965) Assistant Director of Admissions and Records, B.A., Kearney State College; M.T., Central State College.
SEYMOUR, WANDA SUE, (1974) Business, B.S., M.S., Oklahoma State University.
SHAHAN, BILL G., (1967) Chairman, Physical Education, B.S., M.T., Central State College.
SHANAHAN, LAWRENCE B., (1972) Language Arts, B.S., M.A., Marquette University; Ph.D., University of Wisconsin.
SHANAHAN, MARY S., (1972) Language Arts, B.S., M.S., Ph.D., University of Wisconsin.
SHAW, WANDA, (1968) Art, B.S., M.S., Kent State University.
SHIPLEY, R. CLYDE, (1977) Health and Physical Education, B.S., Missouri Valley College; M.E., Central Missouri State University.
SIMPSON, PHILLIP M., (1971) Social Science, B.A., M.A., North Texas State University; Ph.D.,University of Arizona.
SIRCY, OTICE C., (1968) Language Arts, B.A., University of Texas; M.A., North Texas State University.
SIRCY, VIRGINIA, (1968) Music, B.M., North Texas State University; M.M., Michigan State University.
SKRDLE, NANCY, (1969) Technical Processing Librarian, B.S., Oklahoma College for Women; M.L.S., University of Oklahoma.
SLUSHER, BILLY J., LTC, (1973) Chairman, Military Science, B.A., University of Oklahoma.
SMITH, ARTHUR, (1969) Music, B.M., M.M., Cincinnati Conservatory of Music; D.M.E., University of Oklahoma.

SMITH, CHARLES WAYNE, (1970) Coordinator of Humanities, B.S., William Carey College; M.A., Ph.D., University of Southern Mississippi.
SMITH, GENE C., (1973) Music, B.M., M.M., Baylor University.
SMITH, GEORGE F., (1969) Chairman, Music, B.M.E., M.M.E., University of Oklahoma; Ed.D., North Texas State University.
SMITH, PAUL WILLIAM, (1964) Education and Psychology, B.S., Central State College; M.Ed., University of Oklahoma.
SNIDER, THEODORE, (1968) Physical Science, B.S., M.S., Kansas State College of Pittsburg; Ph.D., Oklahoma State University.
SOLSTAD, KENNETH, (1972) Language Arts, B.A., Yale University; M.A., Ph.D., University of California at Berkeley.
SPEAIRS, DAVID R., (1977) Business, B.S., M.S., Texas Christian University.
SPEARS, JOHN, (1976) Health and Physical Education, B.S., M.T., Southwestern Oklahoma State University.
SPESSARD, MILTON L., (1964) Library Cataloguer, B.B.A., M.L.S., University of Oklahoma.
SPRADLEY, TERRY P., (1966) Technology, B.A., Oklahoma City University, M.S., Ed.D., Oklahoma State University.
STANLEY, GEORGE E., (1970) Language Arts, B.A., M.A., Texas Tech University; D.Litt., University of Port Elizabeth.

STANTON, JIMMY H., (1968) Physical Science, B.S., Delta State College; Ph.D., University of Mississippi.
STEGMAIER, MARK J., (1975) Social Science, B.A., University of Santa Clara; M.A., Ph.D., University of California at Santa Barbara.
STERLING, JOHN, (1971) Fiscal Officer, B.S., East Central State College, CPA.
STEVENS, MARION D., (1966) Social Science, B.A., Northeastern State College; M.A., Eastern New Mexico State University.

SUTHERLIN, TOM, (1972) Technology, A.S., B.S., M.S., Oklahoma State University; Certified Engineering Technician.
SWOPE, H. JOANN, (1970) Language Arts, B.S., M.A., Central Missouri State; Ph.D., Kansas State University.
TERRY, TAYLOR BROOKS, (1965) Language Arts, B.A., Southern Methodist University; M.A., University of Texas at El Paso.
THOMAS, CHARLES, (1971) Music, B.M., Southern Methodist University; M.M., University of Oklahoma.
THOMPSON, JUDY, (1971) Mathematics, B.S., M.S., East Texas State University.
TODD, FLAKE, (1969) Business Manager, B.A., Central State College; M.E., University of Oklahoma.
TYLER, JACK D., (1967) Biology, B.S., Southwestern State College; M.S., Oklahoma State University; Ph.D., University of Oklahoma.
TYSON, LAWANDA, (1971) Education and Psychology, B.S., East Texas Baptist College; M.Ed., Ph.D., East Texas State University.
VAN REST, ANDRE W., (1974) Business, B.A., M.A., University of Missouri at Kansas City.
VOWELL, BOBBY GENE, (1964) Chairman, Physical Science, B.S., Oklahoma State University; M.S., University of Oklahoma; Ed.D., Oklahoma State University.
WAGNER, HARRY, (1969) Mathematics, B.S., Naval Postgraduate School; M.S., Kansas State Teachers College; Ed.D., University of Arkansas.
WARREN, LESLIE BENSON, (1974) Art, B.S., M.A., M.F.A., Stephen F. Austin State University.
WEBER, PHILLIP A., (1976) Military Science, Captain, B.A., Cameron University.
WEMHANER, JAMES DAVID, (1977) Social Science, B.A., M.A., Central State University; Ph.D., Oklahoma State University.
WHITE, DONNA B., (1974) Education and Psychology, B.A., Texas Woman's University; M.S., East Texas State University.
WHITELEY, LOUIS GUY, (1972) Director of Housing, B.S., Central State College.
WHITELEY, RALPH W., (1969) Director of Public Relations, B.S., Central State College; M.A., Western Colorado State College.
WILLIAMS, MAC, (1976) Speech-Drama, B.A., Angelo State University; M.A., Trinity University.
WILLIAMS, WARD, (1968) Chairman, Education and Psychology, B.S., M.Ed., EdD., University of Oklahoma.
WILLIS, MARLENE, (1974) Social Science, B.A., B.S.Ed., M.A., Northeast Missouri State University.
WILSON, VICKI, (1972) Physical Education, B.S., San Francisco State; M.S., University of Oklahoma.
WRIGHT, FRANCES, (1947) Social Science, B.A., Oklahoma College for Women; M.A., University of Oklahoma.

WYNN, VALREE F.,(1966) Language Arts, B.A., Langston University; M.A., Ph.D., Oklahoma State University.
YARBRO, DOROTHY, (1973) Nursing, B.S.N., University of Missouri; M.S.N., Texas Woman's University.
ZIEGLER, BOB, (1968) Biology, B.S., M.S., Fort Hays State College.

## EMERITUS FACULTY

BEAVERS, BLANCHE, (1942) Business, B.S., Oklahoma College for Women; M.C.E., University of Oklahoma. 1974
BREWER, BURNEY H., (1959) Social Science, B.S., Central State College; M.Ed., University of Oklahoma. 1972
CLAIBORNE, RAY, (1967) Social Science, B.S., Central State College; M.Ed., University of Oklahoma. 1970
ELLIOTT, HELEN, (1940) History and Government, B.A., McPherson College; M.A., University of Kansas; Graduate Study, University of Oklahoma and University of Southern California. 1970
GRAY, THOMAS A., (1966) Language Arts, B.A., Milligan College; M.T., Southwestern State College. 1975
HINES, JESSIE MAY, (1946) Language Arts, B.A., Central State College; M.A., Oklahoma State University. 1972
PAINE, GORDON, (1948) Registrar, B.A., M.S., University of Oklahoma. 1970
PUGH, NEVA, (1969) Education and Psychology, B.S., Southwestern State College; M.Ed., Ed.D., Oklahoma University. 1973

TOBIAS, DOROTHY, (1943) Physical Science, B.S., M.S., Oklahoma State University. 1971
discontinued, and Cameron assumed status as a two-year Junior College. Operating under the Oklahoma State System of Higher Education since 1941, the college has continued to implement its pioneer heritage.

In September, 1966, Cameron's President and staff were notified by the Oklahoma State Regents for Higher Education that the function of Cameron had been changed from a two-year junior college to a baccalaureate degree-granting institution. The transition began shortly thereafter with the first baccalaureate degrees being awarded in May, 1970. In keeping with the spirit of the transition, efforts were undertaken to change the name of the institution to one that would more accurately depict the general nature of the college. In April, 1971, the President of the institution was notified that Cameron State Agricultural College had become Cameron College.

Three years later, in May of 1974, the Oklahoma Legislature decided that Cameron College should be redesignated as Cameron University. On August 16, 1974, ninety days after the bill was signed into law, the name officially became Cameron University.

## FUNCTIONS

On June 27, 1967, the Oklahoma State Regents for Higher Education officially adopted the following statement of functions for Cameron University:

1. To provide the educational services of a senior college for the population center of Comanche County and surrounding area.
2. To provide a program of general education for all students designed to develop common understandings, to foster good citizenship, and to promote the development of each individual as a responsible person.
3. To provide pre-professional programs of less than baccalaureate degree length for students planning to transfer into professional programs at other colleges and universities.
4. To provide instructional programs in technical and occupational education of less than a baccalaureate degree, culminating in the awarding of an Associate in Arts or an Associate in Science degree or an appropriate certificate of accomplishment.
5. To provide four-year programs of instruction in the liberal arts and sciences culminating in the awarding of the Bachelor of Arts or Bachelor of Science degree.
6. To provide on-campus programs of adult and continuing education, both for degree credit and non-degree credit.
7. To provide off-campus degree credit classes for adults, compatible with classes authorized to be offered on the main campus.
8. To provide, consistent with the resources available, a program of community services designed to improve the cultural, economic, moral, and social environment of the geographic area in which the institution is located.
9. To provide special programs of collegiate instruction suited to the needs of the military personnel at Fort Sill.
10. To provide four-year programs in Military Science leading to the completion of requirements for the Department of Army Reserve Officers' Training program.

## OBJECTIVES

Cameron University is a multi-purpose state-supported university whose primary objective is to offer appropriate educational programs to persons living in its service area. The university recognizes that the educational process includes the development of the intellectual, cultural, social, physical, moral, and occupational capacities of persons who participate in its program. The university undertakes to promote insight into democracy and its bearings upon common problems; to perpetuate, enrich, and improve the state, national, and international cultural heritage; to assist all individuals to contribute to the common good of society by developing both personal integrity and occupational competency; and to encourage the development of creative ability.

To carry out the primary objective, the university recognizes three main areas of endeavor. Each area, as described below, has its own aims and objectives and contributes in a significant way to the primary objective of the university.

## EDUCATION FOR EFFECTIVE LIVING

This area of the students' education is designed to provide common experiences which are needed by all citizens if they are to live effectively. It incorporates approaches which encourage the student to think clearly, creatively, and critically about those problems which confront him and his society; it frees the student from the tyranny of ignorance, prejudice, apathy and the provincialism of time and place; it assists the student to function effectively in the groups of which society is composed; and it gives the student the desire to continue the pursuit of knowledge whereby he may better understand himself and his society.

## EDUCATION FOR SPECIALIZED FIELDS OF ENDEAVOR

The purpose of specialized education is to develop the technical and professional competencies of individuals in order that they may meet the demands and requirements of modern professions.

The university recognizes three realms of specialized education:

## Specialized Arts and Science Baccalaureate Programs.

Arts and sciences education provides for a comprehensive background and concentrated investigation in one or more specialized fields, intending thereby to develop that receptivity to new ideas which stimmulates intellectual curiosity. The Arts and Sciences curricula prepare students for entrance into professions, for further professional training, or for graduate work in the academic disciplines.
Occupational Associate Degree Programs.
The university recognizes that occupational preparation is significant to an individual and to society. The university further realizes that a post secondary education program having less than a baccalaureate
objective is an essential part of meeting the objectives of the university as well as those of society and certain individuals. The experiences necessary for the achievement of maximum technical competence in the student's chosen occupation are provided.

## Teacher Education.

The purpose of Teacher Education is to develop competent teachers. In addition to his general education experiences, the student secures an in-depth preparation in an Arts and Sciences discipline and professional knowledge and skills necessary for the prospective teacher to become an effective member of the profession and assume an active role in our society.

## EDUCATION FOR COMMUNITY SERVICE

The university attempts to serve individuals, business, industry and the professions of this area by providing facilities and leadership. It organizes and promotes, on campus and in community centers, conferences, institutes, workshops, and credit or non-credit courses for vocational, cultural, and avocational purposes. It affords cultural enrichment of the area through the sponsorship of lectures, musical and dramatic productions, and art exhibits and workshops. It also encourages study and research by means of providing leaves of absence, space, and facilities for research projects sponsored by the university and agencies outside the university.


## ACADEMIC FACILITIES

Administration Building ( $A D M$ ), a new two-story, air-conditioned structure with full basement was completed in the summer of 1969. It houses the offices of the President, the Dean of the University, the Dean of Instruction, the Business Manager, the Dean of Students, and the Directors of Admissions and Records, Data Processing, Development, Financial Aids and Public Relations.

Art Building (ART) is situated to the Southeast of the Music Building, and is one of three recently completed classroom structures in the new Fine Arts complex. It includes specialized laboratory facilities for the study of crafts, graphics, painting and sculpture, and also houses the offices of the Art department's faculty.

The Biological Sciences Building (BIO), completed in the spring of 1962, is a modern two-story brick, air-conditioned fireproof building housing classrooms and laboratories of the Biological Science Department.

Burch Hall (BUR), completed in August 1968, is a two-story, airconditioned building with carpeted classrooms and is located north of the Gymnasium. It houses the Departments of Mathematics, Military Science, and Drafting and Electronics laboratories.

The Graphics Barn and Art Gallery (GB), an arched white concrete barn, is situated adjacent to the Maintenance Department Office on the west side of the campus. This famous W.P.A. structure houses the Art Gallery and is a studio facility for Graphics, Painting and Drawing.

The Gymnasium (GYM), a $140 \times 140$ modern Physical Education Building of brick, concrete and steel construction completed in March of 1957, has a seating capacity of 1800 by means of individual opera-type seats. The plant contains a large basketball court, a weights room, boys' and girls' dressing rooms, and offices for the Physical Education staff.

Howell Hall (HOW), a general classroom building, was completed in June, 1968 and is located east of the Gymnasium. It is also two story, air-conditioned and has carpeted classrooms. It houses the Departments of Business, Home Economics, and the Modern Language laboratories.

The Library (LIB), a two-story brick air-conditioned building, was completed in the spring of 1964. The library has a collection in excess of 142,000 volumes, numerous pamphlets, and bound periodicals. The library subscribes to nearly 1,000 current magazines and newspapers. In accordance with modern library practice, the books are catalogued under the Library of Congress System and arranged on the open shelf plan, which enables students to browse at will and thus become acquainted with the entire collection.

Nance-Boyer Hall ( $N B$ ) is situated in the center of the campus. The three-story central section of this brick structure was constructed in 1929. It originally served as a combination administration and classroom building, and continues to provide a majority of the classrooms for the Departments of Agriculture, Education and Psychology, Language Arts
and Social Science. It also contains the offices of the Agriculture faculty and the Journalism staff.

The two-story south wing of Nance-Boyer Hall was constructed in 1949, and first functioned as a Library. It was recently renovated and air-conditioned, and presently includes some classrooms and offices for all of the Nursing faculty and a majority of the Language Arts faculty.

The two-story north wing of Nance-Boyer Hall, which was constructed in 1953, initially included an auditorium, rehearsal areas for the Music Department and some faculty offices. In 1975, this structure was completely remodeled, and converted into modern air-conditioned office space for the Office of Student Services, the Veterans Affairs Officer, the Counseling, Testing and Reading Centers and the Departments of Education and Social Science. The Education Department's complex includes a spacious and well-equipped audio-visual laboratory.

The Old Baptist Student Union ( $O B S U$ ) was acquired by the University during the Spring of 1975. It now provides one large combination classroom and laboratory for the Department of Speech-Drama.

Music Building (MUS) is located on the east side of University Boulevard in the new Fine Arts complex. It provides office, studio classroom and rehearsal space for the Music department.

The Physical Sciences Building (PS), was completed in January of 1964. It is also a two-story, air-conditioned fireproof building and houses laboratories and classrooms for chemistry, geology and physics.

Rehearsal Hall $(R H)$ is located on the east side of University Blyd. It temporarily houses the electronic piano laboratory and practice rooms for the Music Department.

South Hall $(S H)$ is located to the south of the Student Union. It is used as needed by the various departments for temporary office and classroom space.

Speech-Drama Building (SD) is located on the west side of 27th Street in the new Fine Arts complex. Completed during the summer of 1977, this facility contains four large classrooms and the offices of the faculty in the Speech-Drama department.

Cameron University operates a number of satellite laboratories, which include the University Farm, portable driver education and computer graphics units and a complex of Physical Education training areas.

Much of the long-range planning of physical facilities for Cameron University was prepared in 1969 by architects Richard Kuhlman, Joseph Rodgers and Charles Goins. The study, entitled "Campus Plan 1985" was financed by a grant from the McMahon Foundation. New facilities at Cameron will be consistent with the suggestions presented in the study.

## Expenses, Fees and Financial Aid

## FEES AND EXPENSES

All students, residents and nonresidents, are charged a general fee which includes the individual charges for registration, library, and laboratory.

## GENERAL FEES:

Oklahoma Residents
Lower Division $\quad \$ 12.45$ per semester hour
Upper Division $\quad 13.45$ per semester hour
Non-resident of Oklahoma
Lower Division $\quad \$ 31.20$ per semester hour
Upper Division 34.20 per semester hour
Extension Courses Fees
Audit, Without Credit
Workshops 16.50 per semester hour

Same charge as regular fee
SPECIAL FEES: (In addition to General Fees listed above)
Private lessons in applied music and speech 18.00 per semester hour
Semi-private lessons in applied music and speech
7.50 per semester hour

Private lessons in applied music and speech if not otherwise enrolled
Organ rental
Piano rental
Band and Orchestra Instrument rental
Art, Data Processing and Physical Education
Science Laboratory courses
Student Identification Card and Services
Advanced Standing Examination
36.00 per semester hour 10.00 per semester 3.00 per semester 3.00 per semester

Cost of materials and/or services used
Cost of breakage
1.00 per semester
5.00 per credit hour

American College Testing Program
(Residual Test)
Standardized Test at a rate established by the National Testing Agency Late Enrollment fee
1.00 per day (Maximum \$5.00)
Re-enrollment after withdrawal
Course Change (For each course added or dropped) ..... 1.00
Transcript (Per copy after first one) ..... 1.00
Welding Fee Cost of Materials used
Automobile Parking Permit:
Semester ..... 5.00
Summer Term ..... 2.50
Evening Term ..... 1.00
Graduation Fee:
Associate Degree ..... 6.00
Bachelors Degree ..... 10.00
Stadium Fee (all full-time students) 5.00 per semesterYearbook Picture (all full-time students)1.00 per year

## REFUNDS

## Withdrawal From School or Individual Classes

## Fall and Spring Semester

Withdrawal prior to class beginning, $100 \%$ refund.
Withdrawal during first week of the semester, $80 \%$ refund.
Withdrawal during second week of the semester, $50 \%$ refund.
Withdrawal during third week of the semester, $25 \%$ refund.
Thereafter, no refunds.

## Summer Session, Evening Classes, On-Duty Classes

Withdrawal prior to class beginning, $100 \%$ refund.
Withdrawal during first two days of classes, $80 \%$ refund.
Withdrawal during third and fourth day of classes, $50 \%$ refund.
Withdrawal during the fifth day of classes, $25 \%$ refund.

## Workshops

Withdrawal prior to beginning of workshop, $100 \%$ refund.
Withdrawal after the workshop begins, no refunds.

## LIVING EXPENSES

Full-time Cameron University students (those enrolled in twelve or more semester hours during the fall or spring semester or six or more semester hours in a summer term) are required to live in university housing facilities, to the extent that such facilities are available, as follows:

1. Those single students who do not reside in the residence of their parents or legal guardian.
2. Those single students employed by the university who are paid from state funds.
3. Those single students who are the recipients of athletic scholarships.

Room and board costs for students living in university housing are as follows:

For double room in 10-story air-conditioned residence halls, per semester $\$ 531.00$; for single room $\$ 635.00$.

Room and Board are payable in advance, but arrangements may be made to pay them in four installments rather than paying the whole semester's amount at one time.

Students living in the residence halls are required to take their meals in the university dining hall. The university reserves the right to change at any time the charge for board if any food prices necessitate or permit a change. A meal ticket may be used only by the person purchasing the ticket. Its use by any other person will cause forfeiture of the ticket.

A deposit of twenty dollars $(\$ 20.00)$ is required for room reservations. If the student finds that he will be unable to attend school, a refund will be made provided notification is given prior to August 1. The $\$ 20.00$ deposit or trust fund, less actual loss or breakage caused by the student, will be refunded at the end of the school year. However, if student moves from the residence hall during the semester and breaks his contract, the $\$ 20.00$ room deposit will be forfeited.
Refunds of Rent and Board:
Refunds of Room and Board payments may be made for the following reasons:

1. A cancellation in writing to the Business Office on or before August 1.
2. Nonadmission to the University.
3. Withdrawal or dismissal from the University.
4. Marriage during the term.

More specific details pertaining to the refunds of room and board payments are contained in the housing contract or may be obtained from the Business Office.

## FINANCIAL AIDS

The primary purpose of student financial aid at Cameron University is to provide assistance to students who, without such aid, would be unable to attend college. All funds for grants, loans, and scholarships are channeled through the Office of Financial Aids. Policies are formulated by the Financial Aids Committee and administered by the Director of Financial Aids.

## SCHOLARSHIPS

Academic Scholarships
Each year a limited number of Academic Scholarships are awarded to beginning freshmen students. Scholarships consist of the waiver of
tuition for sixteen hours of college work for each semester of the freshman year. Scholarships are awarded on a competitive basis and based upon scholastic ability and financial need.

## Institutional Scholarships

These awards are made available by Cameron University and outside organizations through Cameron, to students who have demonstrated success or high potential in areas of high school or college achievement.

## Departmental Scholarships

Each academic department at Cameron University will have a limited number of scholarships for students who have demonstrated success or high potential in individual studies, athletics, or fine arts.

Applicants should contact the Chairman of the Department in the area in which the scholarship is desired or the Director of Financial Aids, Cameron University, for application.

## Rehabilitation Scholarships

The Department of Institutions, Social Rehabilitation Services offers payment of tuition and other services to civilian students who have certain physical handicaps, provided the vocational objective selected by the student has been approved by a representative of the Division. Application for Vocational Rehabilitation should be made to the Vocational Rehabilitation Office, Cameron University, P.O. Box 6338, Lawton, Oklahoma 73505.

## Bureau of Indian Affairs Scholarships

The United States government through the Bureau of Indian Affairs provides annual scholarship grants to assist eligible students to attend institutions of higher education. In order to qualify, a student must be one-fourth or more Indian blood quantum and meet certain residence, need, and scholastic requirements. Grants may cover such items as tuition, books, room and board, travel, and miscellaneous expenses. Further information may be obtained from the Native American Counselor located in the Counseling Center, Room 2005, Nance-Boyer Hall, Cameron University.

## WORK OPPORTUNITIES

## Student Employment

Cameron University offers employment to a limited number of students each year in the laboratories, offices, dining halls, residence halls, and maintenance department. While it is impossible to give employment to all students who apply, it is the policy of the school to assist as many of these students as possible, enabling them to contribute toward the cost of their college education.

Numerous citizens of Lawton employ Cameron students on a parttime basis about their homes and businesses. It is possible for most students needing financial assistance to obtain some work either at the
university or in the city of Lawton. Every effort is made to find places and systematize the assigning of students' jobs so that the largest possible number of students can be helped.

While some limitations are placed on the total amount that a student may earn a month from the university, the amount to be earned does depend upon the student's class schedule and upon the degree of faithfulness and energy with which he performs his task. Please request student Employment Application blanks from the office of Financial Aids, Cameron University, Lawton, Oklahoma 73505.

## University Work-Study Program

The Work-Study Program was established by the 88th Congress under Title I, part C, of Public Law 88-452, designed as the Economic Opportunity Act of 1964. This program, nationwide in scope, provides money to the university for the employment, on a part-time basis, of worthy full-time students from "low-income" families.

## GRANTS

## Educational Grants

Federal funds are available through Cameron University in form of Educational Grants to help students of exceptional financial need pursue a course of undergraduate study. The student must be enrolled or have been accepted for enrollment on a full-time basis and must show evidence of academic or creative promise and the ability to maintain good standing.

The grants vary from $\$ 200$ to $\$ 800$ depending on (1) Economic need and (2) Amount of assistance provided from non-Federal grants, scholarships, loans, and student employment.

Application should be made through the Director of Financial Aids, Cameron University, Lawton, Oklahoma 73505.

## LOANS

## National Direct Student Loan Program

Cameron University is a participant in the Student Loan Program. If a financial need is shown, an undergraduate student may borrow up to $\$ 1,000$ each academic year, to a total of $\$ 5,000$. The repayment period and the interest do not begin until 9 months after the student ends his studies. The loans bear interest at the rate of 3 per cent per year and repayment of principal may be extended over a 10 year period, except that the institution will require a repayment of no less than $\$ 30$ per month.

## Guaranteed Bank Loan

Available to Cameron students to help meet their financial needs is the guaranteed loan program. The guaranteed loan program has one purpose: to provide the means for the student to borrow money for college expenses at low interest rates, with the Federal Government

## SPECIAL INFORMATION FOR VETERANS, SERVICE PERSONNEL AND ELIGIBLE DEPENDENTS

Cameron University is fully certified by the Oklahoma State Accrediting Agency to the Veterans Administration (VA) as an approved training institution.

Certain veterans, service personnel, plus eligible dependents or survivors of same may qualify for federally enacted education benefits.

The Office of Veterans Affairs offers assistance and information on available programs, applications for benefits, admissions, enrollments, academic goals, career guidance and special tutorial and financial benefits.

To begin receiving payments for attendance, students must contact the Office of Veterans Affairs and initiate required documents. Students either making initial use of their educational benefits or re-applying after an interruption of at least one term can expect beginning VA payments as follows:

1. Request for advance payment (to be received by start of term) must be made with UVAO no less than thirty days prior to start of term.
2. Regular payments can be expected to start approximately eight weeks after terms beginning.
VA policy precludes pay for courses previously taken for credit and courses not leading to a degree. Additionally, courses withdrawn from can cause the VA to recover monies for that course back to term start.

To insure accurate, timely benefits, each Cameron student recipient of V.A. education assistance is responsible to the University Veterans Affairs Officer (UVAO) for promptly:

1. Filing tuition payment receipts following each new term of enrollment.
2 Reporting increases and decreases in course loads as they occur.
2. Reporting the cessation of attendance.
3. Reporting changes in previously reported information (address, ending date, future attendance plans, etc.)
In order to continue receiving benefits payments, the Veterans Administration requires that students:
4. Satisfy the University's standards on academic progress (see "retention standard" on pages 49-50).
5. Comply with the University's requirement of regular class attendance (see pages 51-52, class attendance).
V.A. educational benefits are paid on a graduated basis according to course load (full time, three-fourths time, one-half time) and number of dependents.

For regular semester courses of sixteen weeks in length, twelve or more credit hours constitute full time attendance, nine to eleven hours constitute three-fourths time, and six hours constitute half-time. Eligi-
bles taking less than a half-time load and active service personnel will be paid for tuition and fees only. The credit hour load required for accelerated courses (eight to six weeks in length) is full time, six or more hours; three-fourths time, four or five hours; one-half time, three hours. For load determination of mixed enrollment of accelerated and sixteen week courses, consult the UVAO.

Students receiving VA educational benefits must present their enrollment receipt for each up-coming period of attendance to the University Veterans Affairs Office in the north wing of Nance-Boyer Hall for enrollment to be considered complete.
The above information is applicable to all Cameron students attending under Chapter 31 (Disabled Veterans Bill), Chapter 34 (regular GI Bill), or Chapter 35 (Dependents Bill) of Title 38 USC.

## SERVICEMEN'S OPPORTUNITY COLLEGE (SOC)

Cameron University has been designated as a Servicemen's Opportunity College. Sponsored by the American Association of State Colleges and Universities, the Servicemen's Opportunity College Project (SOC) represents a new commitment to education for the military. This network of institutions with similar admissions, transfer and residence requirements and policies allows servicemen and women to move from random educational activities into program-completion efforts. It allows maximum coordination of opportunities among institutions.

# PROCEDURES AND REGULATIONS 

## ADMISSION TO CAMERON UNIVERSITY

Students seeking admission to Cameron University must present to the office of Admissions and Records the following:

1. Official high school transcript (also, previous college transcripts for transfer students).
2. American College Test scores.
3. Completed "Application for Admission" form.
4. Physical Examination form completed by personal physician.

The admissions forms may be secured from the Office of Admissions and Records, Cameron University.

More detailed information pertaining to admission requirements for the State of Oklahoma is listed below.

## ADMISSION OF STUDENTS

RESIDENTS: Rules for admission for Residents of Oklahoma, adopted by the Oklahoma State Regents for Higher Education, are as follows:

1. Any resident of Oklahoma who is a graduate of an accredited high school, who has participated in the American College Testing Program, and who meets at least one of the following requirements, is eligible for admission.
(1) Maintained an average grade of " C " or above in four years of his high school study ( 2.0 or higher on a 4.0 scale.)
(2) Ranked scholastically among the upper three-fourths of the members of his high school graduating class.
(3) Attained a composite standard score on the American College Testing Program which would place him among the upper three-fourths of all high school seniors, based on twelfth grade national norms.
An individual not eligible for admission as stated above may, if he is a high school graduate and has participated in the American College Testing program, be admitted "on probation" for study in any summer session or one semester following high school graduation. A student admitted under this provision who (a) carries a semester-hour load of six or more hours and (b) achieves a grade-point average of 1.6 or higher (based on a 4.0 scale) will be eligible for continued enrollment in the fall semester.
tem of Higher Education must be a graduate of a high school accredited by the Regional Association or by an appropriate accrediting agency of his home state, and must have participated in the American College Testing Program or a similar acceptable battery of tests. In addition, he must meet one of the following requirements.
(a) Ranked among the upper one-half of the members of his graduating high school class.
(b) Attained a composite score on the American College Testing Program, or a similar acceptable battery of tests, which would place him among the upper one-half of all high school seniors, based on twelfth grade national norms.
2. Undergraduate non-resident students by transfer from other accredited colleges:

Transcripts of record from colleges or universities accredited by the North Central Association or other regional associations will be given full value.
(a) Each non-resident undergraduate applicant must be in good standing in the institution from which he plans to transfer.
(b) Each non-resident undergraduate applicant must have made satisfactory progress (an average grade of " C " ' or better) in the institution from which he plans to transfer.
3. For institutions not accredited by a regional association, the recommendations contained in the current issue of the Report of Credit Given by Educational Institutions, published by the American Association of Collegiate Registrars and Admissions Officers, will be followed.
(a) Each non-resident undergraduate applicant must meet the conditions of 2(a) and 2(b) above.

## RESIDENT STATUS OF ENROLLED STUDENTS IN THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION (Revised on December 16, 1974)

NOTE: Bracketed insertions are intended to aid in application of these regulations to various student situations.
SECTION 1. Attendance at an Institution of Higher Learning.
Attendance at an educational institution is interpreted as temporary residence; therefore, a student neither gains nor loses resident status solely by such attendance. [A nonresident student of majority age, or an emancipated minor, generally remains a nonresident so long as he remains in attendance continuously]. If he establishes actual residence in Oklahoma for reasons entirely or mainly unrelated to college attendance, he may attain resident student status only after a period of at least
twelve consecutive months following such establishment of actual residence.

## SECTION 2. Attendance at an Institution of Higher Learning while on Active Duty in the Armed Services.

A student who is attending an institution while on active duty in the Armed Services is considered as having a temporary residence in the state in which he is attending school; therefore, a student neither gains nor loses resident status solely by such military service. Members of the armed services, stationed in Oklahoma, and their wives, husbands and/or children shall be admitted without the payment of the nonresident fee so long as they continue to be stationed in the State in full-time military services and under military orders; provided, however, that a member of the armed services who is relieved of part or all of his normal military duties so that he may attend college as a full-time student will be classified on the same basis as a student who has no connection with the military service. [Full-time students (as considered for residence regulations, and not necessarily in other instances) are those enrolled in 12 or more credit hours during a regular semester; 6 or more credit hours during a summer term.]
SECTION 3. Students who are married.
A nonresident citizen of the United States who marries an Oklahoma resident may receive resident status classification at the beginning of the next semester following such marriage. A resident person who marries a nonresident shall keep his or her resident status as long as continuous attendance as a full-time student is maintained or as long as domicile is maintained within Oklahoma. An alien who marries an Oklahoma resident may be granted resident student classification at the next enrollment occurring after expiration of twelve months following the establishment of domicile in Oklahoma.
SECTION 4. Students who are Minors; Emancipation of Minors.
For the purpose of determining resident status at an institution of higher learning, a minor is defined as a male or female under 18 years of age. The residence of [an unemancipated] minor child is that of his father; or that of his mother if his father be not living or if the parents are separated and the child habitually resides with the mother; or, if both parents are dead, that of his legally appointed guardian or anyone else with whom he habitually resides in the absence of formal legal designation. A minor may become emancipated [freed from his parental domicile] through marriage, formal court action, abandonment by parents, or positive action on his own part evidential of his alienation of parental domicile. To qualify under the latter category, a minor must have completely separated himself from the parental domicile and have proved that such separation is complete and permanent. Mere absence from the parental domicile is not proof of its complete abandonment. If an applicant can provide adequate and satisfactory proof of complete emancipation and of his having come to Oklahoma with the intention of establishing domicile, he may be granted resident student classification at the next enrollment occurring after expiration of twelve months following establishment of domicile in Oklahoma.

## SECTION 5. Students who are Adults.

If a person enjoying majority privileges can provide adequate and satisfactory proof of his having come to Oklahoma with the intention of establishing domicile, he may be granted resident student classification at the next enrollment occurring after expiration of twelve months following the establishment of domicile in Oklahoma [provided he has not changed his domicile since that time]. Such twelve months' prior residence shall not be required in the case of a person who provides evidence of having come to Oklahoma to work full time or practice a profession or conduct a business full time and who enrolls in not more than four credit hours per semester in an academic year or three credit hours in a summer session. The dependent spouse of such person may be granted resident student classification at the first enrollment following establishment of domicile in Oklahoma.

## SECTION 6. Parents moving into Oklahoma.

If it is clear that parents have moved into Oklahoma with every intention of remaining permanently and of establishing themselves as citizens of the State, the dependent children of such parents may be classified as residents at the first enrollment after the parents move into the State. If the parents of [such a dependent] resident student [a person actually enrolled] establish their home in another state with the intention of establishing domicile there, the student shall at the first enrollment after twelve months from the date of establishment of said home by his parents be classified as a nonresident student; however, the student may continue in resident status if he reaches the age of 21 within the twelvemonth period, or if he establishes evidence of complete emancipation. [For this regulation, a student not enrolled in the summer, when his parents move from Oklahoma, is entitled to the twelve-month extension of residence status if he completed the preceding spring semester with residence status.]
SECTION 7. Students Who Are Not Citizens of the United States.
An individual who is not a citizen of the United States may become eligible for classification as an Oklahoma resident for purposes of attendance at an educational institution provided that he holds "permanent resident status" as classified by the Immigration and Naturalization Service, (this classification status is typically designated by the issuance of a green card to eligible recipients), or who is residing within the United States on an indefinite basis on the parole authority of the United States Attorney General, and who meets the criteria as set forth in Section 8 of this policy statement.

## SECTION 8. Proof of Residence.

The burden of proof of residence shall be upon the applicant. Some of the various types of evidence that may serve as proof of one's residence in Oklahoma are: year-round residence, ownership of property, registration for and voting in state general elections, filing an Oklahoma income tax return for the most recent calendar year, and payment of ad valorem property taxes. It is the intent of the policy that an individual eligible for enrollment as a resident student in statesupported institutions of higher education must have been domiciled in

Oklahoma for a period of at least twelve months and established himself as a bona fide resident of the state.

## FALSIFICATION OF RECORDS

The falsification of any admission record, whether by change, by omission, or untrue statement will be sufficient grounds for permanent denial of admission to the university; or if the student is attending classes, for suspension from the university with forfeiture of any credit earned.

## NAME CHANGE

A student who has had a change in name must provide the University with appropriate documentation which substantiates the legal name change. This must be submitted to the Office of Admissions and Records prior to the student's next registration. Registration under a name different from that used in the student's last enrollment can not be accomplished without the above certification, which becomes a part of the student's permanent file. All grade reports and transcripts are issued under the student's legal name as recorded in the Office of Admissions and Records.


## AMERICAN COLLEGE TESTS

Cameron University participates in the American College Testing program. Each student entering Cameron is required to take the American College Test. The student's scores on this test, designed to measure the student's achievement in English, mathematics, social studies and natural sciences, are kept on file with the student's academic record in the Admissions Office. The test scores are used to supplement the academic records and other information that the University has assembled regarding each student, and the information is used in counseling with students concerning their educational and vocational plans.

## ADMISSION OF JUNIOR COLLEGE GRADUATES

Cameron University cooperates in a reciprocal transfer agreement between the college and certain Oklahoma Junior Colleges. Students from cooperating colleges who have completed either the Associate of Arts or Associate of Science degree in a transer program will be accepted as having fulfilled the lower division general education requirements. The only additional lower division general education requirements which would be imposed on such students would be if students lacked prerequisites for upper division courses, if students had not performed at the grade-level required of Cameron students in similar courses, or if professional licensing or certifying agencies had requirements greater than those prescribed in the reciprocal agreement.

Students who transfer to Cameron prior to the completion of an Associate degree of the type described above will be evaluated by Cameron on a course-by-course basis. Comparable courses taken at state accredited junior colleges will transfer at full value.

## RE-ADMISSION

Any former Cameron student who did not attend Cameron during the previous academic year must file another Application for Admission form. The application should be submitted at least one month (and preferably earlier) prior to the beginning of the semester in which he plans to re-enter.

## FRESHMAN ORIENTATION

All freshman students are required to participate in an Orientation and Advance Registration Program on campus during June and July prior to the semester in which they plan to enroll at Cameron University. This is a cooperative program sponsored by the Office of Student Services with the assistance of members of the Student Senate, faculty, administration, and upperclassmen. Such an orientation eliminates many of the difficulties that students frequently encounter in adjusting to college life. It includes test interpretation, counseling, general regis-
tration procedures, and small group discussion sessions relating to studies and problems of college life.

After the Orientation Program, each student will be provided an opportunity to pre-enroll for the next semester; each student will have a faculty person to assist him in preparing his enrollment schedule. Books and supplies may also be purchased during the Orientation session. The Admissions Office sends complete details of the Orientation Program to each freshman student that is admitted to Cameron University. Request for additional information should be addressed to the Office of Student Services, Cameron University.

## ENROLLMENT

Academic Advisors - Before entering college, a student should thoroughly check the major fields of study offered at Cameron in order to determine the field best suited to his interests and needs. Before starting enrollment each student should tentatively select his major field. His designated academic advisor will counsel with the student regarding his proposed major and choice of courses and approve both.
Course Loads - A normal academic load for a regular semester is
sixteen hours, which includes any evening or extension classes in which a student may enroll. Students who wish to take more than eighteen semester hours in a regular semester or nine hours in a summer term must obtain permission for such overloads from the Dean of Instruction.

Students carrying twelve or more semester hours of work are classified as full-time students for college classification purposes. The Veterans Administration requires the student to carry a minimum of twelve hours in order to receive full Veteran's benefits.

Concurrent Enrollment in Another Institution - Full-time Cameron University students, those enrolled in twelve hours or more during a regular semester or in eight hours or more during a summer term, must have the prior approval of the Dean of Instruction in order to concurrently enroll for credit in any other college or university.

Classification of Students - Freshmen are those students who at the beginning of the academic year have less than 28 semester hours of credit; sophomores, those with 28 or more semester hours, but less than 60 ; juniors, those with 60 or more, but less than 90 ; seniors, those with 90 or more hours who have not received a degree; special students, those who are not working toward a degree.

Course Numbering System - All courses are numbered in terms of four digits. The first digit indicates the class year in which the subject is ordinarily taken. The last digit indicates the credit hours given for the course. The two middle digits identify the course within the department. For example, a course numbered 2013 should be interpreted as a sophomore course carrying three semester hours of credit.

Freshmen may not enroll in courses numbered 3000 and above without special permission, nor may sophomores enroll in 4000 courses without permission.

Credits - All credits are given in terms of semester hours. A semester hour consists of one hour of class work or two or three hours of laboratory work each week for the semester.

Registration - Every student is required to pre-enroll prior to the beginning of the academic term or to register during the designated enrollment period. The student's enrollment is not complete until the proposed course of study is approved by his advisor and all tuition and fees are paid.

Any person attending class or doing the work in a course for which he has not registered in advance will not receive credit for the work so done.

Auditing - No student will be allowed to attend class regularly as a visitor or auditor without an auditing card from the Director of Admissions.

Students may enroll in a credit course as an auditor on a non-credit basis for informational instruction only. Auditors are not held responsible for the work expected of regular students and receive no grade or credit for the course. Test participation is the prerogative of the instructor. Regular attendance at class is expected, however, and auditors are subject, the same as regular students to being dropped from the course for excessive absences (in this event auditors receive a " $W$ ').

Credit may not be earned in a course taken as an auditor except by re-enrollment for credit in and completion of the course with a satisfactory grade.

Pre-enrollment - Students not on academic probation may preenroll at a specified time prior to regular enrollment. This service provides the student the opportunity of selecting a more appropriate schedule of courses.

Late Enrollment - No student will be permitted to enroll after Friday of the first full week of classes in any semester or term without permission of the Dean of Instruction. Any student enrolling after classes begin will pay a late enrollment fee, and, of course, will make up all work of the classes in which he enrolls.

## DROPPING A COURSE OR WITHDRAWAL FROM THE UNIVERSITY

Students who enroll in a class at Cameron University reserve places for themselves which can not be made available to other students unless and until they officially withdraw from the classes. Every semester some students are denied admission to classes for which they have special need or in which they have strong interest because these classes are already filled.

An add-drop period is provided for a limited time at the beginning of each semester or term to allow shifting of schedules and to permit the placement of new students in any class vacancies which may have developed.

Except when there are critical personal reasons, withdrawal from classes after the add-drop period is strongly discouraged. By the end of the regular period for adds and drops, instruction is normally progressed to a point where a new student would be under too much handicap to successfully make up the work. A class vacancy thus occurs which might have been filled if the withdrawal had occured during the specified time.

1. A student desiring to withdraw completely from school must secure a withdrawal form from the Admissions Office, have it properly signed and deposit it at the Business Office.
2. If withdrawal occurs during the first nine weeks of the semester the student will receive a grade of " $W$ '" in each course in which he is enrolled. After the first nine weeks a grade of " $W$ " will be granted in each course in which the student has a passing grade, and a grade of "WF" in those courses in which he is failing.
3. (a) A student desiring to drop a single course must secure the proper card at the Admissions Office, have it approved by his or her instructor, return it to the Admissions Office and then deposit it at the Business Office.
(b) A student desiring to add courses or rearrange his or her schedule in any way must secure the proper card at the Admissions Office, have it approved by his or her instructor, bring the card back to the Admissions Office for necessary corrections, and then deposit it at the Business Office.
4. The conditions stated in (2) will determine the grade received when a single course is dropped.
5. The deadline for changing courses will be Friday of the first full week of classes in any semester or term. A student may not withdraw from a single class within the last two weeks of a regular semester or within the final week of a summer session.

## RETENTION STANDARDS

A first semester freshman who fails to make a 1.00 (D) scholastic average during his first semester in college, figured on the total number of hours attempted for that semester, will be placed on scholastic probation for the next semester. Other students who drop below a 1.5 average in any semester will also be placed on scholastic probation.

Retention standards as set up by Oklahoma State Regents for Higher Education and applicable to students at Cameron are as follows:

For continued enrollment at any institution in the State System, a student must have earned a cumulative grade point average as indicated below:
At the end of two semesters( 24 to 36 hours attempted)1.40
At the end of four semesters ( 37 to 72 hours attempted) ..... 1.60
At the end of six semesters( 73 to 108 hours attempted)1.80
Further study after 108 semester hours attempted ..... 2.00

A student who achieves a grade-point average of 2.00 or above in the last semester in which he was enrolled will be considered to be making satisfactory progress regardless of his cumulative grade-point average.
Any student not maintaining satisfactory progress toward his study objective as indicated above will be placed on probation for one semester, at the end of which time he must have met the minimum standard required in order to continue as a student.

A senior who has failed to meet the cumulative grade-point average of 2.00 may enroll in an additional 15 semester hours in further attempt to achieve the requirements for graduation.

The student who has been suspended from the University because of poor grades is not eligible to apply for re-admission until a minimum of one full semester has elapsed.

## FIVE YEAR, SLOW START PROVISION

A student may petition the Academic Standards Committee for a review of grades made five (5) or more years prior to the current semester. If the committee finds that the student has shown evidence of significant academic progress, they may recommend that hours attempted and grade points earned five (5) or more years prior to the current semester not be used in calculating the student's grade point average for the purpose of retention in school. If the student chooses to have such courses disregarded in calculating the G.P.A., all grades (not just failing grades) earned five (5) or more years prior to the semester in which the student petitions for the grade review will be disregarded in computing the G.P.A. for purposes of retention in school.

## GRADING SYSTEM

The grading system used at Cameron is as follows:


Grade Points: Students earn grade points as follows:
A.......................... 4 points per semester hour

B $\ldots \ldots \ldots \ldots \ldots \ldots \ldots . .3$ points per semester hour
C......................... 2 points per semester hour
D.......................... 1 point per semester hour

F $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots . . . .$.
If a course is repeated, both grades are used in computing the grade point average. (Repeating a course does not remove the previous grade from the student's record.) A grade of " $W$ "' or " $S$ " has no effect on the student's grade point average; the hours involved are excluded from the computation.

An incomplete is given to a student whose grade average is passing but who, because of illness or some other unavoidable circumstances, may not complete the course at the end of a semester or summer term. Students granted an " I ' in a course have until the end of the next full semester to submit incomplete work required by the course.

Students failing to complete required work within one full semester after the " $I$ " was granted will receive the grade of " $F$ ". However, such students may with the permission of the appropriate department chairman, re-enroll in the course at Cameron the next semester or term the course is offered. Upon satisfactory completion the "I'" in the incomplete course will be changed to a " $W$ " and the student will be granted the grade earned in the repeated course.

Semester grade reports are mailed to the parents of all unmarried students under the age of eighteen. Grade reports of other students are mailed to their home address. Grades will be withheld if the student does not have all required student information on file in the Admissions Office or if other obligations to the University have not been met.

In addition to semester grades, notification of low grades (D's and F's) that the student may have at the close of the seventh week of the semester is provided.

Information concerning student's grades and personal records will be released to outside agencies only at the individual's request. The detailed policy statement regarding release of student information is found in the Student Handbook.

## CLASS ATTENDANCE

Cameron University's official policy on excessive absences is based upon an assumption that conscientious class and laboratory attendance is essential to the student's total education. Students who at any time during a given term are found to have been excessively absent from a particular class may thus be dropped from the class. The course grade recorded for such a student will be "W', a "WF" or an "F" and will be determined by the instructor's assessment of the circumstances in each individual case.

Because a wide variety of instructional strategies and methodologies are utilized within the University, a specific number of
absences may be considered tolerable in one class but regarded as clearly excessive in another class. Consequently, at the beginning of every term, all instructors will carefully define and/or quantify their attendance standards and will also announce their procedures for verifying unavoidable absences and their methods of dealing with missed assignments and exams. It is the student's responsibility to note these procedures and to consistently and carefully follow them.

## SUBSTITUTION AND WAIVER OF COURSES

Requests to substitute or waive courses that are designated as necessary to fulfill general education requirements, to fulfill major or minor requirements, or to obtain credit for any other course listed in the university catalog must be approved by (1) the Chairman of the department offering the course involved, (2) the Chairman of the student's major department, and (3) the Dean of Instruction. A form for substituting and waiving courses may be obtained from the Registrar's office.

When the student has obtained all three signatures required on this form he should turn it into the Registrar's office. The Registrar will then place copy of the form with the student's folder, send a copy to the Chairman of the department in which the course is offered, and deliver a third copy to the chairman of the student's major department.

Permission for any other exception to stated requirements - e.g. number of upper division hours, the residency requirement - should be obtained from the Dean of Instruction. A letter granting such exceptions will be placed with the student's folder in the registrar's office and a copy sent to the Chairman of the student's major department.

# COUNSELING, TUTORIAL AND TESTING SERVICES 

## GUIDANCE SERVICES

The Guidance program at Cameron University is dedicated to the total development of each student by assisting the student in establishing guidelines for both social and personal development in an increasingly complex society. It is the purpose of the Guidance and Counseling program to help students mature personally, socially, educationally, and vocationally.

## COUNSELING SERVICES

The Counseling Center provides a full range of direct and consultative services to students, faculty, staff, and organizations at Cameron University. Services offered include the following:

Personal Counseling. A staff of professionally trained counselors are available to provide counseling related to personal, social, group, work, or home problems.

College Information. Facts about college environment, educational opportunities, scholarships, loan funds, etc., are available to students. A library of almost 400 graduate and undergraduate catalogs may be used for students seeking transfer or graduate information.

Orientation. The first time student receives a thorough introduction to Cameron University. Orientation includes an overview of the campus life and focuses on areas of importance to the new student.

Career Selection. Students receive assistance in general career selection and planning. Career information is available in the forms of references, films, files, occupational handouts, etc.

Educational Planning. Students are assisted in general tentative scheduling prior to first time enrollment and at any time a change in majors is decided upon. In educational planning for upper classmen, department chairmen and faculty advisors are to be consulted regarding specific required courses and their sequence.

Handicapped Program. An outreach program is available to aid handicapped students who are unable to visit the Center's offices. By calling the Counseling Center, Extension 10/11, appointments may be set up whereby the services of the Center will be brought to the student.

## TUTORIAL LABORATORIES

The Reading Center. Located in the north wing of Nance-Boyer Hall, the Reading Center assists students in improving skills of comprehension, vocabulary, study skills and rate. A service of the Department of Education and Psychology, the Reading Center is staffed by specialists who are experienced in diagnosing and eliminating reading and study problems. A student visiting the Reading Center is tested to determine the materials best suited to the idenified problems, then given a program of individualized instruction designed to strengthen reading and/or study skills.

The Physical Science Tutorial Program. During the 1971-1972 academic year, a tutorial program was initiated in the Physical Science Department of Cameron University. This program has been continued, with some modifications each year. The objectives of the program are (1) to help students overcome background deficiencies in science, (2) to help students overcome background deficiencies in mathematics, and thus to acquire those mathematical skills which are essential to problem solving in chemistry, (3) to help students who are having difficulty understanding and applying chemical principles, (4) to help students having difficulty with problem solving, and (5) to assist minority students who are experiencing difficulty with chemistry due to language problems. The program seeks to reach students with pre-determined needs, as well as students with less obvious needs, by rendering tutorial assistance to all who voluntarily avail themselves of the opportunity. The Physical Science Tutorial Laboratory and the tutorial instructor's office are located on the second floor of the Physical Science Building.

The Remedial Writing Program. Individualized instruction, one-to-one relationships, mini-labs and special classes of ten students or less have characterized the remedial writing program at Cameron University. Small groups of students regularly participate on a voluntary basis in the mini-labs, which are devoted to such subjects as spelling, theme structure and usage problems, but at least one-half of the composition consultant's time is reserved for private conferences with drop-in students. In addition to operating the remedial writing laboratory, which is located in the south wing of Nance-Boyer Hall, the Department of Language Arts offers a formal three credit hour course for beginning students with grammatical deficiences. The course begins with the recognition of verbs and proceeds through paragraph development.

The Mathematics Tutorial Laboratory. Located in Burch Hall, the Mathematics Tutorial Laboratory is available to students who are enrolled in mathematics classes and to students in other classes where mathematics is involved. The lab is staffed by a specialist in mathematics, and is equipped with both scientific and statistical calculators. Students enrolled in the beginning and intermediate Algebra classes meet in the Mathematics Tutorial Laboratory twice each week. Participation by all other students is strictly voluntary, and may be on an irregular, drop-in basis.

## ADVANCED STANDING CREDIT BY EXAMINATION

Purpose. The purpose of the Advanced Standing Examination Program at Cameron is to provide examinations, in various subject areas, which are designed to measure knowledge acquired prior to formal college study. College credit is granted to those students who take an advanced standing examination and meet or surpass the minimal score established by the academic departments.

Rules and Regulations. The following rules and regulations for the administration of Advanced Standing Exams have been prescribed by the Oklahoma State Regents for Higher Education.

1. Advanced Standing Credit may be awarded up to one-half of the total semester hours required at the lower division level (32 hours); and not more than one-half of the hours required at the upper division level (32 hours).
2. In computing the total amount of credit which may be earned by Advanced Standing, hours taken through correspondence and extension methods shall be considered as having been earned through Advanced Standing mechanism.
3. Advanced Standing Credit may only be awarded in those academic disciplines which are taught at the awarding institution. Advanced standing examinations in foreign language are not allowed in the native tongue of a foreign student, except for courses in language and literature corresponding to Cameron University courses numbered 3000 or above.
4. Advanced Standing Credit awarded to a student must be validated by successful completion of 12 or more semester hours of academic work at the awarding institution before being placed on the student's transcript.
5. The neutral grade of satisfactory ( S ) will be utilized to designate Advanced Standing Credit. No entry will be made on the student's transcript unless he is successful in passing the examination.
6. Advanced Standing Credit, once recorded and validated at an institution in the Oklahoma State System of Higher Education, is transferrable on the same basis as if the credit had been earned through regular study at the awarding institution.
Standardized National Tests. Any person with substantial knowledge of a subject matter, whether gained through high school or other experiences, may receive credit in a particular course through the CLEP testing program. Formal applications for each test must be submitted to the University Testing Center. Cost if: one test, $\$ 20.00$, two tests, $\$ 30.00$, three, four, or five $\$ 40.00$.

Subject CLEP examinations are offered in College Composition, General Psychology, Introductory Sociology, American Government, College Algebra, Plane Trigonometry, Calculus with Analytic Geometry, General Chemistry, Humanities, Computers and Data Pro-
cessing, Elementary Computer Program - FORTRAN IV and Microbiology.

Costs and exam offerings are effective February, 1977, and subject to change without notice.

Institutionally Prepared Tests. Students desiring to take an advanced standing examination for credit in a subject other than those listed above may submit an application to the chairman of the department offering the course. Institutional charges for administration and recording of locally administered advanced standing examinations shall be at the rate of $\$ 5$ per semester-credit-hour. Applications and further information concerning these tests may be obtained from the University Testing Center.

## CONTINUING EDUCATION FOR ADULT LEARNERS

Each year more and more adults are returning to the classroom to take part in what has come to be known as continuing education or life-long learning. Cameron University recognizes the need for counseling and guidanc services for those mature students returning to formal learning after an absence from school.

The Office of Student Services has established a Center of Continuing Education for Adult Learners with services available in preadmission counseling, seminars regarding the return to school, mini courses in academic effectiveness, study-skills, library technique reviews, and other programs directly related to the success of the mature student.

## STUDENT LIFE

## EXTRA-CURRICULAR ACTIVITIES

Cultural Events - Cultural events at Cameron University are varied in order to meet the needs of the student body.

Popular recording artists, music concerts, and drama productions are scheduled regularly on campus. Art displays and other activities are regularly brought to the university.

Music Groups - Band and choral activities are open to all students on campus and provide many interesting opportunities.

Intramural Athletics - In the extensive intramural program at Cameron University, students have the opportunity to participate in basketball, volleyball, softball, horse shoes, badminton, tennis, pingpong, flag football, and bowling.

Intercollegiate Athletics - Cameron University is a member of the National Association of Intercollegiate Athletics (NAIA). Included in the present university program are the sports of football, basketball, baseball, riflery, golf, and track.

## STUDENT ACTIVITY FACILITIES

The Davis Memorial Student Union, completed in 1961, is a modern one-story structure. It contains a lounge area, bookstore, United States Post Office, card playing area, and snack area.

Cameron Stadium, completed in 1965, is a bowl type modern football field, with an artificial turf and with a seating capacity of approximately 10,000 . The stadium is complete with concession facilities, press box, dressing rooms, and ample parking.

McCord Field, completed in 1970, is a baseball park complete with concession facilities, press box, and ample parking. It has a seating capacity of approximately 1,000 .

The gymnasium, completed in 1957, has a seating capacity of approximately 1,700 . The building is complete with dressing facilities, four all-purpose classrooms, coaches' offices, and offices for the physical education department.

All of the athletic facilities are modern and well equipped. The facilities are available for student use and are used regularly for intramural activities. State play-offs for area high schools are regularly held in Cameron facilities. The football stadium is also used by three local high schools for their home games.


## STUDENT ORGANIZATIONS

All regularly enrolled students of Cameron University are members of the student association, which supports selected student enterprises, organizations, and directs student activities. This organization is designed to develop student government, and to bring a working relationship between the university administration, the faculty, and the student body.

Cameron has many student organizations with which the students may affiliate. These organizations provide opportunity to associate with others of similar aspirations and interests along with the guidance of a faculty advisor. These organizations can be both stimulating and rewarding in the student's development during his college years. The student groups are listed in the Student Handbook.

Those who seek further spiritual development and experience may participate in classes in Religious Education and in activities at local churches, where fellowship, leadership, and religious training are provided.

## PUBLICATIONS

All official student publications of the university are published under the policies of the Student Publications Committee, a representative board of students, faculty, and administrators.

## The University Newspaper

The Cameron Collegian, the official publication of the university, is published weekly by members of the publication staff, with the assistance of the journalism classes. The paper serves the function of reporting news of Cameron University, supporting student and university activities, and providing training in journalism.

## The University Yearbook

The Wichita, published once each year or in two parts in the fall and spring, is a permanent record of the activities of the student body, organizations, faculty, and extra-curricular activities during the school year.

## HEALTH SERVICES

Full-time Cameron University students may receive emergency care, first aid, and treatment of common minor ailments by reporting to the Emergency Room of Memorial Hospital. Through an agreement between Health Services and the Hospital Board, full-time students may receive such treatment without charge for the Emergency Room or for the nurse's services. The University Physician is available for emergencies and consultation. Medicine, physician's services, diagnostic treatment, etc., are charged to the student. Students are expected to have
general medical needs met by their personal physicians, dentists, or clinics.

Insurance Planfor Students - The University provides enrollment forms for a student health insurance plan specifically designed and rated for Oklahoma college students.
R.O.T.C. Medical Eligibility - Satisfactory completion of a physical examination is required prior to participation in the advanced Military Science Program.

Emergency Authorization for Medical Treatment - The University requires students or the parents of minor students to give written permission for any duly licensed medical official to perform emergency treatment during any academic term in which the student is enrolled in Cameron University.


## STUDENT CONDUCT

The rules and regulations for the conduct of students attending Cameron University are listed in several official University publications including the Student Handbook and this catalog.

Regulations and policies relating to the students of Cameron University are made with the view of protecting the best interests of the individual, the general welfare of the entire student body, and the educational objectives of the University.

Student violations of these rules and regulations are reviewed by administrative officers having disciplinary responsibilities. The decisions made by these officers are subject to appeal, either administratively or by proper referral to special hearing committees. The recommendations of these appeal bodies, however, must be reviewed by the President of the University, since final disciplinary authority rests with him.

When a student is suspended or dismissed for disciplinary reasons, this fact shall be recorded on the student's records. The grades recorded for the student for that semester shall be determined in the same way as if the student had withdrawn voluntarily and any refund of fees shall be determined by the regular refund policy.

## ACCESS TO STUDENT RECORDS

The Family Educational Rights and Privacy Act of 1974 provides that students should be informed as to the location of their educational records and the administrator who is responsible for their maintenance. Student records are filed in a variety of offices as listed in the Student Handbook. The administrative officers are responsible for the records under their control and for the appropriate release of the records under their control and for the appropriate release of information contained in these records. Cameron University forwards educational records on request to other educational institutions in which a student seeks or intends to enroll without providing any further notice to the individual regarding the transfer of records.

Student patrons are greeted with a "we're glad you're here" attitude by Food Service employees. Each person is treated as an individual; not a number.

Food Service strives to make residence living a pleasant experience in the life of a college student.

## LIVING EXPENSES

Full-time Cameron University students (those enrolled in twelve or more semester hours during the fall or spring semester or six or more semester hours in a summer term) are required to live in University Housing facilities, to the extent that such facilities are available, as follows:

1. Those single students who do not reside in the residence of their parents or legal guardian.
2. Those single students employed by the University who are paid from state funds.
3. Those single students who are the recipients of athletic scholarships.

Room and board costs for students living in University Housing are as followsi

For double foom in 10 -story air-conditioned residence halls. DEF semester, $\$ 531.00$; for single room, $\$ 635.00$

Room and Board are payable in advance, but arrangements may be made to pay them in four installments rather than paying the whole semester's amount at one time.

Students living in the residence halls are required to take their meals in the University dining hall. The University reserves the right to change at any time the charge for board if any food prices necessitate or permit a change. A meal ticket may be used only by the person purchasing the ticket. Its use by any other person will cause forfeiture of the ticket.

A deposit of twenty dollars (\$20.00) is required for room reservations. If the student finds that he will be unable to attend school, a refund will be made, provided notification is given prior to August 1 . The $\$ 20.00$ deposit, or trust fund, less actual loss or breakage caused by the student, will be refunded at the end of the school year. However, if the student moves from the residence hall during the semester and breaks his contract, the $\$ 20.00$ room deposit will be forfeited.

For more information concerning Housing, write to: The Director of Housing, Shepler Center, Cameron University, Lawton, Oklahoma 73505.

## STUDENT UNION

The Clarence L. Davis Memorial Student Union offers a relaxing atmosphere where a student can enjoy his free time between classes,
purchase a snack or beverage, browse through the Gift Shop, purchase class materials or textbooks in the Bookstore, or watch a little television in the lounge area.

## BOOKSTORE

The Bookstore in the Davis Student Union has all textbooks, notebooks, class materials and supplies needed for most courses at Cameron University. The store also carries a wide selection of ther books, including fiction and non-fiction, office supplies, and clothing, such as T-shirts, Sweat Shirts and Gym clothes. Class Rings, Graduation Robes and many other items are available.

## POST OFFICE

Cameron postal service includes the sale of stamps, money orders, envelopes, and post cards, Mail is delivered daily, Monday through Saturday. The university post office is located in the Student Union.

## VENDING

A full line of vending machines are located in the Student Union, May Shepler Center, and in most of the academic facilities on campus.

## CONCESSIONS

Concession stands offering snacks, beverages, programs, etc., are available at all athletic events.

## SUMMER PROGRAMS

Summer Programs or special summer events are coordinated through the Auxiliary Services Office, Extension 80. Programs such as Football or Basketball Camp, Speech Clinics, Band Camp, and many others are but a few of the summer programs offered at Cameron University during the summer months.

# SPECIAL PROGRAMS 

## R.O.T.C. (Reserve Officers Training Corps)

Four-Year Program

Cameron University offers courses in basic and advanced Military Science. The basic course, taken during the freshman and sophomore years, is designed to teach principles and techniques of leadership and to develop in each student an understanding of the role of the Army in the defense of the United States. The purpose of the advanced course, taken during the junior and senior years, is to train selected students in a balanced course of officer training, both theoretical and practical, which will qualify them to perform the duties of a commissioned officer in the Army of the United States. Each student who successfully completes the advanced course will, upon receiving his Bachelors Degree, be commissioned as a Second Lieutenant in the United States Army.

While participating in the advanced course, each student is paid $\$ 100$ per month for the academic school year, not to exceed 10 months for each of two years, or a total of $\$ 2000$. Additionally, during the summer between the junior and senior year, while the student attends the advanced ROTC Summer Camp, he will receive one-half of a second lieutenant's pay, or approximately $\$ 550$ for the six-week period.

## Two-Year Program

For those students who were unable, or did not elect, to enroll in the basic course and who desire to pursue a commission, the Army has developed a two-year program. The requirements of the basic course may be met by attending a six-week ROTC Basic Summer Camp the summer prior to enrollment in the advanced course. From one to three hours of academic credit may be obtained, at student option, by properly enrolling in MS 3003 (Basic Summer Camp) for the summer school term. Veterans who wish to pursue a commission may enter the advanced program by enrolling in MS 3013 with evidence of satisfactory prior service and appropriate academic standing. Further information on the two-year program may be obtained from the Professor of Military Science.

## Scholarship Program

In 1964, Congressional Legislation authorized college scholarships for selected students enrolled in the ROTC program. The scholarships are awarded on a competitive basis to help outstanding young people pay for their college education while completing requirements for a commission in the United States Army. Scholarships are available for one, two, three and four year periods and include the following:
a. Payment for all tuition, textbooks, fees and other educational expenses for the duration of the scholarship.
b. Payment of $\$ 100$ per month subsistence allowance for the duration of the scholarship.
Further information on the Scholarship program can be obtained through the Financial Aids Office and/or the Professor of Military Science.


## SUMMER SESSION

## ADMISSION

Admission to the summer session is on the same basis as during the regular year. Detailed information concerning admission requirements may be obtained from a previous section of this bulletin.

In the event that a student wishes to apply the credit earned during a summer session at Cameron toward a degree to be conferred by some other institution, it will be the responsibility of the student to confer with his or her dean or adviser before coming to Cameron to select courses which supplement or satisfy the requirements of his program.

## OFFERINGS

The same standard courses are offered in the summer session as in the regular sessions. Frequency of class sessions is increased for this short period so that the same amount of time in class and in preparation is devoted to the summer term as to the semester. The number and variety of undergraduate courses offered in the summer is somewhat smaller in some departments than during the regular semesters, but adequate offerings are afforded in all departments for ordinary curriculum needs.

## STUDY PROGRAM

The normal undergraduate study program for the summer session is eight or nine semester hours. With the approval of the Dean of Instruction, students who have a superior scholastic record may be permitted to enroll in more than nine hours.

## EVENING AND SATURDAY CLASSES

## BACKGROUND

One of the functions of Cameron University as defined by the Oklahoma State Regents for Higher Education is to "provide oncampus programs of adult and continuing education, both for degree credit and non-degree credit'". To implement this function, the University has established an extensive program of evening classes and also offers a limited number of Saturday classes.

## TERMS AND TIMES

There are five eight and one-half evening terms per academic year. The Saturday classes and a few of the evening classes are offered on the full seventeen week semester schedule.

Most of the evening classes are for three hours credit and meet from 7:00 to 9:40 p.m. on either Monday and Wednesday or Tuesday and Thursday. Courses for which the student receives four or five hours of credit usually hold longer sessions and/or meet more than twice per week. A majority of the Saturday classes meet from 9:00 to 12:00 a.m. or from 1:00 to 4:00 p.m.

## VARIETY OF OFFERINGS

Classes offered during the evenings and on Saturdays are representative of those offered in the regular day program each semester, and include courses which are applicable toward an Associate or Bachelor's degree. The course work is for resident credit.

## MINIMUM CLASS ENROLLMENT

A minimum enrollment of ten is required to form a class. Persons enrolling in a course that is cancelled because of an insufficient enrollment may transfer to another course without penalty or receive a full refund of fees.

## LATE ENROLLMENT

Persons must enroll prior to the second night of class.

## SCHEDULE CHANGES

Persons make changes in class schedules, but must do so prior to the third night of classes.

## FEES

Fees are $\$ 12.45$ per semester hour for 1,000 and 2,000 level courses and $\$ 13.45$ for courses of the 3,000 and 4,000 level. If a course fails to materialize all fees will be refunded.

## WITHDRAWALS

It is the students' responsibility to complete an official drop card when withdrawing from a course; otherwise, he could receive an " F ", for the course. If withdrawal occurs during the first three weeks of the session, the student will receive a grade of "W". After the first four weeks a grade of " $W$ " will be granted if student has a passing grade or a "WF" if the grade is not passing.

## TEXTBOOKS

Textbooks for evening classes are the same as for day classes and may be purchased from the Cameron Bookstore. The bookstore WILL be open on all enrollment nights.

## PARKING REGISTRATION

All motor vehicles parked on campus must be registered with the university and have a Parking Permit properly displayed. Permits may be purchased during enrollment at a cost of $\$ 1.00$. The permit is valid for one session, only. Failure to register the vehicle and properly display the decal will subject the owner to a $\$ 10.00$ fine. Traffic violation booklets will be available to all students during enrollment.

## SPECIAL ON-CAMPUS CLASSES

 FOR
## ON-DUTY MILITARY PERSONNEL

## BACKGROUND

The United States Department of the Army, in the Army Education Services Plan FY75, has set forth significant new objectives and requirements for implementation by Army installations. These objectives include the opportunity for every soldier to participate in special educational programs during on-duty hours.

One of the functions officially assigned to Cameron University is to provide special programs of collegiate instruction suited to the needs of the military personnel at Fort Sill. Accordingly, the University has agreed to assume responsibility for the undergraduate college portion of the Army's new educational program for the military personnel who are on-duty at Fort Sill.

The University conducts four special eight week sessions for onduty military personnel each year, two of them concurrently with the regular sixteen week fall semester and two during the spring semester. On-duty military personnel may also participate in the University's regular eight week summer term.

With the approval of their unit commanders, interested individual soldiers are released from their regular military duties during either the morning or the afternoon to participate in at least one of these sessions per year. Approximately fifty percent of the eligible applicants for the program are released for morning classes and fifty percent for afternoon classes.

## PARTICIPATION

All assigned and/or attached military, except students and trainees are eligible to participate in the On-Duty Education Program on a voluntary basis. Military dependents and other civilians may also enroll in any or all of the terms. Interested individuals may receive counseling at the Army Education Center, Building 266, Fort Sill.

## ADMISSIONS PROCEDURES

Each individual desiring to enroll will be required to complete and deliver to the Education Center the following forms:
(1) FS Form 369R. This form supplies the required enrollment information.
(2) A release form, signed by the unit commander.
(3) A financial assistance form, signed by the unit commander, which will either be:
(a) DA Form 2171, in which case the Army will pay $75 \%$ of the tuition cost, or
(b) VA Form 22-19999a, in which case the in-service GI Bill will reimburse the student for one-hundred percent of tuition cost.
The Education Center will then issue all of the necessary admissions forms for Cameron University and further instructions will be given. Actual enrollment will be conducted on campus by Cameron University personnel at a designated time and place. All completed Cameron University forms, the approved financial assistance form and the student's portion of the tuition costs will be required at that time. Enrollment will be limited to those individuals who can provide a high school transcript or satisfactory GED scores.

## NON-CREDIT VOCATIONAL PROGRAM

In cooperation with the Army Education Center at Fort Sill, Cameron University offers non-credit vocational programs in Gas and Diesel Engines, in Auto-Body Repairs and in Air Conditioning Refrigeration and Heating for the active-duty military personnel at Fort Sill. Students work at their own pace in each of these programs, all of which are scheduled at the Cameron Vocational Center on the military reservation. Cameron provides the instructional staff and develops the instructional materials, while Fort Sill furnishes facilities, equipment, maintenance and other miscellaneous support. These self-paced instructional programs are also made available to the United States Army for export to and duplication by other military installations. For further information on these programs, interested active-duty military personnel should contact the Army Education Center, Building 266, Fort Sill or the Chairman, Department of Technology, Cameron University.


## CONCURRENT ENROLLMENT OF HIGH SCHOOL SENIORS IN CAMERON UNIVERSITY

A senior student enrolled in an accredited high school may be admitted provisionally to Cameron University as a special student if:

1. He or she meets the published criteria of the State Board of Higher Regents (other than high school graduation) for admission to the institution.
2. He or she is enrolled in less than a full-time load (fewer than five credit courses per semester) at the high school which he or she is attending, as attested by the high school principal.
3. He or she is eligible to complete requirements for graduation from high school no later than the spring of the senior year, as attested by the high school principal.
A high school student admitted under the provisions set forth above may enroll in a combined number of high school and college courses per semester not to exceed a full-time college work-load of fifteen (15) semester credit hours. For purposes of calculating work-load, one high school credit course shall be equivalent to three semester credit hours of college work.

Following high school graduation, such a student may continue his or her enrollment at Cameron University or may transfer to another institution in the State System, provided that during the provisional enrollment period he or she has achieved a college grade point average of 1.6 or above on a 4.0 scale.

## EXTENSION STUDY

## GENERAL PROVISIONS

1. A student may enroll for extension study if he has been formally admitted to the University, and otherwise is eligible for attendance. He must be in good standing at schools at which he was previously enrolled, he must have filed required credentials, and he must be specifically qualified to enroll in the particular courses involved.
2. For a person otherwise employed, the maximum amount of extension study which may be completed in a calendar year is twelve semester hours, and in a single semester, six hours.
3. The maximum total amount of extension work applicable on degree requirements or teacher's certificate is one-fourth each of the total work in general education and fields of specialization.
4. In special situations the student may be permitted to pursue extension or residence work with Cameron and another college concurrently, or to enroll in extension work concurrently with residence work atCameron, but in either instance specific prior arrangement must be made with approval of the Dean of Instruction, and such arrangement must be reported to the Admissions Office.
5. The fee for extension study is $\$ 16.50$ per semester hour. If a student withdraws during the first week of class his refund is $80 \%$. If he withdraws during the second week of class the refund is $50 \%$. After the second week of classes there is no refund on extension classes.

Undergraduate extension study is carried on during the scholastic year in southwestern Oklahoma. This type of work is conducted by regular faculty members, and classes are formed in centers where there is sufficient demand.

Application for formation of classes should be forwarded to the University by June 15 for classes to be offered in the fall semester, and by October 15 for classes to be offered in the spring semester.

## Elementary-Secondary

Teacher certification for students majoring in Art, Music, or Health and Physical Education permits them to teach at both the elementary and the secondary level. In addition to the course(s) in methods of teaching in the major field (see section concerning major), the following sequence of professional education courses is required:

> 2003 Introduction to Teaching . . . . . . . . . 3 hours
> **3323 Psychology of Adolescence . . . . . . . . 3 hours
> *3352 Educational Psychology . . . . . . . . . . 2 hours
> ***4032 Educational Tests and Measurements
> 2 hours
> *4232 Audio-Visual Education ............ 2 hours
> *4114 Directed Observation and Student Teaching in the Elementary School
> 4 hours
> *4124 Directed Observation and Student Teaching in the Secondary School 4 hours
*Should be taken in the professional semester.
**Students majoring in Art or Health and Physical Education may elect 3343 Psychology of Childhood.
***Not required of Art, Music, English, or Health and Physical Education Majors.

## ADMISSION TO TEACHER EDUCATION

Students planning to enter teacher education programs are required to file formal applications with the Director of Teacher Education for admission to such study. Students admitted to the programs are provided guidance in selection of objectives and are subject to progressive evaluation as they proceed in their work.

A student should enroll in the first professional education course, Introduction to Teaching, during the sophomore year. Application for admission to the Teacher Education Program is generally made while enrolled in this course. Earlier enrollment requires permission from the Director of Teacher Education.

The Teacher Education Council, an advisory committee of students, faculty, and administrators, serves Cameron University in policy review and development relating to the education of teachers. The professional members of this Teacher Education Council are the administrators who have direct responsibility for the direction of the pre-service experiences of elementary and secondary teachers and elected faculty members from the various academic departments offering approved programs in Teacher Education.

The following data are used in considering an application for admission to the program:

1. Records of college entrance tests, (ACT or SAT), records of academic achievement in high school and college, the SCAT administered during the sophomore year, and other standardized tests, if needed.
2. Reports on character and qualifications obtained from the Office of the Dean of Students, and from a minimum of three (3) faculty members who are acquainted with the student through classwork.
3. Each applicant must have the approval of his Introduction to Teaching instructor.
4. English Proficiency as shown by a C or higher in English 1113 and English 1213 or their equivalent.
5. Records concerning physical handicaps, general health factors, and communication problems should indicate that the applicant is capable of teaching effectively.
6. Reports of a conference which the student may have with a subcommittee (the Selection, Admission, and Retention Committee) of the Teacher Education Council. This conference may be at the request of the student or the Director of Teacher Education.
7. A minimum cumulative grade point average of at least a 2.0 on a 4.0 scale at the time of admission to the Teacher Education Program. (Note the requirement of a 2.2 for student teaching.)
The application for Teacher Education is then placed in one of the following classifications: Approved, Deferred, or Not Approved.

Approved - requirements include a 2.0 grade point average, including all college work attempted, and a satisfactory rating on the evaluation procedures described in 1 through 7.

Deferred - the application may be deferred pending completion of any of the requirements.

Note Approved - the applicant may receive this status because of failure to meet any of the requirements.

## Retention in the Teacher Education Program

1. The student must maintain Approved status. Refer to data used for admission to teacher education.
2. Students with Approved status not enrolling in the program for two consecutive semesters may be removed from Approved status.

## Admission to Student Teaching

Student teaching is a full-time experience. The student is expected to work all hours of each school day for the entire student teaching experience. The student should not enroll in other classes or make any arrangements that will interfere with full-time student teaching.

1. Applications should be made to the Coordinator of Student Teaching before the last Friday in March or October, one year prior to the semester the student plans to enroll in student teaching.
2. Admission to student teaching requires a 2.2 grade point average.
3. The student must have maintained Approved status.
4. The student must have approval of his major department. (Requirements are determined by the department.)
5. Admission to student teaching is a formal step in the admission and retention program for teacher education. For admission to student teaching, students must furnish evidence that degree requirements will be completed the semester in which they are enrolled in student teaching or the full semester following student teaching.

## TRANSFER STUDENTS

1. Verification of admission to an approved Teacher Education program at a previous college may be acceptable.
2. Applications for admission to the Teacher Education program may be secured from the office of the Department of Education and Psychology.
3. Applications will be evaluated on the same basis as thjose of non-transfer students atilizing data provided by the previous college.
4. Students must complete one semester of 2.0 or above work at Cameron University.
5. Applications for admission to the Student Teaching Program may be obtained from the office of the Coordinator of Student Teaching.

Physics
Technology
Chemistry
Elementary Education
General Education (for Military personnel only)
Health and Physical Education
Cameron University offers a program whereby a student may complete the requirements in professional education leading to an Oklahoma elementary, secondary, or elementary-secondary teaching certificate. Teacher certification may be earned in conjunction with each major listed above with the exceptions of Agriculture, General Education for military personnel, Medical Technology, Sociology and Technology. Students seeking teacher certification must be formally admitted to the teacher education program. (For information concerning admission to teacher education see page 77.)

## REQUIREMENTS FOR GRADUATION

The individual who enters Cameron may graduate under the curriculum required by that catalog or, under any other single catalog which is in effect while he is in attendance at the university.

To secure a Bachelors degree from Cameron the candidate must complete the following general degree requirements:

1. Completion of a major and a minor or a major-minor, and fifty hours of general education is required for all Bachelors degree candidates.
2. The minimum credit total required for a Bachelors degree is 128 semester hours with at least twice as many grade points as total hours attempted whether passed or failed. In cases involving work done at more than one college the above grade average must be attained at Cameron as well as in total combined college work.

In determining graduation requirements, only the last course grade earned in a course attempted more than once will be utilized in calculating the graduation grade points (in calculating grade point averages for all purposes other than graduation, the total number of grade points earned is divided by the total number of hours attempted.)
3. At least one-half of all the lower division work and one-half of all the upper division work required for graduation must be done in residence at approved institutions. Those students completing teacher certification requirements must complete three-fourths of the work in general education, three-fourths of the work in professional teacher education and three-fourths of the work in their field of specialization in residence.
4. Completion of a minimum of 30 hours in residence at Cameron is required on all Bachelor Degree Programs except the B.S. in General Education which requires at least 24 hours in residence.
5. Fifteen of the last 30 hours on the degree program must be done in residence at Cameron. When necessary, the remaining hours may be
completed at other baccalaureate degree-granting institutions. Credits earned at a junior college can not be used to fulfill any of the last sixty-four required hours on any bachelors degree.
6. At least forty hours must be done in junior and senior level courses.
7. A student may receive a second degree upon completion of thirty hours in addition to the hours required for the first degree, provided the requirements for the degree are met. Normally, no more than one degree will be conferred at one convocation.
8. Candidates must file for the degree at the Admissions Office at the beginning of the semester or term preceding graduation.
9. All degree candidates are expected to participate in the formal commencement exercises. No degree will be conferred upon any student in absentia unless the absence has been approved in advance by the Dean of Instruction. Such exemptions must be applied for in writing.

## GRADUATION UNDER A PARTICULAR CATALOG

Students may graduate under the degree provisions of the catalog in effect at the time of their first completed semester at Cameron or under any other catalog which may be issued prior to their receipt of a degree. However, every category of requirements in the particular catalog selected must be fulfilled. No student will, for example, be permitted to follow the prescribed guidelines of one catalog in general education and the stipulated major or minor requirements of another catalog.


## DOUBLE MAJORS

Students may have more than one major listed on their transcript, provided that they complete all of the requirements for each of the majors.

The student seeking two majors must designate one of the majors as the "first major." The degree awarded, B.A. or B.S., will then be determined by the designated "first major."

Students fulfilling all of the requirements of a "second major" are not required to complete a minor.

## DUPLICATE USE OF COURSES

Credits earned in a particular course may not be used to fulfill the requirements of two different majors or of both a major and a minor. Should the same course be required in each of a student's majors or in both his major and minor, the student will be expected to complete an additional elective course in the field in which the duplication occurs.

## RECOGNITION OF HONOR GRADUATES

Graduating baccalaureate and associate degree candidates with superior academic records are accorded special recognition by the University. Students who have achieved an over-all grade point average of 3.8 or above for all college-level courses attempted are graduates "with high honors" and those who have achieved an over-all grade point average of at least 3.6 but less than 3.8 for all college-level courses attempted are graduated "with honors". Both categories of honors graduates are identified as such on their official Cameron University transcripts, and they are also formally recognized in the commencement exercises for their graduating class.


## GENERAL EDUCATION REQUIREMENTS FOR THE BACHELORS DEGREE

Fifty hours of general education as outlined below are required of each person who receives a Bachelors Degree from Cameron University. Its purpose is to acquaint the student with the major areas of knowledge and experience which are generally recognized as the common possession of educated persons, so that his understanding and appreciation of his cultural heritage will enrich his personal and community life and serve as a basis for vocational success and good citizenship.

## MINIMUM 50 HOURS

1. Communications 9 hours
(a) English 1113, English Composition I ........... 3 hours
(b) English 1213, English Composition II

3 hours
(c) Speech 1113, Fundamentals of Speech

3 hours
2. Mathematics 3 hours
Selected from any Mathematics course numbered 1013 or above except courses designed for elementary education ma- jors.
3. Science 8-10 hours
(a) Biological Science-a 4 hour or 5 hour Biology, Botany or Zoology course, and
(b) Physical Science-a 4 hour or 5 hour Physical Science, Chemistry, Geology, or Physics course.
4. American History and Political Science 6 hours
(a) History 1483 or 1493 3 hours
(b) Political Science 1113,3023 or 3113 ..... 3 hours
5. Humanities ..... 6-8 hours
To be selected from the following, with no more than two courses from any one group (a-h)
(a) Art 2112, 2313, 2323
(b) Drama 2212
(c) English 2543, 2653, 2713, 2723, 2773, 2883
(d) Foreign Language (French, German, or Spanish) 1113, 1223 or equivalent
(e) Humanities 2114, 2224, 2513
(f) History 1113, 1123, 2473
(g) Music 1212, 1222, 1901, 2012, 2022
(h) Philosophy 1113, 2213
6. Behavioral Science ..... 3 hours
Home Economics 1123, Psychology 1113, or Sociology ..... 1113
7. Economics ..... 3 hours
Economics, 2013, Geography 3023, or Home Economics 3603
8. Physical Education Activity* 4 hours
(a) Any physical education activity course(s)
(b) Marching band (not to exceed 2 courses)
(c) Intramural sports (not to exceed 2 courses)
(d) Intercollegiate Athletics (not to exceed 1 course)
(e) Any four enrollments in Military Science courses having leadership laboratories.
9. Electives sufficient to total 50 semester hours or more but with no more than six hours of these electives in any one academic department. (Agriculture, Art, Biology, Business, Education \& Psychology, Health \& Physical Education, Home Economics, Language Arts, Mathematics, Military Science, Music, Nursing, Physical Science, Social Science, Speech-Drama, Technology.)
*Not required if student is
(a) 30 years of age or older, or
(b) recommended by a medical doctor for waiver of the requirement, or
(c) awarded credit based on one year of active full-time military service.


## SPECIFIC REQUIREMENTS FOR THE BACHELOR'S DEGREE

On the following pages the specific requirements for major programs in the various areas of study are listed.

## DEPARTMENT OF AGRICULTURE

The Department of Agriculture offers a program leading to a Bachelor of Science Degree with a major in agriculture. The students majoring in Agriculture will be required to choose a concentration in animal science or agronomy.

## AGRICULTURE

I. GENERAL EDUCATION (See pages 86-87) ......... . 50 hours
II. MAJOR FIELD .............................................. . . 37 hours

Required Courses ............................... 17-18 hours
1124 Introduction to Animal Science .......... 4 hours
1214 Introduction to Plant Science ............ 4 hours
1334 Introduction to Agricultural Economics

4 hours
2124 Fundamentals of Soil Science ............ 4 hours
4571-2 Senior Seminar in Agriculture ........ 1-2 hours
Required Area of Concentration .................. 14 hours
Select Group A or Group B
GROUP A
Animal Science
3102 Livestock Evaluation ...................... 2 hours
3112 Livestock Evaluation ...................... 2 hours
3133 Breeds of Livestock ....................... 3 hours
3653 Applied Nutrition ............................ 3 hours
4113 Beef Cattle Science ........................... 3 hours
4123 Swine Science . . . . . . . . . . . . . . . . . . . . . . . . 3 hours
4132 Sheep Science . . . . . . . . . . . . . . . . . . . . . . . . . 2 hours
4434 Animal Reproduction .................... 4 hours

## GROUP B

Agronomy
3012 Identification, Grading andAnalysis of Field Crops2 hours
3214 Forage, Range and Pasture Crops 4 hours
3434 Soil Morphology and Conservation ..... 4 hours
3683 Physical Properties of the Soil 3 hours
4124 Pesticides 4 hours

## DEPARTMENT OF ART

The Department of Art offers a program leading to a Bachelor of Arts Degree with a Major-Minor in Art. The program includes courses for students with no art experience as well as courses for students wishing to concentrate their efforts in a specific area.
ART
I. GENERAL EDUCATION (See pages 86-87) ..... 50 hours
II. MAJOR-MINOR FIELD ..... 54 hours
Required Courses ..... 31 hours
1223 Fundamentals of Art ..... 3 hours
1013 Basic Drawing I 3 hours
1243 Beginning Painting ..... 3 hours
1413 Beginning Sculpture ..... 3 hours
2133 Design ..... 3 hours
2123 Color ..... 3 hours
2033 Figure Drawing I 3 hours
2313 History of Art, Prehistoric to the Renaissance 3 hours
2323 History of Art, Renaissance to the Present ..... 3 hours
4333 History of American Art OR 3 hours
4343 History of Contemporary Art
4001 Senior Exhibition ..... 1 hour
Upper Division Art Electives 23 hours
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION
Those students who wish to qualify for a standard teaching certificate in Art in the State of Oklahoma must take 4773 Public School Art and the professional education requirements listed on page 78 .

## MEDICAL TECHNOLOGY

The Department of Biology offers a program whereby a person may be granted a Bachelor of Science Degree with a major in Medical Technology. The program consists of three academic years of course work at Cameron (listed below) and a year of work under the direction of hospital personnel at Comanche County Memorial Hospital or another school of medical technology approved by the Board of Schools, American Society of Clinical Pathologists.*
I. GENERAL EDUCATION (See pages 86-87) 50 hours
(Must include 1015 or 1364/1361 General Chemistry, 1114 Gen- eral Botany and 1513 Mathematics)
II. MAJOR FIELD ..... 62 hours
A. Biology ..... 16 hours
1114 General Zoology
2024 Comparative Anatomy, or 4004 Physiology
2124 MicrobiologyApproved Electives
B. Chemistry ..... 16 hours
1225 General Chemistry OR 1474/1471 General Chemistry
2112 Theory of Chemical Analysis
2223 Quantitative Analysis
3345 Organic ChemistryApproved Electives
C. Medical Technology (completed at school of Medical Technology) 30 hours
III. APPROVED ELECTIVES 16 hours(Electives must be selected and approved from advanced Biologycourses, advanced Chemistry courses, Physics or Mathematicscourses)
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR
GRADUATION

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## DEPARTMENT OF BUSINESS

The Department of Business offers programs leading to:
(a) Bachelor of Science degree with a major in Business Administration.
(b) Bachelor of Science degree with a major in Accounting.

## BUSINESS ADMINISTRATION

I. GENERAL EDUCATION (See pages 86-87) ......... . 50 hours

Students who major in Business Administration are encouraged to select their elective hours in general education from courses outside the Department of Business.
II. CORE COURSES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 33 hours

1013 Introduction to Data Processing ......... 3 hours
2013 Principles of Accounting I ................ 3 hours
2023 Principles of Accounting II ............... 3 hours
2023 Principles of Economics II . . . . . . . . . . . . . . 3 hours
2113 Business Communications ............... 3 hours
3013 Principles of Management ................ 3 hours
3213 Business Law I ............................. . . . 3 hours
3413 Principles of Marketing . . . . . . . . . . . . . . . . . 3 hours
3603 Principles of Finance . . . . . . . . . . . . . . . . . . 3 hours
3613 Quantitative Analysis I ..................... 3 hours
4633 Business Policy ............................ . . 3 hours
III. AREA OF SPECIALIZATION .......................... . . 21 hours

Individuals who major in Business Administration must complete one of the following controlled areas of Specialization (minors).
A. General Business Administration
21 hours

3013 Intermediate Accounting I ............. . 3 hours
3513 Personnel Management ............... 3 hours
Upper-Division Business Department Electives

15 hours
Chosen from any Business Department courses, except for those courses prefixed Shorthand, Typewriting, and Office Administration, with no more than six (6) hours from any one area.
B. Economics ................................ 21 hours

3013 Micro Economic Theory ............. . 3 hours
3023 Macro Economic Theory . . . . . . . . . . . 3 hours
Upper-Division Economics ................. 6 hours
Upper-Division Electives ................... 9 hours
Chosen from any Psychology, Mathematics, Social Science, Technology, and/or Business Department courses, except for those courses prefixed Shorthand, Typewriting, and Office Administration.
C. Management ..... 21 hours
3613 Production Management ..... 3 hours
3433 Labor Problems ..... 3 hours
3513 Personnel Management ..... 3 hours
Upper-Division Management ..... 6 hours
Upper-Division Electives ..... 6 hours
Chosen from any Business Department courses, except forthose courses prefixed Shorthand, Typewriting, and OfficeAdministration.
D. Finance ..... 21 hours
2643 Insurance or 2813 Fundamentals of Real Estate ..... 3 hours
3623 Investments ..... 3 hours
3313 Money and Banking ..... 3 hours
4333 Financial Analysis 3 hours
Upper-Division Electives ..... 9 hours
Chosen from any Mathematics and/or Business Depart-ment courses, except for those courses prefixed Short-hand, Typewriting, and Office Administration.
E. Marketing ..... 21 hours
3013 Micro Economics OR 3023 Macro Economics ..... 3 hours
3533 Sales Management ..... 3 hours
3433 Retail Management ..... 3 hours
4433 Advertising ..... 3 hours
Upper-Division Electives ..... 9 hours
Chosen from any Business Department courses, except forthose courses prefixed Shorthand, Typewriting, and OfficeAdministration.
F. Office Administration ..... 21 hours
1213 Business Computations ..... 3 hours
3003 Advanced Typewriting ..... 3 hours
3013 Office Procedures ..... 3 hours
3123 Office Management ..... 3 hours
Electives ..... 9 hours
Chosen from Shorthand 2112 or above and/or from any upper-division Business Department Courses.

## IV. Related Subjects for Teacher Education (Optional)

The department of Business offers work leading toward two different standard business teaching certificates. They are referred to as the Business Education Certificate and the Bookkeeping-Clerical Practice Certificate. The program of studies for those students desiring teacher certification in the State of Oklahoma must include Business 4772, Methods of Teaching Business Subjects, the professional education sequence listed on page 77, and one of the following groups.

Business Education
*Shorthand 12 hours
*Typewriting 9 hours Office Administration 3013 or 3123

3 hours

Bookkeeping-Clerical Practice
*Typewriting 2 hours Office Administration 3013 or 3123

3 hours
*Three hours of typewriting and/or shorthand may be omitted for each unit completed in high school, except that one course in each subject must be completed in college.
V. Electives to Complete 128 Hours Required for Graduation.

## ACCOUNTING

I. GENERAL EDUCATION (See pages 86-87) ......... 50 hours
Students who major in Accounting are encouraged to select their elective hours in general education from courses outside the Department of Business.
II. CORE COURSES .......................................... . 33 hours
1013 Introduction to Data Processing ......... 3 hours
2013 Principles of Accounting I ................ . 3 hours
2023 Principles of Accounting II .............. 3 hours
2023 Principles of Economics II . . . . . . . . . . . . . . 3 hours
2113 Business Communications ................ 3 hours
3013 Principles of Management ................ 3 hours
3213 Business Law I.............................. . 3 hours
3413 Principles of Marketing .................... 3 hours
3603 Principles of Finance . . . . . . . . . . . . . . . . . . . 3 hours
3613 Quantitative Analysis I .................... 3 hours
4633 Business Policy ............................ 3 hours
III. MAJOR FIELD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 24 hours
4213 Auditing ................................... 3 hours
Upper-Division Accounting Electives ........ 21 hours

## IV. MINOR

Students who major in Accounting and complete the core requirements are not required to complete a minor.
V. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR
GRADUATION.

## DEPARTMENT OF EDUCATION AND PSYCHOLOGY

The Department of Education and Psychology offers programs leading to the Bachelor of Science Degree with a major in Elementary Education and to Teacher Certification in Elementary, ElementarySecondary and Secondary Education.

## ELEMENTARY EDUCATION

I. GENERAL EDUCATION (See pages 86-87)

50 hours

(Must include 1113 General Psychology)
II. SPECIALIZED EDUCATION—Major . . . . . . . . . . . . . . 32 hours

Required Courses .............................. . . . . 27 hours
3132 Music for Elementary
Teachers I . . . . . . . . . . . . . . . . . . . . . . . . 2 hours
3143 Methods and Materials of Elementary
Language Arts . . . . . . . . . . . . . . . . . . . 3 hours
3153 Reading Instruction I ...................... 3 hours
3253 Reading Instruction II . . . . . . . . . . . . . . . . 3 hours
3162 Methods and Materials of Elementary
Arithmetic
(Prerequisite: Math 3353) . . . . . . . . . . . . . . 2 hours
3172 Methods and Materials of Elementary
Natural Science ....................... . . . 2 hours
*3182 Methods and Materials of
Elementary Social Science . . . . . . . . . . . . . 2 hours
3352 Physical Education in the
Elementary School ..................... . . 2 hours
3353 Math for Elementary
Teachers I . . . . . . . . . . . . . . . . . . . . . . . . . 3 hours
4123 Library Science- $\quad$ Children's Literature . . . . . . . . . . . . . . . . . . . 3 hours
4232 Art for Elementary Teachers . . . . . . . . . . . . 2 hours
Elective Courses (minimum) 5 hours
2212 Physical Education-First Aid .......... 2 hours
2053 Home Economics-
Child Development ........................ . . 3 hours
3142 Music for Elementary
Teachers II .............................. . . . . 2 hours
3363 Math for Elementary
Teachers II .............................. . . . 3 hours
3413 Speech Development and
Correction ................................. . . . 3 hours
4153 Diagnosis and Remediation of
Reading Difficulties ..................... 3 hours
Art, Drama, Music (Courses in these fields
other than methods courses) ......... . 1-3 hours

[^1]III. CERTIFICATION REQUIREMENTS 8 hours
1223 Fundamentals of Art ..... 3 hours
2243 Human Geography 3 hours
3002 The Exceptional Child 2 hours
IV. AREA OF CONCENTRATION-Minor ..... 18 hours
An approved program must be chosen from one of the following:

1. Language Arts: English and/or Speech and/or Journalism
2. Social Studies
3. Mathematics
4. Science5. Fine Arts: Art or Drama or Music
5. Health and Physical Education
6. Foreign Language
7. Reading
A maximum of nine hours of work taken to fulfill other require-
ments may be applied to areas 1-7. Methods courses in ElementaryEducation may not be applied to areas 1-7. Requirements for area 8(Reading) are: Educ. 3143, 3153, 3253, 4153, and Lib. Sci. 4123 ; plus 3hrs. from: Lib. Sci. 3113, Lib. Sci. 4313, Eng. 4613.
V. PROFESSIONAL EDUCATION ..... 22 hours
2003 Introduction to Teaching ..... 3 hours
3012 History and Philosophy of Education ..... 2 hours
3343 Psychology of Childhood ..... 3 hours
*3352 Educational Psychology ..... 2 hours
*4032 Educational Tests and Measurements ..... 2 hours
*4118 Directed Observation and Student Teachingin the Elementary Grades8 hours
*4232 Audio-Visual Education 2 hours
VI. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
[^2]
## DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION

The Department of Health and Physical Education offers a program leading to:
(a) A Bachelor of Science Degree with a major in Health and Physical Education
(b) A teaching certificate in Driver and Safety Education.

## HEALTH AND PHYSICAL EDUCATION

## I. GENERAL EDUCATION (See pages 86-87) 50 hours

II. MAJOR FIELD 37 hours*
Required Courses
29 hours
A. Health ..... 10 hours
1052 Personal and Community Health ..... 2 hours
2212 First Aid ..... 2 hours
3012 Adapted and Correctives Physical Education ..... 2 hours
3244 Applied Anatomy and Kinesiology ..... 4 hours
B. Health and Physical Education Theory ..... 11 hours
2322 Introduction to Health, Physical Education and Recreation ..... 2 hours
3332 Physical Examination and Measurements ..... 2 hours
3352 Physical Education in the Elementary School ..... 2 hours
3362 Physical Education in the Junior and Senior High School ..... 2 hours
4003 Organization and Administration of Health, Physical Education and Interscholastic Athletics 3 hours
C. Physical Education Activity 8 hours
Swimming ..... 1 hour
Tumbling and Gymnastics ..... 1 hour
Additional elective activity courses ..... 6 hours(excluding Athletics and Intramurals)
D. Elective Health and Physical Education Courses ..... 8 hours
Physical Education Activity ..... 2 hours
2281 Instructor's Course in First Aid ..... 1 hour
3051 Officiating Women's Sports ..... 1 hour
3052 Sports Officiating ..... 2 hours

[^3]3292 Care of Athletic Injuries ..... 2 hours
3353 Camp Counseling ..... 3 hours
3363 Community and Recreation Leadership ..... 3 hours
3373 Therapeutic Recreation ..... 3 hours
4222 Organization and Management of Intramurals ..... 2 hours
4232 Principles and History of Health and Physical Education 2 hours
4781-4 Special Studies 1-4 hours
Theory of Coaching
(Not to exceed one course) ..... 2 hours
III. MINOR FIELD (See pages 124-129) ..... 18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION
Those students who wish to qualify for a standard teaching certificate in Health and Physical Education in the State of Oklahoma must take 4772 Methods of Teaching Physical Education, and the professional education sequence listed on page 78.
NOTE: Intramural Sports: Maximum credit two hours toward general education requirement; four elective hours toward total 128 hours requirement.
Participation in Intercollegiate Sports: Maximum credit one hour toward General Education and eight elective hours toward 128 hour requirement.


## DRIVER AND SAFETY EDUCATION CERTIFICATE

Persons wishing to complete requirements for the standard certificate in Driver and Safety Education must hold a standard elementary-secondary or standard secondary school certificate in another certificate field. They must also possess a valid Oklahoma drivers license. Persons who successfully complete all the requirements for the standard Driver and Safety Education Certificate will thereby satisfy the college requirement for a subject minor.
I. STANDARD CERTIFICATE ..... 21 hours
A. Required Courses ..... 9 hours
3723 Safety Education ..... 3 hours
3823 Driver and Traffic Safety I 3 hours
4923 Driver and Traffic Safety II ..... 3 hours
B. Electives ..... 12 hours

1. Related Courses 6-9 hours
1001 Defensive Driving ..... 1 hour
2001 Motorcycle Driving 2 hours
2053 Police Patrol and Traffic Functions (Law Enforcement) ..... 3 hours
4951 Special Studies ..... 1-4 hours
4933 Driver and Traffic Education 3 hours
4943 Organization and Administration of Drivers Education ..... 3 hours
Approved Courses, Workshops, or Seminars in Driver and Traffic Safety Education ... 2-4 hours
2. Related Fields ..... 3-6 hours
2212 First Aid (Physical Education) ..... 2 hours
3223 Principles of Public Relations (Journalism) ..... 3 hours
4232 Audio-Visual Education (Education) ..... 2 hours
Approved Workshops or Seminars in Civil Defense ..... 1-2 hours
Approved Workshops or Seminars in Alcohol and Drug Education ..... 1-2 hours

## DEPARTMENT OF HOME ECONOMICS

The Department of Home Economics offers a program leading to a Bachelor of Science degree with a major in Home Economics. This program is designed to meet the needs of Home Economics related career personnel and/or non-degree enrollees.

## HOME ECONOMICS

## I. GENERAL EDUCATION (See pages 86-87) <br> 50 hours

II. MAJOR FIELD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 40 hours

Required Courses . . . . . . . . . . . . . . . . . . . . . . . . 30 hours
1123 Family Relations .......................... 3 hours
1233 Clothing Selection \& $\quad$ Construction Techniques ................ 3 hours
1313 Food Principles ............................ 3 hours
2213 Textiles .................................... 3 hours
3153 Observation \& Practice in the
3313 Advanced Nutrition ........................ 3 hours
3423 Household Equipment ..................... 3 hours
3593 Housing and Interior Design ............. 3 hours
3603 Consumer Education and Money
Management ............................ 3 hours
4423 Home Management ......................... 3 hours
Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10 hours
3233 Problems in Clothing Construction $\ldots \ldots .3$ hours
4233 Costume Design . . . . . . . . . . . . . . . . . . . . . . 3 hours
3343 Meal Management . .......................... 3 hours
OR
4313 Quantity Foods . . . . . . . . . . . . . . . . . . . . . . . 3 hours
4123 Marriage and/or 4881-4 Individual
Study in Home Economics ............. 3 hours
III. MINOR FIELD (See pages 124-129) . . . . . . . . . . . . . . . . . 18 hours

## IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

Those students who wish to qualify for a standard Home Economics (Vocational) certificate in the State of Oklahoma must take 4773 Teaching Home Economics in the Secondary School and the professional education requirements listed on page 77.

## DEPARTMENT OF LANGUAGE ARTS

The Department of Language Arts offers a program leading to a Bachelor of Arts degree with a major in English.
ENGLISH
I. GENERAL EDUCATION (See pages 86-87) ..... 50 hours
II. MAJOR FIELD ..... 42 hours
Required Courses ..... 27 hours
2543 English Literature I 3 hours
2653 English Literature II ..... 3 hours
2713 World Literature I ..... 3 hours
2723 World Literature II 3 hours
2773 American Literature I ..... 3 hours
2883 American Literature II 3 hours
3113 Shakespeare ..... 3 hours
3303 Advanced Composition 3 hours
4613 English Grammar and Linguistics ..... 3 hours
Electives ..... 15 hours
Elective hours are to be selected from English courses numbered3000 or above.
III. RELATED SUBJECTS FOR TEACHER CERTIFICATION ..... 8 hours
Students who plan to teach must take Library Science 4313 and 5additional hours in any combination from the related fields of libraryscience, speech, dramatics, and/or journalism.
IV. MINOR (See pages 124-129) 18 hours
V. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FORGRADUATION.
Those students who wish to qualify for a standard teaching certificate in Language Arts in the State of Oklahoma must take 4773, Teaching of English, and the professional education requirements listed on page 77 .
The prospective high school teacher with this major qualifies for the Oklahoma Standard Teaching Certificate in Language Arts, and may teach all English courses offered. (A minimum of 6 hours in each subject is required to teach speech, journalism, or library science).


## DEPARTMENT OF MATHEMATICS

The Department of Mathematics offers a program leading to a Bachelor of Arts degree with a major in Mathematics. Also a major in Mathematics may be obtained following an Associate Degree awarded either in Data Processing or in Electronics.
MATHEMATICS
I. GENERAL EDUCATION (See pages 86-87) ..... 50 hours
II. MAJOR FIELDMinimum of 34 hours
Required Courses ..... 15-22 hours
*1715 College Algebra and Trigonometry ..... 5 hours
**1513 College Algebra ..... 3 hours
**1613 Trigonometry ..... 3 hours
2215 Analysis I or Math 2003 and Math 2013 5-6 hours
2113 Introduction to Modern Abstract Algebra 3 hours
2234 Analysis II or Math 2023 ..... 3-4 hours
2244 Analysis III or Math 2033 ..... 3-4 hours
Electives ..... 18-19 hours
Electives may be chosen from the following mathematics, statisticsand computer science courses. (Students seeking an OklahomaStandard Teaching Certificate in Mathematics must electMathematics 3333.)
Mathematics
3213 Abstract Algebra 3 hours
3253 Differential Equations ..... 3 hours
3302 History of Mathematics ..... 2 hours
3333 College Geometry ..... 3 hours
4413 Linear Algebra ..... 3 hours
4423 Number Theory ..... 3 hours
4433 Matrix Algebra ..... 3 hours
4471-3 Seminar in Mathematics ..... 1-3 hours
4483 Introduction to Real Analysis ..... 3 hours
4491-3 Independent Study in Mathematics 1-3 hours
Statistics
3013 Introductory Probability and Statistics 3 hours
3113 Mathematical Statistics I ..... 3 hours
3123 Mathematical Statistics II 3 hours
Computer Science
3344 Numerical Methods I 4 hours
3443 Numerical Methods II 3 hours
III. MINOR FIELD (See pages 124-129) ..... 18 hours
IV. Electives to complete 128 hours required for graduation.Those students who wish to qualify for a standard teaching certifi-cate in Mathematics in the State of Oklahoma must take 4772 Teachingof Secondary Mathematics and the Professional Education require-ments listed on page 77.
V. MATHEMATICS-DATA PROCESSINGFor the student who plans a major in Mathematics following anAssociate Degree in Data Processing a total of 128 hours is required asfollows:
During the freshman and sophomore years:
General Education ..... 24 hours
(Must include Math 2215 and Math 2234)
Data Processing Major ..... 32 hours
General Education)
During junior and senior years:
Additional General Education ..... 26 hours
Required mathematics courses not previously taken 7 hours
Additional Upper Division mathematics 18 hours
Upper Division electives 12 hours
VI. MATHEMATICS-ELECTRONICSFor the student who plans to major in Mathematics, following anAssociate Degree in Electronics a total of 128 hours is required asfollows:
During freshman and sophomore years:
General Education ..... 24 hours
(Must include Math 2214 and Math 2234)
Electronics Major ..... 32 hours
During junior and senior years:
Additional General Education ..... 26 hours
Required mathematics courses not previously taken ..... 7 hours
Additional Upper Division mathematics ..... 18 hours
Upper Division electives 12 hours

[^4]
## DEPARTMENT OF MILITARY SCIENCE

Cameron University offers a Bachelor of Science degree with a major in General Education for military service personnel. The Department of Military Science provides liaison services for full-time active duty Army personnel enrolled in the program. This consists of assistance with orders and unit assignment while at Cameron University. Academic counseling for General Education majors is provided by the Office of Admissions and Records and by the instructors in the student's area of specialization.

## GENERAL EDUCATION

I. GENERAL EDUCATION (See pages 86-87) .......... 50 hours
II. MAJOR (Area of specialization) ......................... . 30 hours
III. MINOR (See pages 124-129) ............................. 24 hours

## IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION*

In most instances, Cameron University, follows the American Council on Education Guide in allowing college credit for validated service experience.

1. Credit will be granted for a minimum of one year's active duty as follows:
a. For Commissioned Officer: Eight semester hours of basic military science and 16 semester hours credit in Advanced Military Science.
b. For Warrant Officer: Eight semester hours of basic military science and 12 semester hours for Advanced Military Science provided verification is presented of his having served in a command position for at least 12 consecutive months.
c. For enlisted service: Eight semester hours in Basic Military Science.
2. Cameron accepts a maximum of 64 semester hours in "military" credits which include military service, DANTES (USAFI), College GED, CLEP, CCT credits and service school credits. Credit on CLEP, GED and CCT General Exams is given only toward the B.S. in General Education. No credit is given for CLEP, GED or CCT General Exams on other B.A., B.S. and Associate Degree Programs. A maximum of 16 hours credit is given for CLEP subject exams.
3. Only those military credits which are presented prior to enrollment at Cameron will be accepted.

[^5]

## DEPARTMENT OF MUSIC

The Department of Music offers programs leading to a Bachelor of Arts degree with concentrations in the areas of vocal music, piano and/or instrumental music.

## MUSIC

I. GENERAL EDUCATION (See pages 86-87) .......... 50 hours
II. MAJOR-MINOR FIELD (with concentration in
Voice, Piano or Instrumental) ..................... 56 hours

Required Courses:
2913 Elementary Harmony I . . . . . . . . . . . . . . . . . 3 hours
2933 Elementary Harmony II ................... 3 hours
2921 Elementary Ear Training I . . . . . . . . . . . . . . . 1 hour
2941 Elementary Ear Training II ............... 1 hour
1212 Music Literature I ......................... 2 hours
1222 Music Literature II ....................... 2 hours
3913 Advanced Harmony I ....................... 3 hours
3933 Advanced Harmony II .................... 3 hours
3921 Advanced Ear Training I ................... 1 hour
3941 Advanced Ear Training II ................. 1 hour
3101 Principles of Conducting $\ldots \ldots \ldots \ldots \ldots .1$ hour
3111 Instrumental Conducting OR
3121 Choral Conducting......................... 1 hour
3233 Music History I ............................. 3 hours
3243 Music History II ........................... 3 hours
4412 Counterpoint . . . . . . . . . . . . . . . . . . . . . . . . . 2 hours
4952 Forms and Analysis . . . . . . . . . . . . . . . . . . . 2 hours
Total 32 hours
Required Area of Concentration
Select Group A or Group B or Group C

## GROUP A

Vocal Music
Applied Music (voice) ..................... 16 hours
Applied Music (piano) .................... 6 hours
Vocal Pedagogy ........................... 2 hours
Total 24 hours

## GROUP B

Piano


## GROUP C

Instrumental Music
Applied Music
(primary instrument) .................... 13 hours
Brass Class ............................. 2 hours
Woodwind Class .......................... 2 hours
Percussion Class ........................ 1 hour
Applied Music (piano) .................... 4 hours
Orchestration .............................. . . 2 hours
Total 24 hours

## III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION

NOTE: Students desiring to teach in two of the above areas should fulfill the requirements in both areas. Enrollment in the ensemble of the area of concentration is required of music majors every semester.
A recital on the student's major instrument is required for graduation. This recital may be public if approved by the music faculty.
Music majors must make a passing grade in Music 1000 each semester enrolled as a major.
Music majors and those students seeking teacher certification must demonstrate defined skills and competencies required by the department. These specific requirements are outlined in departmental publications.

Those students who wish to qualify for a standard teaching certificate in Music in the State of Oklahoma must take Music 3712 (Elementary Music Methods) AND either Music 3722 (Secondary Music Methods, Vocal) OR Music 3742 (Secondary Music Methods, Instrumental) and the professional education requirements listed on page 78.

## DEPARTMENT OF NURSING

The Department of Nursing offers a program leading to the Bachelor of Science degree in Nursing.

## Articulated Bachelor's Degree Requirements

Students who are candidates for the Bachelor of Science degree in Nursing must have earned an Associate of Science degree or its equivalent. Diploma school graduates meet the minimum requirements by completing course work other than nursing that is required of an Associate Degree Nursing graduate. Equivalency for lower division nursing course work will be established by the University. The Diploma school graduate whose prior course work meets the equivalency criteria may matriculate with 33 units of ungraded nursing credit.

## NURSING

I. GENERAL EDUCATION (See pages 86-87) .......... 50 hours
(Must include Zool. 1124, Nutrition 1343, and Bacteriology 2034).
Some General Education requirements meet major requirements
also.
II. MAJOR
45 hours
Required courses:

Nurs. 3115 Nursing Process I $\ldots \ldots \ldots \ldots . .5$ hours
Chem. 3304 Physiological Chemistry ......... . 4 hours
Nurs. $3123 \begin{aligned} & \text { Strategies in Health Care } \\ & \text { Teaching ....................... } 3 \text { hours }\end{aligned}$
Nurs. 3133 Leadership in Nursing .......... 3 hours
Nurs.
3145 Nursing Process II ........... 5 hours

Biol. 4004 Physioligy .............................. 3 hours
Nurs. 4255 Nursing Process II ............. 5 hours
Nurs. 4263 Research in Nursing ............. 3 hours
Nurs. 4275 Nursing Process IV .............. 5 hours
Nurs. 4283 Issues in Nursing ................ 3 hours
III. DIRECTED ELECTIVES TO COMPLETE 131 HOURS REQUIRED FOR GRADUATION.
Criteria for admission will be consistent with those of the University. In addition, the applicant must:

1. be a Registered Nurse,
2. hold a current license to practice nursing in the State of Oklahoma,
3. have recent work experience in nursing, or have recently completed a refresher course for nurses, and,
4. be formally admitted to study for the Bachelor of Science in Nursing degree.

## DEPARTMENT OF PHYSICAL SCIENCE

The Department of Physical Science offers programs leading to the following:
(a) Bachelor of Science degree with a major in Chemistry
(b) Bachelor of Science degree with a major-minor in Natural Science
(c) Bachelor of Science degree with a major in Physics

## CHEMISTRY

## I. GENERAL EDUCATION (See pages 86-87) . . . . . . . 50 hours (Must include 1115-1215 or 2015-2025 Physics Sequence)

II. MAJOR FIELD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 36 hours

Required Courses:
General Chemistry . . . . . . . . . . . . . . . . . . . . . 10 hours
1015-1225 General Chemistry . . . . . . . . . . . 10 hours OR
1364, 1361, 1474 \& 1471 Gen. Chem. .... 10 hours
2112 Chemical Analysis .................... 2 hours
2222 Qualitative Chemistry ................. 2 hours OR
Equivalent
2223 Quantitative Analysis . . . . . . . . . . . . . . . 3 hours
3314 Organic Chemistry I . . . . . . . . . . . . . . . . . 4 hours
3324 Organic Chemistry II .................. 4 hours
Select either Group A or Group B:
GROUP A
4353 Physical Chemistry I . . . . . . . . . . . . . . . 3 hours
4351 Physical Chemistry Laboratory ...... 1 hour
4363 Physical Chemistry II . . . . . . . . . . . . . . . 3 hours
4361 Physical Chemistry Laboratory ...... 1 hour
GROUP B
4403 Biochemistry I . . . . . . . . . . . . . . . . . . . 3 hours
4401 Biochemistry Laboratory . . . . . . . . . . . . 1 hour
4413 Biochemistry II ........................ . . 3 hours
4411 Biochemistry Laboratory . . . . . . . . . . . 1 hour
Chemistry electives to complete the
requirements for the major
3-5 hours
III. MINOR FIELD (See pages 124-129) ................ 18 hours
(It is strongly recommended that the student select a minor
from the fields of Biology, Mathematics or Physics) GRADUATION
Those Chemistry majors who wish to qualify for a standard teaching certificate in Science in the State of Oklahoma must take 4472 Methods of Teaching Physical Science and the professional education requirements listed on page 77 .


## PHYSICS

I. GENERAL EDUCATION (See pages 86-87) ..... 50 hours*(Note: For those wishing to apply for an Oklahoma Teaching Certificate see GeneralEducation footnote below)
II. MAJOR FIELD ..... 43-46 hours
A. Required Courses ..... 31-34 hours
General Physics 10-13 hours
1115-1215-2213 General Physics
Sequence 13 hours
OR
2015-2025 General Physics Sequence 10 hours
3003 Modern Physics I 3 hours
3011 Modern Physics Lab 1 hour
3024 Elect. Meas. \& Electronics 4 hours
3031 Elect. Meas. Lab 1 hour
3303 Mechanics ..... 3 hours
4113 Electricity \& Magnetism ..... 3 hours
3403 Heat \& Thermodynamics ..... 3 hours
4403 Light ..... 3 hours
B. Required Electives ..... 12 hours
(A minimum of 6 semester hours must be taken fromGroup A Electives, and a minimum of 6 semester hoursmust be taken from Group B Electives.)
GROUP A ELECTIVES
(To be selected from the following)
Math 2244, 3344, 3443
Electronics 2014, 2064, 3033, 3123Chemistry 2112, 3343, 4024
GROUP B ELECTIVES
(To be selected from the following)
Physics 3033, 4452, 4491-3
Chem 4353, 4363, 4351, 4361
Math 4413, 4433
III. MINOR FIELD (See pages 124-129) ..... 18 hours
(It is strongly recommended that the student select aminor from the fields of Mathematics, Chemistry, orElectronics.)
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION

## DEPARTMENT OF SOCIAL SCIENCE

The Social Science Department offers programs leading to the Bachelor of Arts degree, with majors in History and in Sociology.
HISTORY
I. GENERAL EDUCATION (See pages 86-87) ..... 50 hours
II. MAJOR FIELD 41 hours
Required Courses ..... 14 hours
Introductory European history ..... 6 hours1113 Early Western Civilization and1123 Modern Western CivilizationIntroductory American history (above andbeyond general education requirement)3 hours1483 United States History to 1865 OR
1493 United States History since 1865
State history 2 hours
2112 Oklahoma History and Government
Techniques of research and writing ..... 3 hours 4793 Senior Seminar in History
Electives chosen from each of the following areas ..... 27 hours
American history courses numbered 3000 or above in an approved program ..... 9-12 hours
European history courses numbered 3000 or above in an approved program 9-12 hours
Asian, Latin American or cognate studies(above and beyond the generaleducation requirement)3-6 hours
A course or courses in Asian history, Latin Americanhistory, Economics, Geography, Political Science orSociology, or in any combination of these fields inwhich the student does not elect to minor.
III. MINOR FIELD (See pages 124-129) ..... 18 hours(The student is strongly advised to select Philosophy,Political Science, Economics, Sociology, English or aforeign language for the minor.)
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION

Those students who wish to qualify for a standard teaching certificate in social studies in the State of Oklahoma must complete all history major requirements and must take History 4772, Methods of Teaching History, as well as and the professional education requirements listed on page 77 .

## BACHELOR'S DEGREE REQUIREMENTS

NOTE: To qualify to teach economics, geography or sociology, a person must have at least 6 hours in the subject. To qualify to teach civics, a person must have 6 hours of American history and government with credit in economics or sociology. To teach Democracy, college credit is required in two or more of the following: American history and government, economics or sociology. To qualify to teach history and government, college credit is required in such subjects as American history, ancient and medieval history, modern history, world history, and American government with a minimum of 6 semester hours in each subject taught. A minimum of 4 hours of American history and government plus 2 semester hours of Oklahoma history shall be required to teach Oklahoma history.


SOCIOLOGY
I. GENERAL EDUCATION (See pages 86-87) ..... 50 hours
II. MAJOR FIELD ..... 36 hours
Required Courses ..... 27 hours
1113 Principles of Sociology ..... 3 hours
2023 Social Problems 3 hours
3113 Development of Sociological Thought 3 hours
3123 Contemporary Social Theory ..... 3 hours
3223 Methods of Social Research ..... 3 hours
4793 Senior Seminar: Selected Topics ..... 3 hours
Other Sociology courses numbered 3000 or above 9 hours
Electives ..... 9 hours
Above and beyond the general education and minorrequirements, and selected from additional courses inSociology and/or from approved electives in relatedsubjects, which include:
Anthropology 1113 Introduction to Anthropology
Geography 2243 Human Geography
BiologyPsychology3383 Social Psychology
Speech 4523 Psychology of Communication
III. MINOR FIELD (See pages 124-129) ..... 18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION

## DEPARTMENT OF SPEECH-DRAMA

The Department of Speech-Drama offers a program leading to a Bachelor of Arts degree with a major in Speech-Drama.

## SPEECH-DRAMA

I. GENERAL EDUCATION (See pages 86-76) ...... 50 hours
II. MAJOR FIELD ........................................ 33 hours*

Required Courses ................................ 11 hours
1133 Voice and Diction .................... 3 hours
2212 Introduction to Theater ............... 2 hours
2313 Discussion Methods ................... 3 hours
2533 Oral Interpretation of Literature ...... 3 hours
Select either Group A or Group B
GROUP A

## Speech



## GROUP B

Drama

$$
2113 \text { Stagecraft ................................ } 3 \text { hours }
$$

2213 Fundamentals of Acting .............. 3 hours
3383 History of Theater .................... 3 hours
Junior and Senior level electives in Speech-
Drama to complete requirements
for the major
13 hours
II. MINOR FIELD (See pages 124-129) ................. 18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION
Those students who wish to qualify for a standard teaching certificate in Speech in the State of Oklahoma must take 4772 Teaching Speech in the Secondary School and the professional education requirements listed on page 77.

[^6]

## DEPARTMENT OF TECHNOLOGY

The Department of Technology offers a program leading to a Bachelor of Science degree with a major in Technology.

The curriculum is designed to prepare the associate degree technician for mid-management and/or positions in the technical specialty that require greater responsibility. The program includes common courses in the area of the technology and related subjects. Qualified associate degree graduates of junior colleges, colleges and Technical Institutes may seek the degree.
TECHNOLOGY
I. GENERAL EDUCATION (See pages 86-87) 50 hours
II. MAJOR-MINOR ..... 60 hours
Technical Specialty ..... 32 hours
Technology ..... 12 hours
Tech 3013 Technical Report Writing ..... 3 hours
Tech 3023 Prin. of Supervision ..... 3 hours
Tech 4033 Industrial Organization 3 hours
Tech 4003-6 Dir. Observation \& Studenton-the-job Internship3-6 hours
Required Upper Division Electives(advisor approved)16 hours
Electives are selected from Physics, Chemistry, Math,Business, Management, and Office Administration forEngineering related technology graduates.*Electives are selected from Business, Accounting,Management, Office Administration, and Math forBusiness related technology graduates.*
Electives are selected from Sociology, Psychology, Business, Management, and Office Administration for Law Enforcement technology graduates.*
*Other upper division electives may be selected and approved by the department on the basis that the courses complement the associate degree and best serve to meet the goals and objectives of the student.

## III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION

NOTE: Individuals planning to enter the Bachelor of Science degree program with a major in Technology are required to file formal application for admission to such study. Students desiring admission may make application during the last semester of the sophomore year. The following data are used in considering an applicant for admission to the program:

1. An Associate Degree or an appropriate certificate of accomplishment for acceptable work done in an accredited college.
2. A formal application. The application form may be obtained from the Department of Technology.
3. A college transcript.
4. Record of college entrance test (ACT or SAT)
5. Recommendation of the major advisor (FreshmanSophomore).
Persons admitted to the program will be assigned a major advisor. The advisor and the student will determine a suitable program of study. The program of study will be filed with the Chairman of the Department of Technology. Any deviation from the program of study must have prior approval from the major advisor. The individual will be advised if admission is probationary or denied.

Graduates from the associate degree programs listed below are typical of those qualified to work toward a B.S. Degree with a major in Technology.

## RN Nurse

General Technology
Electromechanical
Electronics
Mechanical Technology
Drafting and Design
Data Processing
Law Enforcement
Fire Protection
Marketing and Mid-Management
Agriculture Technology
Also, persons who have a minimum of 24 college credit hours in a Trade and Industrial concentration may be qualified for the degree program.

# SUBJECT MINORS 

## APPROVED MINOR FIELDS

A minor for Bachelor of Arts and Bachelor of Science degree programs at Cameron University consists of a minimum of 18 course hours in an approved subject area. Students may not major and minor in a subject having the same prefix unless the university offers an approved major-minor in that subject. The following constitute the approved areas in which students may earn subject minors.

Accounting
Agriculture
Agronomy
American Studies
Animal Science
Art
Biology
Chemistry
Coaching of Athletics
Computer Science
Criminal Justice
Data Processing
Design Drafting
Drama
Driver \& Safety Education*
Economics
Electronics
English
Environmental Studies
Ethnic Studies
Foreign Language**

French<br>General Humanities<br>Geography<br>German<br>Health and Physical Education<br>History<br>Home Economics<br>Journalism<br>Language Arts<br>Management<br>Mathematics<br>Military Science<br>Music<br>Nursing<br>Philosophy<br>Psychology<br>Physics<br>Political Science<br>Sociology<br>Spanish<br>Speech<br>Statistics

A transfer student may use work at other institutions toward meeting requirements of the above listed minors. The transfer student who desires to minor in a field not listed above may be apoproved to do so providing Cameron University offers at least 8 hours in the subject area.

[^7]Suggested Minor Program Outlines
American Studies
Required Foundations Course 3 hours
2513 Humanities of the Great Plains
Electives ..... 15 hours
(To be selected from the following)
1013 Economic History of the United States
3023 American Political Thought
3153 Contemporary American Affairs
3313 The American Religious Experience
3513 American Novel
4313 American Drama
4333 History of American Art
4343 History of Contemporary Art
4511-3 Selected Topics in the Great Plains Experience
Art
Color or Design ..... 3 hours
Perception or Drawing ..... 3 hours
Painting ..... 3 hours
Sculpture or Crafts ..... 3 hours
Upper-Division Electives ..... 6 hoursTotal 18 hours
Chemistry
General Chemistry 1015 and 1225 OR $1364 / 1361$ and $1474 / 1471$ ..... 10 hours
Analysis 2112 OR 2222 OR 2223 ..... 2-3 hours
Organic Chemistry 3314 and 3324 OR 3345 ..... 5-8 hours
Electives to total ..... 18 hours
Coaching of Athletics Certification(Closed to Health and Physical Education Majors)
I. HEALTH ..... 6 hours

1. 3244 Applied Anatomy and Kinesiology . ..... 4 hours
2. 3292 Care of Athletic Injuries ..... 2 hours
II. ADMINISTRATION AND THEORY OF COACHING ..... 8-9 hours
3. 4003 Organization and Administration of Health, Physical Education and Interscholastic Athletes ..... 2-3 hours
4. Theory of Coaching (minimum of 6 hours in two or more different sports) 6-7 hours
III. ELECTIVE COURSES ..... 5-6 hours
Courses chosen from the following as desired or needed to complete 20 hours for certification requirement.
Sports OfficiatingWeight Training1 hour
Tennis 1 hour
GolfGymnastics ................................. 1 hour
Swimming ..... 1 hour
Intercollegiate Sports 1 hour
Computer Science
Required Courses ..... 12 hours
1013 Introduction to Data Processing
2112 FORTRAN Programming
2013 Principles of Scientific Computing
3344 Numerical Methods I
Electives 6 hours(Selected from the following courses)2053 COBOL Programming
3003 Computer Organization and Programming
3443 Numerical Methods II
4013 Data Structures
4491-3 Special Problems
Data Processing
1013 Introduction to Data Processing ..... 3 hours
1023 RPG Programming ..... 3 hours
2033 Systems Concepts 3 hours
2053 COBOL OR 2112 FORTRAN ..... 2-3 hours
Electives to total ..... 18 hours
Design Drafting
1013 Engineering Graphics I ..... 3 hours
1023 Engineering Graphics II ..... 3 hours
2013 and 3024 Architectural Design and 2123 Surveying OR
1072 Tool Design, 2064 Structural and3034 Machine Design10 hours
Electives to total ..... 18 hours
Electronics
1014 Electricity 4 hours
1024 Network Analysis 4 hours
1054 Introduction to Electronics ..... 4 hours
2014 Amplifiers 4 hours
Electives to complete ..... 18 hours
Environmental Studies
Required Foundations Course 3 hours
2513 Humanities of the Great Plains
Electives ..... 15 hours
(To be selected from the following)
1024 Historical Geology
2014 Physical Geography
3013 Environment and Man
3253 Conservation of Natural Resources
3373 Sociology of the Community
4213 Urban Economic Problems
Ethnic Studies
Required Foundations Course ..... 3 hours
2513 Humanities of the Great Plains
Electives ..... 15 hours(To be selected from the following)
1113 Introduction to Anthropology
1113 Beginning Spanish I
1223 Beginning Spanish II
2013 Racial and Cultural Minorities
3123 Contemporary Social Theory
3243 Ethnic Geography of the United States
3313 Black Literature in America
3343 History of the Plains Indians
3353 American Negro History
General Humanities
Required Foundations Course ..... 4 hours
2114 Humanities in Early Western Culture OR 2224 Humanities in Western Culture;
Renaissance to the Present
Electives ..... 14 hours
(Selected from the following, but with no more than five hours from any one group)
A.
2112 Art Appreciation
2313 History of Art: Pre-Historic to Renaissance
2323 History of Art: Renaissance to the Present
B.
2713 World Literature I
2723 World Literature II
C.
3383 History of the Theatre I
3393 History of the Theatre II
D.
2012 Music Appreciation I
2022 Music Appreciation II

## E.

1113 Early Western Civilization 1123 Modern Western Civilization

## Health and Physical Education

Health6 hoursHealth chosen from the major under Letter A andCare of Athletic Injuries, including 2212 FirstAid .......................................... 2 hoursHealth and Physical Education Theory 6 hours
Health and Physical Education Theory chosen from the Major under Letters B and D, including 2322 In- troduction to Health, Physical Education and Rec- 
Physical Education Activity ..... 6 hoursPhysical Education Activity chosen from the majorunder Letter C, including Swimming, Tumbling andGymnastics ................................. 2 hoursThe minor must include four to six hours numbered inthe 3000 and 4000 series.

## Home Economics

There are several suggested options for the student who elects a minor in Home Economics. Concentration in any of the following areas is recommended:

General Home Economics
Child Development and Family Relations
Clothing and Textiles Food and Nutrition
Detailed information may be obtained from the Home Economics staff.

## Language Arts

It is recommended that 9 to 12 hours be selected from one of the following areas and that 6 to 9 hours be selected from one or more of the other fields listed, for a total of 18 hours. The language arts areas consist of:

Foreign Language
Journalism
Library Science

# English (sophomore level or above) <br> (The English option is closed to English majors.) 

Mathematics
*1715 College Algebra and Trigonometry ..... 5 hours
**1513 College Algebra 3 hours
**1613 Trigonometry ..... 3 hours
2215 Analysis I ..... 5 hours
Electives (numbered 2000 or above) to total ..... 18 hours
*Not required if equivalent courses were taken in high school.
**Mathematics 1513 and Mathematics 1613 duplicate Mathematics 1715.
Philosophy
1113 Introduction to Philosophy ..... 3 hours
2213 Elementary Logic ..... 3 hours
3013 Ethics ..... 3 hours
3023 American Political Thought ..... 3 hours
3113 Development of Sociological Thought ..... 3 hours
4783 Philosophy of History ..... 3 hours
Total 18 hours
Physics
Physics 1115 and 1215 OR 2015 and 2025 ..... 10 hours
Modern Physics 3003 ..... 18 hours

# ASSOCIATE DEGREE REQUIREMENTS 

## ASSOCIATE DEGREE PROGRAMS

Cameron University offers a two-year curricula in Sciences leading to the degree of Associate in Science. A student may earn an Associate in Science degree with a major in one of the following areas:

Criminal Justice
Data Processing
Design Drafting
Electronics
General Education (for Military Only)
Nursing

## REQUIREMENTS FOR GRADUATION

The individual who enters Cameron may graduate under the curriculum required by the catalog for that year or, under any other single catalog which is subsequently issued while he is in attendance at the university.

To secure an Associate Degree from Cameron University a student must satisfy the following requirements, plus any others stipulated for the degree for which a student is a candidate:

1. A minimum of 64 hours credit with a cumulative average of 2.00 or higher must be completed.
2. One-half or more of the work must be done in residence at an approved institution.
3. At least fifteen hours must be taken in residence at Cameron University.
4. Degrees will be conferred twice each year, at the end of the spring semester and at the end of the summer session. Candidates must apply for the degree at the Admissions Office at the beginning of the semester or term preceding graduation.

## GENERAL EDUCATION REQUIREMENTS FOR ASSOCIATE DEGREE

Twenty-four (24) hours of General Education as outlined below are required of each person who receives an Associate in Science Degree from Cameron University. Students should consult the specific general education and degree requirements for their chosen major in ascertaining the courses which they take to satisfy the following requirements:
GENERAL EDUCATION 24 hours

1. Math and/or Science ..... 3-4 hours
Mathematics selected from any freshman level course 1013 or above.
2. Communications ..... 6 hours
1113 English 3 hours
1213 English or 1113 Speech ..... 3 hours
3. Social Science ..... 6 hours
1113 Political Science 3 hours
1483 or 1493 History ..... 3 hours
4. Behavioral Science or Economics ..... 3 hours
Chosen from Group A or Group B
GROUP A
1113 Psychology
1113 Sociology
GROUP B
2013 Economics
3023 Geography
3603 Home Economics
5. Humanities and/or Physical Education ..... 3-4 hours
Chosen from Group A and/or Group B
GROUP A
Art 2112, 2313, 2323
Drama 2212
English 2543, 2653, 2713, 2723, 2773, 2883
Foreign Language (French, German or Spanish)1113, 1223, or equivalent
Humanities 2114, 2224, 2513
History 1113, 1123, 2473
Music 1212, 1222, 2012, 2022
Philosophy 1113, 2213
GROUP B
Any physical education activity course(s)
Marching band (not to exceed 2 courses)
Intramural sports (not to exceed 2 courses)
Any four enrollments in Military Science courseshaving leadership laboratories.
6. Electives to total 24 semester hours.

## SPECIFIC DEGREE REQUIREMENTS

On the following pages the specific requirements for major programs in the various areas are listed.

## DEPARTMENT OF MILITARY SCIENCE

Cameron University offers an Associate in Science degree with a major in General Education for military service personnel who have served one year in the military service. The Department of Military Science provides liaison services for full-time active duty Army personnel enrolled in the program. This consists of assistance with orders and unit assignments while at Cameron University. Academic counseling for General Education majors is provided by the Office of Admissions and Records.

## GENERAL EDUCATION

I. MAJOR 40 hours
A. Required Courses:

1. Language Arts ..... 6 hours
a. 1113 English 3 hours
b. 1213 English ..... 3 hours
2. Mathematics ..... 3 hours
Chosen from any freshman course other than beginning, intermediate, or beginning- intermediate algebra.
3. Social Science 6 hours
1113 Political Science ..... 3 hours
1483 or 1493 History 3 hours
4. Science 8 hours
This must include 4 hours in Biological Science and 4 hours credit in Physical Science
5. Behavioral Science 3 hours
1113 Psychology or 1113 Sociology .... 3 hours
B. Required Electives Sufficient to total 32 hoursSelected from the following with no more than twocourses from: Agriculture, Art, Business, Home Eco-nomics, Foreign Language, Music, Speech-Drama,Philosophy, or Technology.

## II. ELECTIVES TO COMPLETE 64 HOURS REQUIRED FOR GRADUATION

Courses may be selected from the following:

Agriculture
Biology
Business
Fine Arts
Home Economics
Language Arts
Mathematics

Meteorology
Physical Science
Psychology
Social Science
Speech
Technology

A maximum total of 32 hours of non-duplicating credit with no more than 16 hours from item a through c and no more than 16 hours from items d through f .
(a) CLEP subject matter exams
(b) USAFI Subject Exams
(c) Military Service Schools
(d) Military Science (8 hours credit for 1 year active duty)
(e) Cameron Advanced Standing Exam
(f) Correspondence, Independent Study, Extension Courses offered and or validated by a regionally accredited institution.
No credit is given for CLEP, GED or CCT General Exams.


## DEPARTMENT OF NURSING

To insure high quality instruction, the class enrollment is limited each year. Selection is made in the spring by a review committee for fall admission. Enrollment in general education courses does not insure admission into the Department of Nursing. A student's enrollment in the Nursing Program may be discontinued at any time, if in the judgment of the faculty of the Department of Nursing and the Admissions and Retention Committee, the student does not seem to be suitable for a nursing career.

## NURSING

I. GENERAL EDUCATION (See page 131) ............. . 24 hours (Must include Zoology 1124 and Psychology 1113)
II. MAJOR 46 hoursRequired Courses:
1018 Integrated Nursing I ..... 8 hours
1027 Integrated Nursing II 7 hours
2039 Integrated Nursing III 9 hours
2049 Integrated Nursing IV 9 hours
1343 Basic Nutrition 3 hours
1113 Principles of Sociology ..... 3 hours
3343 Psychology of Childhood ..... 3 hours
2034 Bacteriology ..... 4 hours

For graduation the student shall achieve an overall grade point average of 2.0 (C). In addition, the student shall make a satisfactory grade (C) in all courses required by the Nursing Department. A student receiving a grade of "unsatisfactory" in the clinical laboratory portion of a nursing course cannot receive a passing grade in that nursing course.

All nursing courses shall be completed at Cameron University unless special permission for transfer credit is arranged with the Chairman of the Nursing Department and the Registrar.

Students who are admitted to the Nursing Program are required to purchase student nurse liability insurance and all students are eligible to become members of the Oklahoma State Student Nurses Association.

## DEPARTMENT OF TECHNOLOGY

The Department of Technology offers programs leading to the following:
(a) Associate in Science degree with a major in Criminal Justice.
(b) Associate in Science degree with a major in Data Processing.
(c) Associate in Science degree with a major in Design Drafting.
(d) Associate in Science degree with a major in Electronics.

The programs are designed for the specific purpose of preparing the individual for useful employment as a technician. Qualified graduates, who are interested in advanced study, may pursue the Bachelor of Science degree with a major in Technology. See pages 122-123 for the Bachelor of Science degree requirements.

## CRIMINAL JUSTICE TECHNOLOGY

I. GENERAL EDUCATION (See page 131) $\ldots . . \ldots \ldots .24$ hours
(In meeting the General Education requirement, the stu-
dent must take Speech 1113 , Psych 1113, and Soci 1113.)
II. MAJOR 32 hours

1. Required Courses .............................. 15 hours

CJ 1013 Introduction to Criminal Justice ...... 3 hours
CJ 1113 Applied Criminology .................. 3 hours
CJ 1023 Community Relations .................. 3 hours
CJ 1033 Criminal Law ........................... 3 hours
CJ 3003 Juvenile Justice ......................... 3 hours
2. Option $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$. 12 hours
(Select either Corrections or Law Enforcement)

Corrections
Corr 2003 Correctional Treatment Methods ... 3 hours

Corr 2063 Management of Correctional
Institutions ............................ 3 hours

## OR

Law Enforcement
Law En 2003 Security Systems ................ 3 hours
Law En 2033 Police Patrol and
Traffic Functions .......................... 3 hours
Law En 2053 Criminal Investigation ........... 3 hours
Law En 2063 Criminalistics .................... 3 hours
3. Required Electives .............................. 5 hours

CJ 2001-3 Independent Study in Criminal Justice . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1-3 hours
CJ 3013 Special Problems ....................... 3 hours

III. Selected Electives (Advisor Approval) .................. . . 8 hours
IV. ELECTIVES TO COMPLETE 64 HOURS REQUIRED FOR GRADUATION.

## DESIGN DRAFTING TECHNOLOGY

I. GENERAL EDUCATION (See page 131) ..... 24 hours
II. MAJOR ..... 32 hours

1. Required ..... 24 hours
Design 1013 Engr Graphics I ..... 3 hours
Design 1023 Engr Graphics II 3 hours
Design 1052 Industrial Fluid Power 2 hours
Design 1072 Tool Design 2 hours
Design 2013 Arch Design I 3 hours
Design 2073 Industrial Illustration 3 hours
Design 2102 Materials Testing 2 hours
Design 2123 Surveying 3 hours
Design 2163 Structural Design 3 hours
2. Electives ..... 8 hours
Design 1032 Product Plan \& Estimating 2 hours
Design 2001-3 Special Prob in Design 1-3 hours
Design 3004 Machine Drives and
Linkages ..... 4 hours
Design 3024 Arch Design II ..... 4 hours
Design 3034 Machine Design ..... 4 hours
Elect 1003 Applied Electricity and Machines 3 hours
III. SELECTED ELECTIVES (Advisor Approval) ..... 8 hours
Selected from the following:Mathematics
PhysicsTechnical Course(s)—Any related course.IV. ELECTIVES TO COMPLETE 64 HOURS REQUIRED FOR
GRADUATION.

## ELECTRONICS TECHNOLOGY

## GENERAL EDUCATION (See page 131) ............. . 24 hours

MAJOR ........................................................ 32 hours

1. Required . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 24 hours

Elect 1014 Electricity . . . . . . . . . . . . . . . . . . . . 4 hours
Elect 1024 Network Analysis . . . . . . . . . . . . . 4 hours
Elect 1054 Intro to Electronics ............ . 4 hours
Elect 2014 Electronic Amplifiers . . . . . . . . . . 4 hours
Elect 2044 Communications . . . . . . . . . . . . . . 4 hours
Elect 2064 Pulse \& Switching ............. . . 4 hours
2. Electives ............................................ . . . 8 hours

Elect 2001-3 Special Problems in Electronics . . . . . . . . . . . . . . . . . . . . . . . 1-3 hours
Elect 2112 Rotating Machinery ............ 2 hours
Elect 3033 Automatic Control Systems .... 3 hours
Elect 3043 Television Systems . . . . . . . . . . . . 3 hours
Elect 3123 Prin of Computers ............ 3 hours
Elect 4013 Electronics Design and
Analysis . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 hours
SELECTED ELECTIVES (Advisor Approval) ........ 8 hours
Selected from the following:
Mathematics
Physics
Technical Course(s)—Any related course
ELECTIVES TO COMPLETE 64 HOURS REQUIRED FOR GRADUATION.

## PRE-PROFESSIONAL PROGRAM

Cameron University offers course work at the Pre-professional level for such fields as Pre-Medicine, Pre-Dentistry, Pre-Law, PrePharmacy, Pre-Veterinary Medicine and Pre-Engineering.

The requirements for admission to specific professional schools vary considerably. A person should therefore consult the catalog of the professional school to which he plans to apply for admission for guidance in course selection. Departmental chairmen at Cameron are familiar with the requirements of most professional schools and can assist in appropriate selection of courses.

## NON-DEGREE PROGRAMS

A person may pursue a non-degree program relating to a vocation, avocation, or further study. The department in which course work is to be taken should be consulted regarding the plan of study.


3214 FORAGE, RANGE, AND PASTURE CROPS, 4 hours credit

Principles and applications in relation to production management, utilization, and improvement. Lecture 3 hours, laboratory 2 hours. Prerequisite: Agriculture 1214 and junior standing.

## 3434 SOIL MORPHOLOGY AND CONSERVATION, 4 hours credit

The causes of soil differences; an examination of the descriptions, locations and classifications of soils and a study of soil survey techniques. Lecture 3 hours, laboratory 2 hours. Prerequisite: Agriculture 2124 and junior standing.

3683 PHYSICAL PROPERTIES OF SOILS, 3 hours credit
Physical properties of soils and their influence on plant growth. Lecture 2 hours, laboratory 2 hours. Prerequisite: Agriculture 2124 and general chemistry.

## 4124 PESTICIDES, 4 hours credit

Identification, distribution, characteristics, and methods of controlling pests. Lecture 3 hours, laboratory 2 hours. Prerequisite: Chemistry 3345 and Biology 3024.

## 4234 SOIL FERTILITY AND MANAGEMENT, 4 hours credit

Methods and materials for maintaining and improving soil productivity. Lecture 3 hours, laboratory 2 hours. Prerequisite: Agriculture 2124 and Chemistry 3345.

## 4674 GRAIN CROPS, 4 hours credit

Principles of grain crop production, distribution, classification, and the improvement of grain crops. Lecture 3 hours, laboratory 2 hours. Prerequisite: Botany 1114 and Biology 2003.

## Animal Science

## 3102 LIVESTOCK EVALUATION, 2 hours credit

Instruction in selection, evaluating, fitting, showing, and judging of livestock. Laboratory 4 hours.

3112 ADVANCED LIVESTOCK EVALUATION, 2 hours credit
This course is a continuation of Animal Science 3102. Laboratory 4 hours. Prerequisite: Animal Science 3102.

3133 BREEDS OF LIVESTOCK, 3 hours credit
Study of the origin, history, development and characteristics of livestock breeds and of the specific purposes of each breed. Lecture 2 hours. Prerequisite: Agriculture 1124.

## 3653 APPLIED NUTRITION, 3 hours credit

Composition, characteristics and nutritive value of feeds and ration additives, qualitative and quantitative nutrient requirements of each of the classes of livestock, formulation of rations for each of the classes of livestock. Lecture 2 hours, laboratory 2 hours. Prerequisite: Chemistry 3345 and Agriculture 1123.

## 4113 BEEF CATTLE SCIENCE, 3 hours credit

Application of scientific principles and recent research advances to the production of commercial and purebred cattle, feeding, breeding, management, and marketing methods. Lecture 2 hours, laboratory 2 hours. Prerequisite: Animal Science 3653, Biology 2003, Animal Science 4434.

## 4123 SWINE SCIENCE, 3 hours credit

The application of genetic, physiological, nutritional and engineering principles to the efficient production of swine. Swine evaluation and marketing. Lecture 2 hours, laboratory 2 hours. Prerequisite: Animal Science 3653, Biology 2003, Animal Science 4434.

## 4132 SHEEP SCIENCE, 2 hours credit

Breeding, feeding, management, and marketing of commercial and purebred sheep. Lecture 1 hour, laboratory 2 hours. Prerequisite: Animal Science 3653, Biology 2003, Animal Science 4434.

4434 ANIMAL REPRODUCTION, 4 hours credit
Physiological processes of reproduction in farm animals, gonadal function, endocrine relationships, fertility, and factors affecting reproduction efficiency. Emphasis is given to principles of artifical insemination in the laboratory. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 2003 or Biology 4004.


ART<br>Jack Bryan, Assistant Professor and Department Chairman<br>Assistant Professors: Pogue, Shaw, Warren<br>Instructor: Edmundson.

1013 BASIC DRAWING I, 3 hours credit
A beginning drawing course with emphasis upon theory, creative interpretation and practice in the elements of drawing. Not restricted to Art majors. Laboratory 6 hours.

1023 PERCEPTION, 3 hours credit
Providing drawing experiences that coordinate seeing, thinking, and delineation. Laboratory 6 hours.
1223 FUNDAMENTALS OF ART, 3 hours credit
An introduction to art through studio experience. Explores two-dimensional and three dimensional media, by an analysis of form, and expression. Lab 2 hours.

1413 BEGINNING SCULPTURE, 3 hours credit
A course in 3-dimensional forms. Laboratory 6 hours.
1243 BEGINNING PAINTING, 3 hours credit
A painting course emphasizing composition, form and color. Laboratory 6 hours.
2033 FIGURE DRAWING I, 3 hours credit
A studio course emphasizing the development of concepts and techniques required to accomplish competent graphic expression. Laboratory 6 hours. Prerequisite: Art 1023

## 2112 ART APPRECIATION, 2 hours credit

An introduction to the many aspects of visual art: cultural backgrounds, functions, techniques, materials and aesthetics. A general humanities course open to all students. Lecture 2 hours.

2123 COLOR, 3 hours credit
Exploration and analysis of color. Laboratory 4 hours.

## 2133 DESIGN, 3 hours credit

Exploration and analysis of the elements of design, including line, shape, form, time and space. Laboratory 4 hours.

2313 HISTORY OF ART, PREHISTORIC TO THE RENAISSANCE, 3 hours credit A survey of the painting, sculpture, architecture, and minor arts from prehistoric times through the Gothic period. (Illustrated with visual aids). Lecture 3 hours.

## 2323 HISTORY OF ART, RENAISSANCE TO THE PRESENT, 3 hours credit

A survey of the painting, sculpture, and minor arts from the Gothic period to the 20th century. (Illustrated with visual aids.) Lecture 3 hours.

## 2433 BEGINNING CERAMICS, 3 hours credit

Exploration for form and expression through clay. Emphasis will be on hand building techniques. Laboratory 6 hours.

2453 BEGINNING JEWELRY, 3 hours credit
A course in Jewelry using soldered, cast, and forged processes. Laboratory 6 hours.
3043 ADVANCED DRAWING, 3 hours credit
Advanced problems in creative graphic expression. Prerequisite: Art 2033. Laboratory 6 hours.

3053 SERIGRAPHY, 3 hours credit
An introduction to silk screen printing techniques. Lecture 1 hour, laboratory 4 hours. Prerequisite: Art 2123.

3063 GRAPHICS, 3 hours credit
A studio course in printmaking, utilizing intaglio, relief, and smooth plane techniques in combination with various graphic media. Prerequisite: Permission from the Department of Art. Materials Fee.

3233 ADVANCED PAINTING I, 3 hours credit
A studio course emphasizing the development of creative concepts and ideas through painting. Laboratory 6 hours. Prerequisite: Art 2123.

3403 CERAMICS, 3 hours credit
Experiencing clay through hand-built methods of construction, firing and glaze formation. Lecture 1 hour, laboratory 4 hours. Prerequisite: Art 2433.
3423 SCULPTURE II, 3 hours credit
Exploration and involvement in three dimensional media. Techniques in metal casting, welding, and woodwork. Open studio and seminary structure. Laboratory 6 hours. Prerequisite: Art 2453, or equivalent.

3433 ADVANCED JEWELRY AND METALWORKING, 3 hours credit.
Development and execution of advanced problems emphasizing experimental elements in Jewelry making. Laboratory 6 hours. Prerequisite: Art 2453, or equivalent.
3773 PUBLIC SCHOOL ART, 3 hours credit
A course defining the role of art in the public schools and its pragmatic applications. Laboratory 6 hours per week. Prerequisite: Art 1223 and departmental permission.

3881-2 WORKSHOP, I-2 hours credit.
A concentrated course of specific art activities designed to extend current course offerings. May be repeated for a maximum of 4 hours credit.
4001 SENIOR ART EXHIBITION, 1 hour credit
A senior art exhibition required of the degree candidate.
4063 ADVANCED PRINTMAKING I, 3 hours credit
Printmaking experiences are offered in etching and engraving, plate lithography and screen process printing. Lecture 1 hour, laboratory 4 hours. Prerequisite: Art 3063.

4232 ART FOR ELEMENTARY TEACHERS, 2 hours credit
Studio experiences with two-dimensional and three-dimensional materials toward understanding the visual arts as background for teaching in the elementary schools. Laboratory 4 hours per week. Prerequisite: Art 1223.

## 4243 ADVANCED PAINTING II, 3 hours credit

Advanced painting in media and subject matter decided in conference between student and instructor. Prerequisite: Art 3233.

4253 MIXED MEDIA, 3 hours credit
An advanced studio course in which students use a combination of materials in two and three-dimensional forms. Prerequisite: Art 3233. Laboratory 6 hours.

4333 HISTORY OF AMERICAN ART, 3 hours credit
A survey of American art from the colonial period to the present. Lecture with visual aids, 3 hours per week.
4343 HISTORY OF CONTEMPORARY ART, 3 hours credit
A study of 20th century painting, sculpture, and materials. Laboratory 6 hours. Prerequisite: Art 3432 or departmental permission.

## 4433 SCULPTURE III, 3 hours credit

A studio course in special problems exploring sculptural techniques and materials. Laboratory 6 hours. Prerequisite: Art 3432 or departmental permission.
4443 SCULPTURE IV, 3 hours credit
A studio course emphasizing individual problems and experimental work in the technical and aesthetic problems of sculptural design. Prerequisite: Art 4433.

## BIOLOGICAL SCIENCES

Doyle McCoy, Professor and Department Chairman<br>Associate Professors: Cooper, Epperson, Hopkins, Netherland, Tyler; Assistant Professors: Andersen, Harmon, Orr, Ziegler.

## Biology

## 1005 GENERAL BIOLOGY, 5 hours credit

Laboratory centered course offered each semester. One cell animals to complex animals, including man; one cell plants to multicellular plants. The economic value of the study of the biological world as it pertains to man, his problems, his progress as well as his place in society is a foremost factor in this course. Not applicable on biology major or minor. Lecture and laboratory 5 hours.

## 2001 GENETICS, 1 hour credit

Laboratory to accompany Genetics 2003 for majors. Experiments with fruit flies, bacteria, and fungi to verify and illucidate the theory. Laboratory 2 hours.

2003 PRINCIPLES OF GENETICS, 3 hours credit
A general course in the fundamental principles of heredity with emphasis on human genetics. Lecture 3 hours.

## 2024 COMPARATIVE VERTEBRATE ANATOMY, 4 hours credit

Morphological comparisons of the vertebrate classes with emphasis on evolutionary relationships of major systems. The course will fulfill the needs of preprofessionals and biology majors. Lecture 3 hours, laboratory 6 hours. Prerequisites: Zoology 1114 and sophomore standing.

## 2034 BACTERIOLOGY, 4 hours credit

A general course in microbiology stressing techniques and applied theory. Lecture 3 hours, laboratory 3 hours.

## 2124 MICROBIOLOGY, 4 hours credit

A beginning course in microbiology emphasizing the molecular concepts of the biochemistry, physiology and genetics of bacteria. Also includes a survey of the kingdom. Laboratory experience provides data supporting the theory. Lecture 2 hours, laboratory 4 hours. Prerequisite: Botany 1114.

## 3004 PHYCOLOGY, 4 hours credit

Morphology, classification and ecology of the fresh water algae. Lecture 3 hours, laboratory 3 hours and field trips. Prerequisite: Botany 1214.

## 3013 ENVIRONMENT AND MAN, 3 hours credit

Designed for non-biologists. Principles of ecology and their application to such problems as pollution, human population growth and land use planning. The interdependence of fields of human endeavor affecting the environment. Lecture, discussion and local field trips. Not applicable on biology major or minor. Prerequisite: one course in biology and sophomore standing.

## 3024 GENERAL ENTOMOLOGY, 4 hours credit

Structure, life history, habit and recognition of common insects. Lecture 3 hours, laboratory 2 hours, field trips. Prerequisite: 8 hours of Biological Sciences.

## 3034 GENERAL EMBRYOLOGY, 4 hours credit

The development of the vertebrate body from gametogenesis through early organ formation. Primary emphasis on development of fish, frog, chick and pig. Lecture 3 hours, laboratory 3 hours. Prerequisite: Biology 2024 or concurrent enrollment.

## 3044 EVOLUTION, 4 hours credit

Historical development of evolutionary concepts. Theories to account for speciation, evolutionary mechanisms and phylogenetic relationships. Lecture 3 hours, laboratory 3 hours. Prerequisites: Biology 2003 or permission.

## 3054 PLANT TAXONOMY, 4 hours credit

Classification of flowering plants with emphasis on the flora of the area. Lecture 3 hours, laboratory 2 hours, and field trips. Prerequisite: Botany 1114.

## 3064 GENERAL ECOLOGY, 4 hours credit

General principles of biotic and abiotic interrelationships including sampling techniques, productivity, energy flow, interspecific associations and biomes. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: Junior standing.

## 3074 NATURAL HISTORY OF THE VERTEBRATES, 4 hours credit

Ecology, taxonomy and life histories of vertebrates. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: Zoology 1114.

## 3084 ORNITHOLOGY, 4 hours credit

Identification, ecology, distribution and population dynamics of birds, with emphasis on locally occurring species. Family and ordinal characters are stressed. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: Zoology 1114 or permission.

## 3104 LABORATORY AND FIELD BIOLOGY FOR ELEMENTARY TEACHERS, 4 hours credit <br> Designed for elementary majors. Emphasis on biology as a science and application to local organisms. Lecture, discussion, experiments, laboratory and local field trips. Not available to biology majors. Prerequisite: one course in general biology, or general botany and general zoology.

3114 MAMMALOGY, 4 hours credit
Methods of collection and preservation. Classification, life histories, and distribution of mammals. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: Biology 2024 or permission of department.
3124 GENERAL HISTOLOGY, 4 hours credit
Structure of animals at tissue and organ levels with emphasis on recognition and function of mammalian tissues and organs. Lecture 3 hours, laboratory 3 hours. Prerequisite: 8 hours of Biology.
4004 PHYSIOLOGY, 4 hours credit
General Physiology. Homeostatic mechanisms of organ systems including cellular respiration and energy transfer. Lecture 3 hours, laboratory 3 hours. Prerequisite: Organic Chemistry, 8 hours of Biology.
4014 HERPETOLOGY, 4 hours credit
Taxonomy, distribution, natural history of amphibians and reptiles with emphasis on local forms. Techniques of collection and preservation. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: 8 hours of Zoology or permission.
4024 ICHTHYOLOGY, 4 hours credit
Taxonomy, morphology and ecology of fishes, with emphasis on those of the area. Field trips. Lecture 3 hours, laboratory 3 hours. Prerequisite: 8 hours of Zoology.
4044 GENERAL CYTOLOGY, 4 hours credit
A general course in the study of cell structure and function. Microscopic and cytochemical techniques will be presented in the laboratory. Lecture 3 hours, laboratory 3 hours. Prerequisite: 8 hours of Biology.
4054 VASCULAR AQUATIC PLANTS, 4 hours credit
Taxonomy and ecology of the fresh water vascular plants. Lecture 3 hours, laboratory 3 hours. Prerequisite: Botany 1114. Field trips required.
4064 ADVANCED ECOLOGY, 4 hours credit
Ecological principles as related to populations dynamics, ecosystems, effects of radiation and pollution. Emphasis on production, energy flow, and cycling within ecosystems. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: Biology 3064.

4084 COMPARATIVE ETHOLOGY, 4 hours credit
Behavioral adaptations of diverse animal species. Emphasis is placed on the ecological, physiological, and evolutionary aspects of behavior. Lecture 3 hours, laboratory 3 hours. Prerequisite: 8 hours of Zoology or permission of department.

4094 LIMNOLOGY, 4 hours credit
An introduction to the biological, chemical, and physical features of freshwater lakes, ponds, and streams, with emphasis on methods. Lecture 3 hours, laboratory 3 hours, field trips. Prerequisite: 12 hours of Biology, 10 hours of Chemistry and permission.
4104 HISTORY AND LITERATURE OF BIOLOGY, 4 hours credit
The development of biological science through the classical and modern periods. The use of the library as a research tool, and familiarization with library resources. Lecture 3 hours, laboratory-library 3 hours. Prerequisites: 12 hours of Biology or permission.

## 4121-4 SPECIAL STUDIES, $1-4$ hours credit

Term paper and oral examination required. Laboratory may be required. Prerequisite: 8 hours of Biology.

## 4772 TEACHING OF BIOLOGY, 2 hours credit

Methods and materials in secondary education. Lecture 2 hours. Prerequisite: Approval of instructor and advisor.

## Botany

1114 GENERAL BOTANY, 4 hours credit
An introduction to the structure, life process and reproduction of the seed-bearing plants and their relations to the environment. Lecture 3 hours, laboratory 2 hours.
3124 GENERAL BOTANY II; 4 houts credit
Plant kingdom. A survey of the entire plant kingdom from the simplest to the highest seed-bearing plants stressing life histories, relationships, origin, and evolution of the plant kingdom. Lecture 3 hours, laboratory 2 hours. Prerequisite: Botany 1114.

## Zoology

1114 GENERAL ZOOLOGY, 4 hours credit
A survey and classification of the animal kingdom stressing the animals from the simple to the complex; to develop an appreciation of animal life as it relates to human understanding and welfare. Lecture 3 hours, laboratory 2 hours.

## 1124 HUMAN ANATOMY AND PHYSIOLOGY, 4 hours credit

Introductory Anatomy and Physiology. Emphasis on homeostatic mechanisms, histology, and gross anatomy. Nervous system and endocrines, skeletal and connective tissue frame work, muscles and energy transfer, circulation and respiration, digestion, reproduction and prenatal development. Lecture 3 hours, laboratory 3 hours. Prerequisite: Permission of the instructor.

3014 INVERTEBRATE ZOOLOGY, 4 hours credit
Morphology, taxonomy, natural history, and evolutional relationships of the invertebrates. Lecture 3 hours, laboratory 3 hours. Prerequisite: Zoology 1114.

2643 INSURANCE, 3 hours credit
Basic principles of life, marine, casualty, and fire insurance; the business and personal uses of insurance, and the analysis of insurance policies. Prerequisite: Departmental permission.
2813 FUNDAMENTALS OF REAL ESTATE, 3 hours credit
Basic principles with elementary discussions of title and transfer, value, liens, financing, taxes. Professional ethics of the Real Estate Business. Forty-five hours of instruction. Prerequisite: Economics 2013 or permission.
3023 REPORT WRITING, 3 hours credit
Formal and informal reports with emphasis on problem area selection, the gathering of data, the organizing of data, and the writing of the report; style, format, language and tone. Lecture 3 hours. Prerequisite: Business Communications 2113.
3213 BUSINESS LAW I, 3 hours credit Introductory course dealing with the legal principles of contracts, negotiable instruments, agency and employment. Lecture 3 hours.
3223 BUSINESS LAW II, 3 hours credit
A continuation of Business Law I. The course emphasizes bailments, sales, real and personal property, partnerships, and corporations. Lecture 3 hours. Prerequisite: Business Law 3213.

## 3413 PRINCIPLES OF MARKETING, 3 hours credit

A basic course utilizing a managerial approach to the study and development of marketing with emphasis on marketing strategy and development of marketing mix. Lecture 3 hours. Prerequisite: Junior standing or Department permission.
3433 RETAIL MANAGEMENT, 3 hours credit.
Designed to assist students seeking a general knowledge of the retail field. Principles and methods of organizing and operating a retail firm with particular emphasis on store layout, buying, pricing, sales promotion, control of stock, and evaluation. Lecture 3 hours. Prerequisites: Business 3413 and Management 3013.

## 3603 PRINCIPLES OF FINANCE, 3 hours credit

A basic course on financial structure; sources, acquisition and management of short-term and long-term funds in both the money and capital markets; money market instruments; the comparative evaluation of corporate capital structure in terms of risk, control and flexibility. Lecture 3 hours. Prerequisite: Economics 2023 and Accounting 2023.

## 3613 QUANTITATIVE ANALYSIS I, 3 hours credit

An introduction to quantitative tools used in business analysis. Measures of central tendency, dispersion, uncertainty, statistical inference, and sampling are covered, as well as regression and correlation, time series analysis, index numbers, and seasonal-cyclical variations. Lecture 3 hours. Prerequisite: Mathematics 1913.

## 3623 INVESTMENTS, 3 hours credit

An introduction to the appraisal of securities and the management of investment funds with stress on the principles of value determination, on the risks associated with investment in the various types of securities and on the concepts of asset and portfolio management. Lecture 3 hours. Prerequisite: Business 3603, or departmental permission.

## 3880-4 WORKSHOP, $0-4$ hours credit

A course designed to emphasize specific Business and/or Economic topics. Combines the use of lectures and practical application exercises. May be repeated for a maximum of 6 credit hours. Prerequisite: Junior standing and permission of Department Chairman if taken for credit; permission of Department Chairman if taken for no credit.

## 4023 QUANTITATIVE ANALYSIS II, 3 hours credit

A continuation of Quantitative Analysis I with an emphasis on inference, analysis of variance, non-parametric statistics, multiple regression and correlation, linear programming, Markov analysis, queuing theory, and inventory control. Lecture 3 hours. Prerequisite: Business 3613

4213 URBAN ECONOMIC PROBLEMS, 3 hours credit
A study of the nature and the direction of growth of urban economies; intra-metropolitan development and land use; and the relationship between urban governments and such problems as housing, transportation, and commercial and industrial development. Lecture 3 hours. Prerequisite: Economics 3013.

## 4413 COMPARATIVE SYSTEMS, 3 hours credit

Comparative analysis of the economic theory and institutions of capitalism, socialism, communism, and facism. Lecture 3 hours. Prerequisite: Economics 2023.

## Management

3013 PRINCIPLES OF MANAGEMENT, 3 hours credit
An introductory management course dealing with the fundamental principles of management; planning, organizing, and controlling. Lecture 3 hours. Prerequisite: Junior standing or permission.

## 3513 PERSONNEL MANAGEMENT, 3 hours credit

A foundation course in the principles and practices of personnel management. Organization and operation of the personnel function. Consideration of key personnel problems in the area of procurement, placement, training, promotion, remuneration, and separation. Lecture 3 hours. Prerequisite: Management 3013 or departmental permission.

## 3543 SUPERVISORY MANAGEMENT, 3 hours credit

Techniques and methods of first-line supervision with emphasis on the recognition and resolution of problems arising from legal constraints, manpower requirements, employee behavior and other environmental problems. Lecture 3 hours. Prerequisite: Management 3513.

## 3533 SALES MANAGEMENT, 3 hours credit

Problems of organization; planning and control of sales; formulation of sales policies and the operation of a sales force. Using the principles of selling along with supervising a sales program. Lecture 3 hours. Prerequisite: Management 3013.

## 3613 PRODUCTION MANAGEMENT, 3 hours credit

A study of the manufacturing process emphasizing the planning of production facilities, quality control systems, and production control systems. Lecture 3 hours. Prerequisite: Management 3013.

## 3713 PUBLIC ADMINISTRATION, 3 hours credit

An introductory course to acquaint students with the applications of relevant management theory and tools of analysis for the problems of non-profit organizations. Topics include systems analysis, program-budget systems, and cost-benefit analysis. Problems and examples are drawn from government, military, and educational organizations. Lecture 3 hours. Prerequisite: Management 3013.

4013 ORGANIZATIONAL BEHAVIOR, 3 hours credit
Concerns the application of knowledge relating to human behavior theory as it applies to the business environment. Includes motivation theory, leadership patterns, organization climate, interpersonal relations, intergroup behavior, etc. Emphasis is on behavioral research findings. Lecture 3 hours. Prerequisite: Management 3513.

## 4023 PROBLEMS OF ADMINISTRATION, 3 hours credit

Judgment in practical applications of management principles, with emphasis on the situational approach in integrating people and production-oriented problems. Lecture 3 hours. Prerequisite: 9 hours of management including Management 3513

## 4033 SMALL BUSINESS MANAGEMENT, 3 hours credit

Designed as an internship program to involve the student in identifying problems and recommending solutions in actual business situations. Lecture 3 hours. Prerequisites: Business 3603, Senior standing, and permission of Department Chairman.

## Office Administration

## 1213 BUSINESS COMPUTATION, 3 hours credit

Business applications of basic mathematics, including the utilization of calculators and adding machines. (Recommended for students in the Office Administration and Business Education fields.) Lecture 3 hours.

## 3013 OFFICE PROCEDURES, 3 hours credit

Information on basic office services. Subjects include office communication, duplication, records management, mail and shipping procedures, public relations duties, office equipment and supplies. Lecture 3 hours. Prerequisite: Typewriting 1003.

## 3112 SECRETARIAL PROCEDURES, 2 hours credit

Pertaining to the duties and responsibilities of an executive secretary or administrative assistant. Case studies and realistic office problems serve to acquaint students with proper procedures. Lecture 2 hours. Prerequisite: Office Administration 3013.

## 3123 OFFICE MANAGEMENT, 3 hours credit

Instruction pertaining to office organization, planning and control. Covers the basic responsibilities and problems of the Office Manager. Lecture 3 hours. Prerequisite: Junior standing.

## Shorthand

## 1013 BEGINNING SHORTHAND, 3 hours credit

Fundamental principles of shorthand followed by simple dictation vocabular and letter material. Credit will not be allowed to students presenting high school credit in shorthand except by special permission of the instructor and the Chairman of the Department. Class 5 hours.

## 1023 INTERMEDIATE SHORTHAND, 3 hours credit

A continuation of beginning shorthand with study of the advanced principles of shorthand and advanced letter writing. (Students presenting two years of high school shorthand will not receive credit except by recommendation of the instructor and approval of the Department Chairman.) Class 4 hours. Prerequisite: Shorthand 1013 or equivalent.

## 2112 TRANSCRIPTION, 2 hours credit

Emphasis on transcription and dictation with speeds varying from 90 to 120 words per minute. Students must concurrently enroll in Dictation 2114. Class 2 hours. Prerequisite: Shorthand 1023.

## 2114 DICTATION, 4 hours credit

Skill building in dictation with emphasis on increased speed. Students must take Dictation 2114 concurrently with Transcription 2112. Class 4 hours. Prerequisites: Typewriting 2013 and Shorthand 1023.

## 3113 ADVANCED DICTATION, 3 hours credit

Development of advanced skill in dictation and transcription. Technical dictation of a varied nature. Class 3 hours. Prerequisites: Dictation 2114 and Transcription 2112.

## Typewriting

1003 BEGINNING TYPEWRITING, 3 hours credit
A course for beginning students in typewriting; covers mastery of keyboard skill development, and practice in typewriting letters and simple reports. Students presenting one year of high school typewriting will not receive credit except by recommendation of the instructor and approval of the Chairman of the Department. Class 5 hours. (Offered during the evening only.)
2013 INTERMEDIATE TYPEWRITING, 3 hours credit
Development of skill in the practical application of typewriting. Assignments consist of letter formats, tabulated material, manuscripts, rough drafts, business forms, and additional related business materials. Students presenting two years of high school typewriting will not receive credit except by recommendation of the instructor and approval by the

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Department Chairman. Class 3 hours. Prerequisite: Typewriting 1003 or one year of high school typewriting.
3003 ADVANCED TYPEWRITING, 3 hours credit
Further practice in the application of typewriting skills with emphasis on production of typewriting skills with emphasis on production typewriting. Statistical reports, legal documents, and letter writing comprise the routine situations. Lecture 3 hours. Prerequisite: Typewriting 2013 or two years of high school typewriting.


## EDUCATION AND PSYCHOLOGY

Ward Williams, Professor and Department Chairman Professors: Owen, Parker. Associate Professors: Bruce, McKellips, Prichard, Tyson; Assistant Professors: Ellis, Hopkins, James, Smith, White; Instructor: Rubin

## Education

## 2003 INTRODUCTION TO TEACHING, 3 hours credit

An orientation course in education prerequiste to all other professional education courses. Introduces students to the place of education in a democratic society, and to the basic principles and techniques of teaching; the scope and organization of the public school system in the U.S., and the place of the teacher in the school and community. Lecture 3 hours. Prerequisite: Sophomore or higher standing.

## 3002 THE EXCEPTIONAL CHILD, 2 hours credit

Orientation of elementary and secondary teachers to the characteristics, problems, and special needs of exceptional children. Includes information regarding the identification of exceptional children, methods for teaching exceptional children, and sources of referral and assistance to teachers. Lecture 2 hours. Prerequisite: Psychology 1113 and Education 2003.

## 3012 HISTORY AND PHILOSOPHY OF EDUCATION IN THE UNITED STATES,

 2 hours creditA survey of the development of education from the earliest time until the present, with special emphasis upon the meaning of education including an evaluation of its aims, ideals, and objectives and their bearing on the offerings of our public schools. Lecture 2 hours.

## 3143 METHODS AND MATERIALS IN ELEMENTARY LANGUAGE ARTS, 3 hours credit

Methods and techniques of teaching developmental skills in listening, speaking, writing, and spelling in the elementary grades. Lecture 3 hours. Prerequisites: Education, 2003, Psychology 3343.

## 3153 READING INSTRUCTION I, 3 hours credit

Principles and practices of teaching reading grades K through 3 with emphasis upon the development of reading readiness and beginning reading skills. Prerequisite: Education 2003.

## 3253 READING INSTRUCTION II, 3 hours credit

Principles and practices of teaching reading grades 4 through 8 with emphasis upon vocabulary development, reading-study skills, and reading in the content fields. Prerequisite: Education 3153.

## 3162 METHODS AND MATERIALS IN ELEMENTARY ARITHMETIC,

## 2 hours credit

The development of mathematical concepts and skills necessary to the understanding and social application of elementary school arithmetic; emphasis is placed on the content, methods, and materials associated with a contemporary approach to mathematics. Lecture 2 hours. Prerequisites: Education 2003, Psychology 3343; also recommended Mathe-

## matics 3353. <br> 3172 METHODS AND MATERIALS IN ELEMENTARY NATURAL SCIENCE, <br> 2 hours credit

A survey of elementary science content and materials; including the exploration and evaluation of organizational programs; and laboratory experiences in developing effective teaching methods. Lecture 2 hours. Prerequisites: Education 2003 and Psychology 3343.
3182 METHODS AND MATERIALS IN ELEMENTARY SOCIAL STUDIES, 2 hours credit
Materials, procedures, and functions of teaching the social studies in the elementary
grades. Lecture 2 hours. Prerequisites: Education 2003, Psychology 3343, and approval from the Department of Education.

## 3880-2 WORKSHOP, 0-2 hours credit

Course designed to give intensive emphasis to a specific topic(s) relating to elementary and/or secondary education. May be repeated for a maximum of 4 hours credit. Prerequisite: Junior standing and permission.

## 4001 OBSERVATION OF ELEMENTARY AND SECONDARY SCHOOL STUDENTS, 1 hour credit

Opportunity is provided for directed observation of the child and/or the adolescent. Two laboratory periods per week or equivalent. Prerequisites: Education 2003, junior standing or above, and approval from the Department of Education.

## 4032 TESTS AND MEASUREMENTS, 2 hours credit

Uses and construction of educational tests and measurements for the purposes of classification of students and determination of their achievement in subjects studied in public schools. Lecture 2 hours. Prerequisite: Education 2003 and approval from the Department of Education.

## 4114 *DIRECTED OBSERVATION AND STUDENT TEACHING IN THE ELEMENTARY SCHOOL, 4 hours credit

(For students who are majoring in Art, in Music and in Health and Physical Education. Those enrolling in this course must concurrently enroll in Education 4124.)

## 4118 *DIRECTED OBSERVATION AND STUDENT TEACHING IN THE ELEMENTARY SCHOOL, 8 hours credit <br> (For Elementary Education majors)

## 4124 *DIRECTED OBSERVATION AND STUDENT TEACHING IN THE SECONDARY SCHOOL, 4 hours credit

(For students who are majoring in Art, in Music and in Health and Physical Education. Those enrolling in this course must concurrently enroll in Education 4114.)

## 4128 *DIRECTED OBSERVATION AND STUDENT TEACHING IN THE SECONDARY SCHOOL, 8 hours credit <br> (For Secondary Education majors)

4153 DIAGNOSIS AND REMEDIATION OF READING DIFFICULTIES, 3 hours credit
A study of methods of diagnosis of reading difficulties and techniques of remediation of such difficulties. Includes supervised work with a child with reading problems. Prerequisites: Education 3253 and approval of the department.

## 4323 AUDIO-VISUAL EDUCATION, 3 hours credit

Techniques in the selection, use, and production of teaching aids; with practice in using audio-visual equipment. Prerequisite: Education 2003 and approval from the Department of Education.
4252 PRINCIPLES OF SECONDARY EDUCATION, 2 hours credit
Organization and function of secondary education; principle factors and techniques that have general application to teaching. Lecture 2 hours. Prerequisites: Education 2003, Psychology 3323.
4772 METHODS OF TEACHING IN THE SECONDARY SCHOOL, 2 hours credit A study of the development of course objectives, selection and organization of content, teaching materials, and techniques of instruction in the selected teaching field. Prerequisite: Approval of the department of the student's major and of the department of Education and Psychology.

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## Psychology

1113 GENERAL PSYCHOLOGY, 3 hours credit
A study of the basic facts and principles of behavior. Lecture 3 hours.

## 3323 PSYCHOLOGY OF ADOLESCENCE, 3 hours credit

 A study of physical, mental, social, and emotional development of the individual through youth to maturity; observation of adolescents is given attention. Prerequisite: Psychology 1113.3343 PSYCHOLOGY OF CHILDHOOD, 3 hours credit
Intensive study of childhood, with observation of child behavior. Prerequisite: Psychology 1113.

## 3352 EDUCATIONAL PSYCHOLOGY, 2 hours credit

Introduction to the science of education; application of the methods and results of experimental psychology to the problems of training children. Prerequisites: Psychology 3323 or 3343, Education 2003, and approval from the Department of Education.

## 3363 ABNORMAL PSYCHOLOGY, 3 hours credit

The study of various abnormalities in human behavior with emphasis on the psychoses and neuroses. Prerequisite: Nine hours of Psychology.

3383 SOCIAL PSYCHOLOGY, 3 hours credit
The study of human behavior as affected by social stimuli. Prerequisite: Nine hours of Psychology.

## 3393 PERSONALITY, 3 hours credit

Emphasis on factors determining and affecting personality, its development and assessment. Lecture, discussion, library research and field trips. Prerequisite: Psychology 3363.


# HEALTH AND PHYSICAL EDUCATION 

Bill Shahan, Assistant Professor and Department Chairman Assistant Professors: Jensen, Lavender, Nichols, Maples, Miller, Wilson; Instructors: Helms, Morris, Munzinger, Jones, Polston, Shipley, Spears.

## Health

1052 PERSONAL AND COMMUNITY HEALTH, 2 hours credit Problems and practices concerning personal and community health. Lecture 2 hours.

## 2212 FIRST AID, 2 hours credit

Immediate and temporary treatment for accidental injuries and sudden illness. Lecture 2 hours.

2281 INSTRUCTOR'S COURSE IN FIRST AID, 1 hour credit Course content is sufficient to prepare for the American Red Cross Instructor's rating and presents methods and materials for teaching Standard and Advanced First Aid. Lecture 1 hour. Prerequisite: Current advanced rating in First Aid.

## 3012 ADAPTED AND CORRECTIVES PHYSICAL EDUCATION, 2 hours credit Principles and problems related to adapting physical activities and exercises to specific requirements of exceptional individuals. Lecture 2 hours.

3202 CARE OF ATHLETIC INJURIES, 2 hours credit Methods of caring for injuries to athletes. Lecture 2 hours.

## 3244 APPLIED ANATOMY AND KINESIOLOGY, 4 hours credit

The study of the mechanical and anatomical functions of human motion. (May not be used as a Biology course.) Lecture 4 hours.

## Health and Physical Education Theory

2322 INTRODUCTION TO HEALTH, PHYSICAL EDUCATION AND RECREATION, 2 hours credit
A foundational approach to interpretations and objectives of Health, Physical Education and Recreation, with information on career opportunities and the necessary qualifications. Designed to assist the major in developing a sound philosophic background for continued growth in the professional field. Lecture 2 hours. (Recommended for Freshmen and Sophomore Majors).

## 3051 OFFICIATING WOMEN'S SPORTS, I hour credit

Considers general principles and philosophy of officiating, with a study of knowledge and interpretation of sports rules as well as practice in techniques and mechanics of officiating in women's Individual and Team Sports. Lecture 1 hour.

## 3052 SPORTS OFFICIATING, 2 hours credit

Considers general principles and philosophy of officiating, with a study of knowledge and interpretation of sports rules as well as practice in techniques and mechanics of officiating. Lecture 2 hours.

## 3332 PHYSICAL EXAMINATION AND MEASUREMENTS, 2 hours credit

Methods in techniques of examination; forming and keeping records; elementary physical diagnosis. Lecture 2 hours.

3352 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL, 2 hours credit Program and management of games for children of elementary school age; simple dramatics; playground and gymnasium activities. Lecture 2 hours.
3353 CAMP COUNSELING, 3 hours credit
A study of methods and content for leadership in camping and outdoor recreation. One weekend campout required. Lecture 3 hours.

## 3363 COMMUNITY AND RECREATIONAL LEADERSHIP, 3 hours credit

Introductory course in the history, philosophy, organization, management, and materials of community and private recreation. Lecture 3 hours.
3373 THERAPEUTIC RECREATION, 3 hours credit
Planning and programming recreational activities and leisure-related experiences for individuals who have special impairments, such as chronic illness or physical mental, emotional or social disability. Lecture 2 hours, laboratory 2 hours.

## 4003 ORGANIZATION AND ADMINISTRATION OF HEALTH, PHYSICAL EDUCATION AND INTERSCHOLASTIC ATHLETICS, 3 hours credit

A study of the organization and administration of physical education programs for the public school, with special attention to the problems involved in the direction of high school athletics. Lecture 3 hours.
4222 ORGANIZATION AND MANAGEMENT OF INTRAMURALS, 2 hours credit Intramural programs; evaluation of activities, use of test in forming competitive groups. Lecture 2 hours.

## 4232 PRINCIPLES AND HISTORY OF HEALTH AND PHYSICAL EDUCATION,

 2 hours creditA study of the basic concepts in the field of health, physical education, recreation, and their origins. Lecture 2 hours.

4252 THEORY OF TEACHING INDIVIDUAL SPORTS FOR GIRLS, 2 hours credit Organizing and teaching individual sports; techniques of officiating; tournament organizations. Lecture 2 hours.

4532 THEORY OF TEACHING GIRLS TEAM SPORTS, 2 hours credit Problems in teaching team sports, rule interpretations, organizing and conducting team sports meets, officiating in team games. Lecture 2 hours.
4542 THEORY OF COACHING TRACK AND FIELD, 2 hours credit A study of the techniques of coaching track and field. Lecture hours.
4552 THEORY OF COACHING OFFENSIVE FOOTBALL, 2 hours credit A study of the techniques of coaching offensive football. Lecture 2 hours.
4562 THEORY OF COACHING DEFENSIVE FOOTBALL, 2 hours credit A study of the techniques of coaching defensive football. Lecture 2 hours.
4572 ADVANCED THEORY OF COACHING FOOTBALL, 2 hours credit An intensive study of modern techniques of coaching football. Lecture 2 hours.

4582 THEORY OF COACHING BASKETBALL, 2 hours credit
A study of the techniques of coaching basketball. Lecture 2 hours.
4592 THEORY OF COACHING BASEBALL, 2 hours credit
A study of the techniques of coaching baseball. Lecture 2 hours.
4772 METHODS OF TEACHING PSYSICAL EDUCATION, 2 hours credit Problems and methods in the teaching of Physical Education. Lecture 2 hours.

## 4781-4 SPECIAL STUDIES, $1-4$ hours credit

Directed independent study in selected areas of Health, Physical Education and Recreation through research, observation, and/or on-the-job internship. May be repeated. Prerequisite: Junior standing and departmental permission.

## Physical Education Activity

1002 LIFE TIME SPORTS, 2 hours credit
Development and practice in a variety of individual and dual sports skills that will contribute to the enjoyment and life-time participation of sports. Laboratory 2 hours.

## 1021 TEAM SPORTS, I hour credit

Fundamentals of Basketball, Football, Soccer, Speedball, Softball, and Volleyball. Four to five of these sports are incorporated in the class with instruction and practice in basic skills followed by participation as a member of a team. Laboratory 2 hours.

1031 BODY MECHANICS, I hour credit
Women's Physical Education. Fundamental principles of good body control and movement. Laboratory 2 hours.

## 1041 TUMBLING AND GYMNASTICS, 1 hour credit

Introduction to basic skills in tumbling, gymnastic apparatus and trampoline. Laboratory 2 hours.

1051 INTERMEDIATE GYMNASTICS, 1 hour credit
Introduction and development in tumbling and gymnastics routines or apparatus and trampoline. Laboratory 2 hours. Prerequisite: Beginning Gymnastics or Instructor's Permission.

## 1061 ADVANCED GYMNASTICS, I hour credit

Individual progression in gymnastics routines used in competition. Demonstrations are given in the community. Laboratory 2 hours. Prerequisite: Intermediate Gymnastics or Permission of Instructor.

1081 PHYSICAL EDUCATION ACTIVITY, 1 hour credit
Individual and group activities for general physical improvement. Laboratory 2 hours.
1091 INDIVIDUAL CORRECTIVE EXERCISES, I hour credit
Methods of corrective exercise for group or individual. Laboratory 2 hours.
1001 BEGINNING SWIMMING, 1 hour credit
Introduction to swimming which will equip the individual with basic water safety skills and strokes. Provides opportunity for studying Beginner and Advanced Beginner Red Cross courses. Laboratory 2 hours.

1111 INTERMEDIATE SWIMMING, 1 hour credit
A variety of swimming skills are introduced and practiced to provide the student with the opportunity to learn the elements of good swimming. Emphasis on strokes and safety procedures in Intermediate Red Cross courses. Laboratory 2 hours. Prerequisite: Beginning Swimming or equivalent.

## 1121 ADVANCED SWIMMING, I hour credit

Student will practice the series of basic strokes with the emphasis on coordination of the whole stroke in order to swim effectively with ease, endurance, and versatility in the water. Advanced forms of safety and an introduction to swimming rescues is provided. Laboratory 2 hours. Prerequisite: Intermediate Swimming or equivalent.

## 1131 ADVANCED LIFE SAVING, 1 hour credit

A comprehensive lifesaving course covering personal safety and self rescue skills, swimming skills for lifesaving, approaches, carries, defenses, releases, search and rescue, cardiopulmonary resuscitation and small craft safety. Laboratory 2 hours. Prerequisite; Advanced Swimming or equivalent.

## 1141 WATER SAFETY INSTRUCTION (WSI), I hour credit

Two part course with the first part consisting of analysis of basic swimming strokes, additional strokes, related aquatic skills plus diving fundamentals. The second part consists of practical teaching in the Red Cross program from beginner to Advanced Life Saving level with cardiopulmonary resuscitation (CPR). Laboratory 2 hours. Prerequisite: Current Senior Life Saving certificate.

## 1151 SKIN AND SCUBA DIVING, 1 hour credit

Practice involving skills in safe and effective use of face mask, snorkel, fins, and other scuba equipment. Laboratory 2 hours. Prerequisite: Advanced Swimming or equivalent.

## 1152 SKIN AND SCUBA DIVING, 2 hours credit

Practice involving skills in safe and effective use of face mask, snorkel, fins and other scuba equipment. Deep water check out and certification. Lecture 1 hour. Laboratory 2 hours. Prerequisite: Advanced Swimming or equivalent.

## 1201 BADMINTON, I hour credit

Fundamental techniques of Badminton with instruction in court work of singles and doubles. Laboratory 2 hours.

## 1211 PADDLE TENNIS AND PADDLE BALL, 1 hour credit

Fundamentals and techniques of Paddle Tennis and Paddle Ball with instruction in court work and strategy of play. Laboratory 2 hours.
1221 ORIENTEERING, 1 hour credit
Study of basic principles in reading, interpreting, and developing skills to accurately use the map and compass for individual and group enjoyment (hiking, hunting, cross country skiing, etc.) and to develop knowledge and competitive techniques for the sport of Orienteering. Laboratory 2 hours.

## 1231 EQUITATION, 1 hour credit

The art of riding on Horseback. Beginners instruction on basic riding position, the control of the horse while riding, mounting and dismounting. The proper use of aids, and the rules of safety. The terminology of horsemanship and the care of the horse. Laboratory 2 hours.

## 1241 ROLLER SKATING, 1 hour credit

Instruction in free style, figure and speed skating. Laboratory 2 hours.

## 1251 BEGINNING SAILING, 1 hour credit

Fundamental skills and basic knowledge for sailing small watercraft. Laboratory 2 hours. Prerequisite: Must be able to swim.

## 1261 CANOEING AND CAMPING, 1 hour credit

Fundamental skills and basic knowledge for canoeing lakes and streams; preparation and use of equipment for outdoor camping. Weekend field trip. Laboratory 2 hours. Prerequisite: Must be able to swim.

## 1271 BOAT SAFETY AND SKIING, 1 hour credit

Beginning water skiing, slalom skiing, and safety procedures in the operation of power boats for water skiing. Laboratory 2 hours. Prerequisite: Must be able to swim.

## 1281 FLY AND BAIT CASTING, 1 hour credit

Development of skills in executing different methods of casting. Fundamentals used in selecting of rod, reel, and lures. Safety and strategy for fishermen. Laboratory 2 hours.

## 1291 CYCLING AND HIKING, 1 hour credit

Organizing and directing individual and group Cycling and Hiking sessions. Simple techniques in the repair and maintenance of bicycles. Proper techniques in safety and skills that will add to the individual's enjoyment and development of appreciation for outdoor recreation. Laboratory 2 hours.

## 1301 BEGINNING DANCE, 1 hour credit

The study of movement with regard to rhythm, quality, the use of space in relation to others, and developing a sense of stage direction. Laboratory 2 hours.

## 2001 ELEMENTARY GOLF, 1 hour credit <br> Fundamentals and techniques of beginning golf. Laboratory 2 hours.

2011 ELEMENTARY BOWLING, I hour credit
Teaching of fundamentals and techniques of bowling. Laboratory 2 hours.
2021. ADVANCED BOWLING, I hour credit

Advancing into teams and league bowling. Laboratory 2 hours. Prerequisite: P.E. 2011.
2031. ELEMENTARY TENNIS, I hour credit

Fundamentals and techniques of tennis. Laboratory 2 hours.

## 2032 INDIVIDUAL SPORTS, 2 hours credit

Individual sports and recreational activities for general physical improvement. Laboratory 4 hours.
2041 INTERMEDIATE TENNIS, 1 hour credit
Review of fundamentals and additional instruction of strokes, court work in singles and doubles. Laboratory 2 hours. Prerequisite: Beginning Tennis or equivalent.

2061 RIFLERY, 1 hour credit
Safety and marksmanship. Laboratory 2 hours.

## 2062 PHYSICAL EDUCATION ACTIVITY, 2 hours credit

Individual and group activities for general physical improvement. Laboratory 4 hours.

## 2101 ARCHERY, I hour credit

Men and/or Women basic fundamentals of shooting a bow and arrow, terminology, correct selection and care of equipment, safety procedures and etiquette. Laboratory 2 hours.

## 2121 SELF-DEFENSE, 1 hour credit

Studying and development of skills and fundamental knowledge in the art of self-defense through scientific principles of body control over opposing forces. Laboratory 2 hours.

## 2131 BEGINNING FENCING, 1 hour credit

To develop fundamental skills and basic knowledge of foil fencing, emphasizing safety, development of coordination, and self-confidence. Laboratory 2 hours.

2151 FOLK AND SQUARE DANCING, 1 hour credit
Basic steps and patterns used in the two types of dance. Laboratory 2 hours.
2161 INTRAMURAL SPORTS, 1 hour credit
Participation in the intramural activities of the university with approval of the Intramural Director. (Maximum credit two hours toward general education requirements, four elective hours toward total 128 hours graduation requirement.)

2181 RECREATION ACTIVITIES, 1 hour credit
Participation in outdoor and indoor recreational activities. Laboratory 2 hours.
2201 BASEBALL, I hour credit
Intercollegiate athletic participation.
2211 BASKETBALL, 1 hour credit Intercollegiate athletic participation.

2221 FOOTBALL, 1 hour credit Intercollegiate athletic participation.

2231 GOLF, 1 hour credit
Intercollegiate athletic participation.
2241 TRACK AND FIELD, 1 hour credit Intercollegiate athletic participation.

2251 TENNIS, I hour credit
Intercollegiate athletic participation.
2261 SOFTBALL, 1 hour credit
Intercollegiate athletic participation.
2271 VOLLEYBALL, 1 hour credit
Intercollegiate athletic participation.
3111 SEASONAL TEAM SPORTS I, 1 hour credit
Advanced skills and beginning strategy in organized team sports. Laboratory 2 hours.
3121 SEASONAL TEAM SPORTS II, 1 hour credit
Continuation of P.E. 3111. Prerequisite: P.E. 1001 and 1021. Laboratory 2 hours.

# HOME ECONOMICS 

Grace Githens, Associate Professor and Department Chairman Associate Professors: McKinley, Merritt;<br>Assistant Professor: McMahon<br>Instructors: Beavers, Jacobs

1123 FAMILY RELATIONS, 3 hours credit
Current issues and their effect on relationships of the individual within the family. Lecture 3 hours.
1233 CLOTHING SELECTION AND CONSTRUCTION TECHNIQUES, 3 hours credit Selection and construction of clothing suited to individual needs, abilities and interests. Problems involving fabric selection, basic fitting and sewing techniques. Laboratory 6 hours.

1313 FOOD PRINCIPLES, 3 hours credit
Practical experience in the preparation and preservation of foods to retain maximum nutritive value, to increase palatability and to assure attractive appearance. Laboratory 5 hours.

1343 BASIC NUTRITION, 3 hours credit
Introduction to the science of nutrition through an analysis of the nutritional requirements of man. Open to all men and women. Lecture 3 hours.

## 2153 CHILD DEVELOPMENT, 3 hours credit

The child from conception through adolescence. Development within the family setting with emphasis on principles of growth and dynamics of behavior. Observation in the child development laboratory is included. Lecture 3 hours. Observation arranged.

2213 TEXTILES, 3 hours credit
Properties, construction, finishes, use and care of textile fibers. Lecture 3 hours.

## 3153 OBSERVATION AND PRACTICE IN THE CHILD DEVELOPMENT LABO-

 RATORY, 3 hours creditObservation and individual work with children in the child development laboratory. Lecture 3 hours, laboratory 4 hours. Prerequisite: H Ec 2153.

## 3233 PROBLEMS IN CLOTHING CONSTRUCTION, 3 hours credit

Use of advanced techniques of fitting, altering, and constructing clothing. An introduction to flat pattern design and tailoring techniques. Laboratory 6 hours. Prerequisite: H Ec 1233.

## 3313 ADVANCED NUTRITION, 3 hours credit

Interaction and physiological functioning of nutrients; dietary analysis and evaluation with emphasis on the application of the concepts of nutrition. Lecture 3 hours. Prerequisite: Chemistry 2204 or equivalent.

3343 MEAL MANAGEMENT, 3 hours credit
Emphasis on management of resources when planning, marketing, preparing and serving nutritionally adequate meals. Laboratory 5 hours. Prerequisite: H Ec 1313 and H Ec 3313.

## 3423 HOUSEHOLD EQUIPMENT, 3 hours credit

Fundamental principles in the selection, operation and care of household equipment. Laboratory 4 hours. Junior standing.

## 3593 HOUSING AND INTERIOR DESIGN, 3 hours credit

Planning, furnishing and decorating the home for family needs. A brief study of period furniture and architecture. Lecture 1 hour, laboratory 4 hours. Prerequisite: Art 1223.

3603 CONSUMER EDUCATION AND MONEY MANAGEMENT, 3 hours credit Basic consumer problems encountered by the individual and the family. Management of money, time and energy as it relates to home, family and community life. Lecture 3 hours. Junior standing.

## 3881-3 WORKSHOP, 1-3 hours credit

Workshop designed to give intensive emphasis to a specific area of Home Economics. May be repeated, with a different topic, for additional credit. Prerequisite: Junior standing or permission of departmental chairman.

## 4123 MARRIAGE, 3 hours credit

Cultural trends and sociological factors affecting marriage in America today. Designed to consider challenges and problems in marital adjustments and interpersonal relations. Lecture 3 hours. Prerequisite: H Ec 1123.

## 4233 COSTUME DESIGN, 3 hours credit

Development of costumes relating to fashion and personal appearance. Lecture 3 hours. Junior standing with at least 9 hours of Home Economics.

## 4313 QUANTITY FOODS, 3 hours credit

Practical experience in planning, purchasing, preparing and serving food for large groups. Lecture 3 hours, laboratory arranged. Prerequisite: H Ec 3343.

## 4423 HOME MANAGEMENT, 3 hours credit

A Seminar with emphasis on the process of utilizing family resources to achieve desired goals. Prerequisite: Senior standing in Home Economics and permission of Department Chairman.

4773 TEACHING HOME ECONOMICS IN THE SECONDARY SCHOOL, 3 hours credit
Principles of learning, methods and materials for teaching and evaluating of Home Economics at the secondary level. Lecture 3 hours. Prerequisite: Permission of department chairman.
4881-4 INDIVIDUAL STUDY IN HOME ECONOMICS, 1-4 hours credit
Directed research and intensive study on selected problems or special topics. Prerequisite: Senior standing with at least 21 hours in Home Economics and permission of Department Chairman. No more than four credit hours of individual study may be counted toward the requirements for a major in Home Economics.


## HUMANITIES

## Charles Smith, Professor and Program Coordinator

The University's course offerings in humanities are a cooperative effort of the Departments of Art, Language Arts, Music, Social Science and Speech-Drama.

## 2114 HUMANITIES IN EARLY WESTERN CULTURE, 4 hours credit

An interdisciplinary approach to art, music, history, philosophy, literature and drama from the origins of Western Civilization through the Middle Ages. This course will be team taught by faculty members from the respective departments. Lecture 4 hours. Prerequisite: English 1213.
2224 HUMANITIES IN WESTERN CULTURE: RENAISSANCE TO THE PRESENT, 4 hours credit
An interdisciplinary approach to art, music, history, philosophy, literature and drama from the Renaissance to the present. This course will be team taught by faculty members from the respective departments. Lecture 4 hours. Prerequisite: English 1113.

## 2513 HUMANITIES OF THE GREAT PLAINS, 3 hours credit

An interdisciplinary approach to the unique environment and the resultant cultural developments in the art, geography, history, literature, and music of the Great Plains from the 1500 's through the mid-twentieth century. The course will be taught by faculty members from the respective departments. Lecture 3 hours.

3003 THE MECHANIZATION OF AMERICAN CIVILIZATION, 3 hours credit The humanistic impact of mechanization in America. A social history of devices and techniques, from handicraft through mass production to automation. Lecture 3 hours.
4511-3 SELECTED TOPICS IN THE GREAT PLAINS EXPERIENCE $1-3$ hours credit Intensive independent reading and research on a specific topic in the Great Plains environment or culture, based on pre-approved outlines or plans, with regular conferences and with oral and written reports. The reading and research will be directed by a faculty member from the art, language arts, music or social science departments.

## LANGUAGE ARTS

Loren McKeown, Professor and Department Chairman<br>Associate Professors: Cardwell, L. Shanahan, M. Shanahan, Solstad, Stanley, Swope, Wynn; Assistant Professors: Allen, Holmes, Lansdown, Lynn, Raburn, Ramsey, O. Sircy, Terry;<br>Instructors: Beaney, Hardwicke, Newell, Reddout.

## English

## 1033 BASIC ENGLISH, 3 hours credit

Review of the fundamentals of English Grammar, standard usage, spelling, and punctuation, including a brief introduction to the basics of writing, with emphasis on individual instruction. Does not satisfy any general education requirement and may not be counted toward a major or minor in English. Lecture 3 hours.
1113 ENGLISH COMPOSITION I, 3 hours credit
Systematic analysis of expository rhetoric and composition with regular practice to develop proficiency in critical thinking, reading, and writing. Lecture 3 hours.

## 1213 ENGLISH COMPOSITION II, 3 hours credit

Continued training in composition and introduction to literary appreciation through the study of literary forms. Lecture 3 hours. Prerequisite: English 1113.

A student with a sufficiently high ACT score in English may take English 1113 by Examination and receive full credit for the course. (See Advanced Credit Examination.)
2543 ENGLISH LITERATURE, 3 hours credit
A survey of English literature from its beginning to the close of the eighteenth century. Lecture 3 hours. Prerequisite: English 1213.

## 2653 ENGLISH LITERATURE II, 3 hours credit

A survey of English literature from the beginning of the nineteenth century to the present. Lecture 3 hours. Prerequisite: English 1213.

## 2713 WORLD LITERATURE I, 3 hours credit

Readings in world literature from classical antiquity to 1700 , with emphasis on major authors. Lecture 3 hours. Prerequisite: English 1213.

## 2723 WORLD LITERATURE II, 3 hours credit

Reading of major works in world literature from the post-Renaissance period to the present. Lecture 3 hours. Prerequisite: English 1213.
2773 AMERICAN LITERATURE I, 3 hours credit
A survey of American literature from its beginning to Whitman. Lecture 3 hours. Prerequisite: English 1213.
2883 AMERICAN LITERATURE II, 3 hours credit
A survey of American literature from Whitman to the present. Lecture 3 hours. Prerequisite: English 1213.

Completion of English Composition II and junior standing or permission of Department of Language Arts is required for enrollment in classes numbered 3000 or above.

## 3103 CREATIVE WRITING, 3 hours credit

Techniques of writing drama, fiction, and poetry. Emphasis varies from semester to semester. Frequent writing practice. Lecture 3 hours.

3113 SHAKESPEARE, 3 hours credit
Interpretation and criticism of selected works of Shakespeare. Lecture 3 hours.

3213 ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY, 3 hours credit Interpretation and criticism of literature of the seventeenth century, with emphasis on authors and works from the metaphysical, cavalier, religious, and classical schools. Lecture 3 hours.
3303 ADVANCED COMPOSITION, 3 hours credit
Critical scrutiny of the structure and style of prose. Study of how rhetorical principles are used and can be taught. Lecture 3 hours. Frequent papers.
3313 BLACK LITERATURE IN AMERICA, 3 hours credit
Introductory survey of writings of American Negro authors: essays, poetry, short stories, novels, and plays, from the founding of America to the present. Lecture 3 hours.

3413 LITERARY CRITICISM, 3 hours credit
The rise and development of trends in literary criticism from Aristotle to the present, focusing on the works of the major critics. Lecture 3 hours.
3513 AMERICAN NOVEL, 3 hours credit
Survey of the American novel; a critical analysis of representative novels of the nineteenth and twentieth centuries. Lecture 3 hours.
3613 ROMANTIC AGE, 3 hours credit
An intensive study of the five major poets of the Romantic Period: Wordsworth, Coleridge, Byron, Shelly, and Keats. Lecture 3 hours.

## 3713 VICTORIAN AGE, 3 hours credit

The poetry and prose of leading authors of the Victorian period, including study of the problems of the Victorian era that bear upon major British writers. Lecture 3 hours.
3813 HISTORY OF THE ENGLISH LANGUAGE, 3 hours credit
Historical development of English vocabulary, sounds, syntax, and inflections. Lecture 3 hours.

## 4053 SEMINAR IN LITERATURE, 3 hours credit

Investigation of one or more major authors or a topic of special interest such as a literary theme, movement or form. The topic varies from semester to semester. Students may repeat English 4053 once for credit but may not elect the same topic. Prerequisite: Consent of department. Seminar 3 hours.

4113 THE ENGLISH NOVEL, 3 hours credit
The critical analysis of representative novels from the eighteenth century to Thomas Hardy. Lecture 3 hours.

## 4123 THE MODERN ENGLISH NOVEL, 3 hours credit

The critical interpretation of major English novels from Joseph Conrad to the present. Lecture 3 hours.

## 4213 CHAUCER, 3 hours credit

Language and poetry of Chaucer; a study of The Canterbury Tales as a picture of medieval life and as an illustration of various literary types, with emphasis on the language of Chaucer and its development into modern English. Lecture 3 hjours.

4313 AMERICAN DRAMA, 3 hours credit
An examination of representative American plays from naturalistic tragedy to farce, with emphasis on the period since 1918. Lecture 3 hours.

4413 MODERN AMERICAN AND BRITISH POETS, 3 hours credit
Contemporary trends in British and American poetry; selected works from the major poets. Lecture 3 hours.
4513 ENGLISH LITERATURE OF THE EIGHTEENTH CENTURY, 3 hours credit An analysis of British prose and poetry of the eighteenth century with emphasis on the works of Pope, Swift, Boswell, and Johnson as major figures of the century. Lecture 3 hours.

4613 ENGLISH GRAMMAR AND LINGUISTICS, 3 hours credit
An introductory study of theories of grammar, phonology, morphology and syntax of the English language, with attention given to semantics, dialect variations, and varieties of usage. Lecture 3 hours.

4773 TEACHING OF ENGLISH, 3 hours credit
An introduction to methods and materials in teaching high school English. Lecture 3 hours. Prerequisite: Departmental approval.

## 4961-3 DIRECTED READINGS IN ENGLISH, 1 - 3 hours credit

Intensive independent reading and research in a selected topic, writer, or movement in literature or language, under the supervision of a qualified member of the faculty. May be repeated to a total of 3 hours. Prerequisite: consent of department chairman.

## Foreign Language <br> French

## 1113 BEGINNING FRENCH I, 3 hours credit

An elementary course in understanding, speaking, reading and writing French. Lecture 3 hours.

1223 BEGINNING FRENCH II, 3 hours credit
Continuation of French 1113. Lecture 3 hours. Prerequisite: French 1113 or equivalent.

## 2113 INTERMEDIATE FRENCH I, 3 hours credit

A systematic review of French grammar and the cultivation of facility in reading modern literary texts. Lecture 3 hours. Prerequisite: French 1223 or equivalent.

## 2123 INTERMEDIATE FRENCH II, 3 hours credit

Continuation of French 2113. Lecture 3 hours. Prerequisite: French 2113 or equivalent.

## 2133 FRENCH COMPOSITION, 3 hours credit

A systematic review of French grammar, conversational and written, with a view toward improving the student's control of written French. Prerequisite: French 1223 or equivalent.

2143 FRENCH COMPOSITION AND CONVERSATION, 3 hours credit
A continuation of French 2133 with additional emphasis on improving the student's control of the spoken language. Prerequisite: French 2133.

4960-3 DIRECTED READINGS IN FRENCH, $1-3$ hours credit
This course provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours.

## German

1113 BEGINNING GERMAN I, 3 hours credit
An elementary course in understanding, speaking, reading and writing German. Lecture 3 hours.

1223 BEGINNING GERMAN II, 3 hours credit
Continuation of German 1113. Lecture 3 hours. Prerequisite: German 1113 or equivalent.
2113 INTERMEDIATE GERMAN I, 3 hours credit
A systematic review of German grammar, and the cultivation of facility in reading modern literary texts. Lecture 3 hours. Prerequisite: German 1223 or equivalent.
2123 INTERMEDIATE GERMAN II, 3 hours credit
Continuation of German 2113. Lecture 3 hours. Prerequisite: German 2113 or equivalent.
2133 GERMAN GRAMMAR, 3 hours credit
An intensive study of the grammatical structure of German to increase the student's speaking and writing facility. Prerequisite: German 1223.

2143 GERMAN COMPOSITION, 3 hours credit
The application of skills gained in German 2133 and additional intensified vocabulary study to increase the student's ability to write in good idiomatic German. Prerequisite: German 2133.
4960-3 DIRECTED READING IN GERMAN, $0-3$ hours credit
This course provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours.

## Spanish

1113 BEGINNING SPANISH I, 3 hours credit
An elementary course in understanding, speaking, reading and writing Spanish. Lecture 3 hours.

1223 BEGINNING SPANISH II, 3 hours credit
Continuation of Spanish 1113, Lecture 3 hours. Prerequisite: Spanish 1113 or equivalent.
2113 SPANISH READING I, 3 hours credit
The cultivation of facility in reading modern literary texts. Prerequisite: Spanish 1223 or equivalent.
2123 SPANISH READING II, 3 hours credit
Continuation of Spanish 2113. Prerequisite: Spanish 2113 or equivalent.

## 2133 SPANISH COMPOSITION, 3 hours credit

A systematic review of Spanish grammar, with a view toward improving the student's control of written Spanish. Prerequisite: Spanish 1223 or equivalent.

2143 SPANISH COMPOSITION II, 3 hours credit
Continuation of Spanish 2133. Prerequisite: Spanish 2133 or equivalent.
3113 SPANISH CONVERSATION, 3 hours credit
Intensive practice in speaking Spanish on topics of everyday life. Prerequisite: Sophomore level proficiency.

## 3203 SURVEY OF SPANISH LITERATURE, 3 hours credit

A study of representative works of Spanish literature from the beginning to the present day. Prerequisite: Sophomore level proficiency.

4960-3 DIRECTED READING IN SPANISH, $1-3$ hours credit
This course provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours. Prerequisite: Spanish 3203 or equivalent.

## Journalism

2113 INTRODUCTION TO JOURNALISM, 3 hours credit
An introduction to news writing and reporting. The technique of news story writing, kinds of news and their sources. Prerequisite: English 1213 or permission.

## 2133 NEWS GATHERING, 3 hours credit

Study of the techniques of gathering news from the various news sources and methods of journalistic research. Concentrated areas of study are government, business, and community organizations. Prerequisite: Journalism 2113 or permission.

## 2213 FUNDAMENTALS OF PHOTOGRAPHY, 3 hours credit

A study of the principles of photography including composition, film, camera, developing, and printing. Lecture 2 hours, laboratory 4 hours.

3123 NEWS WRITING, 3 hours credit
News writing and reporting techniques with emphasis on interpretive reporting. Prerequisite: Journalism 2113.

3133 NEWS EDITING, 3 hours credit
Study of editing and makeup techniques required in newspaper and magazine fields. Lecture 3 hours. Prerequisite: Journalism 2113.

## 3223 PRINCIPLES OF PUBLIC RELATIONS, 3 hours credit

Study of the current concepts of public relations as a management function in business, industry, government, and education. Practice work in producing public relations tools. Prerequisite: Junior standing.

## Library Science

3113 MATERIALS SELECTION, 3 hours credit
Methods of selecting and acquiring books, pamphlets and audio visual materials for the library through publishers and other sources; use of tools and aids. Lecture 3 hours.
3123 SCHOOL LIBRARIES, 3 hours credit
Organization, administration, and planning of elementary and secondary school library media programs. Lecture 3 hours

3223 REFERENCE MATERIALS, 3 hours credit
Selection, evaluation, and use of basic reference materials; interpretation of reference questions; library reference work. Lecture 3 hours.
4123 CHILDREN'S LITERATURE, 3 hours credit
General survey of the literature available for children. Criteria for evaluation of materials in terms of needs, interests, and abilities of children. Methods of selecting books and introducing them to children. Lecture 3 hours.
4313 BOOKS AND MATERIALS FOR YOUNG PEOPLE, 3 hours credit
Survey of adolescent reading patterns, methods of selection and presentation of literature in all media, reading guidance and stimulation of young people.

## MATHEMATICS

Terrall McKellips, Professor and Chairman<br>Professor: Farmer;<br>Associate Professors; Hajek, Hegemann, Morris, Olson, Riecke, Wagner;<br>Assistant Professors; Huckabay, Meraz, Phillips, Thompson.

## Mathematics

" Students who have credit in mathematics courses numbered 1715 or above may not enroll in courses below 1715 without departmental approval.,"

## 1004 BEGINNING ALGEBRA, 4 hours credit

The equivalent of a year of high school algebra. Offered only in night classes. Does not satisfy general education requirement. Lecture 4 hours.

## 1013 BASIC COLLEGE MATHEMATICS, 3 hours credit

Mathematics for general education. A course designed to give students basic concepts, appreciations, understanding, and skills of mathematics. Does not apply toward a major or minor in mathematics. Lecture 3 hours.

1115 BEGINNING AND INTERMEDIATE ALGEBRA, 5 hours credit.
An integration of beginning and intermediate algebra. Especially designed for students having a high school deficiency in algebra. Lecture 5 hours.

## 1213 INTERMEDIATE ALGEBRA, 3 hours credit

Introductory algebra of the real number system. Lecture 3 hours. Prerequisite: Math 1004 or one year of high school algebra.

## 1513 COLLEGE ALGEBRA, 3 hours credit

Topics included are theory of exponents, equations, variables, and functions; logarithms, mathematical induction, binomial theorem, progressions, complex numbers and partial fractions. Lecture 3 hours. Prerequisite: Math 1213 or Math 1115 or equivalent.

## 1613 PLANE TRIGONOMETRY, 3 hours credit

The development and use of circular and trigonometric functions; relations between the functions, logarithms, solutions of triangles; applications to practical problems throughout the course. Lecture 3 hours. Prerequisite: Math 1513 or equivalent or concurrent enrollment in Math 1513.

## 1913 ANALYSIS FOR BUSINESS, 3 hours credit

An intuitive approach to the following topics from college algebra and calculus: functions, solutions of equations and systems of equations, progressions, and introduction to differentiation and integration with business oriented applications. Prerequisite: Math 1115 or Math 1213 or equivalent.

## 1715 COLLEGE ALGEBRA AND TRIGONOMETRY, 5 hours credit

An integrated course in College Algebra and Trigonometry. Lecture 5 hours. Prerequisite: Math 1115 or Math 1213 or equivalent.

## 2003 CALCULUS AND ANALYTIC GEOMETRY I, 3 hours credit

An introduction to analytic geometry and calculus. Includes analytic geometry of the line; introduction to the limit concept; differentiation of algebraic functions and some applications of differentiation. Prerequisite: Math 1513 and 1613; or 1715; or high school equivalent.

## 2013 CALCULUS AND ANALYTIC GEOMETRY II, 3 hours credit

A continuation of 2003. Includes applications of differentiation; introduction to the definite integral; analytic geometry of lines, circles, and conics, and an introduction to the calculus of trigonometric and exponential functions. Prerequisite: Math 2003.

2023 CALCULUS AND ANALYTIC GEOMETRY III, 3 hours credit
A continuation of 2013. Includes trigonometric and exponential functions; arc length; polar coordinates; methods of integration and applications of the integral; and solid analytics. Prerequisite: Math 2013 or Math 2215.

## 2033 CALCULUS AND ANALYTIC GEOMETRY IV, 3 hours credit

A continuation of 2023. Includes vectors; infinite series; partial derivatives; and multiple integration. Prerequisite: Math 2023 or Math 2234.

## 2213 INTRODUCTION TO MODERN ABSTRACT ALGEBRA, 3 hours credit

Abstract development of Natural numbers, Rational numbers, and Real numbers. Including elementary number theory, set theory, product sets, equivalence relations, mappings and cardinality. Brief introduction to groups, rings, and fields. Lecture 3 hours. Prerequisite: Math 2215 or Math 2013.

## 2215 MATH ANALYSIS I, 5 hours credit

Analytic geometry of the straight line and the conic sections, derivatives with applications, the definite integral with applications. Lecture 5 hours. Prerequisite: Math 1513 and 1613 or Math 1715.

## 2234 MATH ANALYSIS II, 4 hours credit

Transcendantal functions, techniques of integration, polar coordinates, vectors in the plane. Lecture 4 hours. Prerequisite: Math 2215 or Math 2003 and Math 2013.
2244 MATH ANALYSIS III, 4 hours credit
Solid analytic geometry, partial differentiation, multiple integrals, infinite series, introduction to differential equations. Lecture 4 hours. Prerequisite: Math 2234 or Math 2023.

## 3213 ABSTRACT ALGEBRA, 3 hours credit

The course emphasizes algebraic structures with particular emphasis on groups, rings, and fields. The fundamental theorems of group and ring theory are introduced and the beginning notions of field theory are presented. Prerequisite: Math 2213.

## 3253 DIFFERENTIAL EQUATIONS, 3 hours credit

Ordinary differential equations with a brief introduction to solutions by series, and the Laplace transform. Lecture 3 hours. Prerequisite: Math 2033 or Math 2234.

## 3302 HISTORY OF MATHEMATICS, 2 hours credit

The historical development of mathematics. Lecture 2 hours. Prerequisite: Departmental permission.

## 3333 COLLEGE GEOMETRY, 3 hours credit

A comprehensive course which includes topics from both Euclidean and non-Euclidean geometries. Lecture 3 hours. Prerequisite: Departmental permission.
3353 MATHEMATICS FOR ELEMENTARY TEACHERS I, 3 hours credit
A basic course in (contemporary or modern) mathematics for elementary education majors. An introduction to the origin and history of number systems: number systems of different bases and basic set concepts. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: General Education Mathematics.
3363 MATHEMATICS FOR ELEMENTARY TEACHERS II, 3 hours credit
Structure of the real number system, relations, functions, and elementary geometric concepts with emphasis on informal geometry. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: Math 3353.
3373 ALGEBRA FOR ELEMENTARY TEACHERS, 3 hours credit
A course in algebra specifically designed for the elementary teacher which includes those topics of algebra that permeate the modern elementary program and many of those which elementary students will encounter in the secondary school. Emphasis is on the role of algebra in teaching in elementary school. Prerequisite: Math 3363 or Departmental permission.

## 3383 GEOMETRY FOR ELEMENTARY TEACHERS, 3 hours credit

A course in geometry specifically designed for the elementary teacher. The geometrical concepts which are introduced in modern elementary mathematics programs are covered in detail in this course. Prerequisite: Math 3363 or departmental permission.

## 4413 LINEAR ALGEBRA, 3 hours credit

Vector spaces, linear transformations, matrices, determinants, characteristic equation, bilinear and quadratic forms. Lecture 3 hours. Prerequisite: Math 2213

## 4423 NUMBER THEORY, 3 hours credit

Divisibility of integers, congruences, quadratic residues, mathematical induction, distribution of primes, diophantine equations, numerical functions and continued fractions. Lecture 3 hours. Prerequisite: Math 2213 or departmental permission.

## 4433 MATRIX ALGEBRA, 3 hours credit

Elementary operations with Matrix algebra, determinants, inverse of a matrix, rank and equivalence, linear dependence, vector spaces and linear transformation, characteristic equations of a matrix; bilinear quadratic, and Hermitian forms. Lecture 3 hours. Prerequisite: Math 2213 or departmental permission.

## 4471-3 SEMINAR IN MATHEMATICS, $1-3$ hours credit

Group projects designed to meet special needs. Prerequisite: Departmental approval. Will count on major or minor only with departmental permission.
4483 INTRODUCTORY REAL ANALYSIS, 3 hours credit
A study of the basic concepts of analysis, elementary set theory, the real numbers, sequences, series, real functions, derivatives, and integrals. Lecture 3 hours. Prerequisite: Math 2033 or Math 2244, and departmental permission.

## 4491-3 INDEPENDENT STUDY IN MATHEMATICS, $1-3$ hours credit

Assigned research, readings, and reports based on the needs of the individual student. May be taken only by juniors and seniors. Prerequisite: Departmental permission.

4772 TEACHING OF SECONDARY MATHEMATICS, 2 hours credit
The general aspects of the teaching of mathematics; detailed study of the teaching of the various high school mathematics courses. Lecture 2 hours. Prerequisite: Senior standing.

## Computer Science

## 2013 PRINCIPLES OF SCIENTIFIC COMPUTING, 3 hours credit

Elements of digital computer logic, including Boolean Algebra, binary arithmetic, and propositional logic as applied to internal logic organization and machine codes; Floatingpoint numbers and implications of finite word length in computer arithmetic, character and string representation and manipulation; Associated flow charts and algorithms. Lecture 3 hours. Prerequisite: DP 2112.
3003 COMPUTER ORGANIZATION AND PROGRAMMING, 3 hours credit
An introduction to both a high-level system programming language and assembly programming language. Topics included are number and character representation, computer arithmetic, machine level instructions, an assembly language, and a high-level programming language. Lecture 3 hours. Prerequisites: DP 1013, CS 2013

## 3344 NUMERICAL METHODS I, 4 hours credit

An introductory course in numerical methods. Topics include: Accuracy in numerical calculations; evaluation of functions; numerical integration; solution of nonlinear equations; solution of systems of nonlinear equations; root squaring method and Bairstow's method for roots of polynomials; computer arithmetic with polynomials. Lecture 3 hours, laboratory 2 hours. Prerequisites: DP 2112 and Math 2215.

## 3443 NUMERICAL METHODS II, 3 hours credit

A continuation of CS 3344. Topics include: Matrices, determinants, and simultaneous linear equations; ordinary differential equations; partial differential equations; interpolation and curve fitting. Lecture 2 hours, laboratory 2 hours. Prerequisites: CS 3344 and Math 2234.

## 4013 DATA STRUCTURES, 3 hours credit

This course is concerned with algorithms for inputting, altering, accessing, and destroying data. Topics included are arrays, stacks and queues, link-lists, and graphs. Lecture 3 hours. Prerequisites: CS 2013 and CS 3344.

## 4491-3 SPECIAL PROBLEMS IN COMPUTER SCIENCE, $1-3$ hours credit

Individual and group projects in computer science based on proposals by students which are approved and supervised by faculty members. Prerequisite: Approval by Department Chairman and faculty member supervising the project.

## Statistics

## 3003 INTRODUCTION TO STATISTICS, 3 hours credit

Designed to introduce the non-mathematics student to the techniques of experimental statistics including estimation and hypothesis testing. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: Math 1213 or Math 1115 or equivalent.

3013 INTRODUCTORY PROBABILITY AND STATISTICS, 3 hours credit
Descriptive statistics including graphical representaion of data, elementary probability and combinatorial methods, binomial and normal distributions, statistical inference including point estimates of mean, variance and proportion, confidence intervals, tests of hypotheses. Lecture 3 hours. Prerequisite: Math 1513 or equivalent.

## 3113 MATHEMATICAL STATISTICS I, 3 hours credit

Introduction to combinatorial methods, probability random variables and expected value, discrete distributions, continuous probability functions, and moment generating functions. Lecture 3 hours. Prerequisite: Math 2033 or Math 2234.

## 3123 MATHEMATICAL STATISTICS II, 3 hours credit

A continuation of Mathematical Statics I. Sampling, interval estimation, tests of hypothesis, and regression and correlation. Lecture 3 hours. Prerequisite: Stat 3113.

## Meteorology

2003 INTRODUCTION TO METEOROLOGY I, 3 hours credit
Introduction to the interaction of the Sun and the Earth, nature of radiation, distribution of temperature and heat balance, observations and instruments, cloud structure, elementary thermodynamics along with the water vapor effects on the atmosphere. Prerequisite: Credit for the concurrent enrollment in Math 1513.
2013 INTRODUCTION TO METEOROLOGY II, 3 hours credit
Introduction to the general circulation, horizontal and vertical motion in the atmosphere, cyclones, air masses, condensation - convective and non-convective processes - tropical meteorology, synoptic analysis and forecasting. Prerequisite: Meteorology 2003.

# MILITARY SCIENCE 

LTC Billy J. Slusher, Professor and Department Chairman Assistant Professors: MAJ Meaders, MAJ Jerney, CPT Rulison, CPT Weber; Principle Drill Instructor: SGM Brewer Senior Instructor: MSG Cockroft

## Basic Course

The ROTC Basic Course, which consists of the following four courses, is designed to provide a basic understanding of the purpose and history of the United States Army, to offer training in fundamental military skills, to teach principles of instructional techniques, and to provide classroom and practical training in leadership. Enrollment in Basic Course subjects is open to all full-time day students, male and female, regardless of intentions to continue in ROTC or to pursue a commission. There is no military obligation incurred for basic course attendance. Full academic credit is given for all ROTC basic courses. In addition, general education requirements for up to 4 hours of physical activity credits can be satisfied by enrollment in MS I or MS II.
1012 FOUNDATIONS OF NATIONAL SECURITY AND ORIENTEERING, 2 hours credit
The introductory course to the ROTC Program. A study of the history and purpose of ROTC, the role of the U.S. Army in planning and execution of National Policy, and practical application of land navigation through the popular sport of orienteering. Lecture 2 hours, Laboratory 2 hours.

## 1022 PRINCIPLES OF MILITARY INSTRUCTION AND SQUAD TACTICS, 2 hours credit

A study of the methods and techniques of military instruction, conference and practical work affording the opportunity to prepare, rehearse and conduct classes on selected subjects; and an introduction to squad level offensive and defensive tactics. Lecture 2 hours, laboratory 2 hours.
2012 DIMENSIONS OF MILITARY LEADERSHIP, 2 hours credit
An analysis of the qualities of Leadership. A study of principles and techniques of influencing the actions of others. Conferences, supplemented with seminars relating to current leadership problems. Lecture 2 hours, laboratory 2 hours. Prerequisite: MS 1012 and MS 1022.

## 2022 AMERICAN MILITARY HISTORY, 2 hours credit

A survey study of American Military History from the American Revolution to the present. The principles of war as applied to battles will be the primary discussion point. Prominent political and military leaders' leadership traits and capabilities will be analyzed. Lecture 2 hours, laboratory 2 hours.

## Advanced Course

The ROTC Advanced Course, comprised of the following four courses, is designed to train qualified, selected students, both male and female, in the basic skills and abilities desired in a commisioned officer. Map reading, communications, tactics, and practical work at advanced camp lay a ground work for specialized staff and area studies conducted in the senior year. Entrance into the Advanced Course is predicated on at least one of the following requirements. Selected students must be physically, morally, and mentally qualified for a commission in the United States Army. They must also have successfully completed the Basic Course, or have attended and completed the ROTC Basic Summer Camp in lieu of the Basic Course, or qualify as a veteran of active service, and secure permission of the Professor of Military Science. Full academic credit is given for all ROTC Advanced Courses to include 3 hours for ROTC Basic Camp and 4 hours for ROTC Advanced Camp.

## 3013 MAP READING AND COMMUNICATIONS, 3 hours credit

An introduction to the basic military skills. An intensive study of the principles and techniques associated with the use of military maps. A study of the use of current tactical communications equipment. Lecture 4 hours, laboratory 3 hours. Prerequisite: Completion of the ROTC Basic Course (MS 1012, 1022, 2012, 2022) or completion of ROTC Basic Camp (MS 3033) or qualify as a veteran, and permission of the Professor of Military Science.

## 3023 TACTICS AND OPERATIONS, 3 hours credit

A continuation of study of military skills and applications toward the Military Team. Tactical considerations of employment of the squad, platoon and company. Lecture 4 hours, laboratory 3 hours.

## 4013 MILITARY TEAM AND STAFF OPERATIONS, 3 hours credit

A study of unit staff officer responsibilities, combat operations, and the military team with emphasis on the planning and coordination necessary between the elements of the team. Lecture 4 hours, laboratory 2 hours.

## 4023 MILITARY MANAGEMENT, 3 hours credit

A study of unit administration and logistical procedures. The role of the officer as a manager. Includes a study of the fundamental concepts of military justice. Lecture 4 hours, laboratory 2 hours.

## Summer Camp

## 3003* BASIC SUMMER CAMP, 3 hours credit

Basic camp is a six-week training period conducted during the summer session prior to enrollment in the Advanced Course. The camp includes instruction in basic military subjects and applied leadership training designed to meet the prerequisites of the advanced program. This camp is required only of those new students who are not qualified veterans and have not successfully completed the on-campus ROTC Basic Course of instruction. Successful completion of this camp qualifies a student for enrollment directly into the advanced course. Students receive payment for attendance at the Basic Camp plus transportation to and from camp (approximately $\$ 500.00$ ).

## 4004 ADVANCED SUMMER CAMP, 4 hours credit

A six-week training period required of all Advanced Course students between the junior and senior academic school year. Successful completion of Advanced Camp is a prerequisite for commissioning. Students receive one-half of a Second Lieutenant's base pay for the training period plus transportation to and from camp (approximately $\$ 475.00$ ).

## Leadership Laboratory

Leadership Laboratory is a weekly period of instruction during which the student learns new practical military skills and reinforces those skills previously acquired. Visits to nearby Fort Sill allow the students to get a first hand look at Army duty and its lifestyle. Specific activities include: rifle markmanship, map reading, weapons orientation, and orientation trips to Fort Sill. Attendance at leadership laboratory is considered for each student on individual basis. Every effort is made to resolve conflicts with other class work and participation in university programs such as the athletic program.
*Enrollment in MS 3003 will be during the summer preceding the admission to the advanced two-year program.

## MUSIC

G. F. Smith, Professor and Department Chairman

Associate Professors: McCollom, A. Smith, G. C. Smith;
Assistant Professors: Engelman, Fees, Fletcher, Giles, Lambert, Martin, Moots, Pickthorn, Radcliffe, V. Sircy, Thomas. Instructor: Neely.

## 1000 CONCERT AND RECITAL ATTENDANCE, 0 hours credit

Each Semester. A required course for music majors; not open to others. Each semester the music faculty will set up a list of concerts and recitals occurring in the Lawton area during the semester and music majors must have a $75 \%$ attendance each semester in residence to qualify for graduation.

## 1001 PIANO CLASS I, 1 hour credit

An introduction to the technique of playing the piano for the student with no previous piano instruction. Class 1 hour, practice 5 hours per week.

1011 PIANO CLASS II, 1 hour credit
Continuation of 1001. Second Semester. Class 1 hour. Practice 5 hours per week. Prerequisite: Music 1001 or equivalent.

## 1081 BEGINNING STRING CLASS, 1 hour credit

The study of the string choir; basic concepts of playing and teaching methods of stringed instruments. Class 3 hours.
1091 INTERMEDIATE STRING CLASS, I hour credit
The study of a limited repertoire, ensemble playing and teaching methods of stringed instruments. Class 3 hours. Prerequisite: Music 1081 or equivalent.

## 1121-2 CHOIR, $1-2$ hours credit

Participation in Cameron University Singers, Swingers or Chamber Choir. The study and performance of choral music of various styles. Open to all university students by audition. May be repeated for credit. 2-5 hours per week.

## 1141 ORCHESTRA, I hour credit

This course involves the study and performance of orchestral literature in the Symphonic Orchestra jointly sponsored by the Lawton Philharmonic Society and Cameron University.
1151-2 BAND, $1-2$ hours credit
The study and performance of original and transcribed concert literature for band. Performance at public events. Open to all college students. Class 4 hours.
1212 MUSIC LITERATURE I, 2 hours credit
Required of all music majors. Study of the development of musical styles and listening technique; use of musical materials, textures, etc. Lecture, reports, listening laboratory. Class 3 hours.

1222 MUSIC LITERATURE II, 2 hours credit
Continuation of the study of styles and materials in music. Lecture reports, listening laboratory. Class 3 hours. Prerequisite: Music 1212.

## 1171 JAZZ ENSEMBLE, 1 hour credit

The performance and study (listening, improvising, composing, and arranging) of the diverse styles of jazz as a uniquely American musical art form. Performances include concerts, jazz festivals, and other scheduled appearances. Concentration of the music studied is contemporary big band jazz. Open to all college students by audition. Class 3 hours. May be repeated for credit.
1901 MUSIC FUNDAMENTALS, 1 hour credit
A study of the basic signs and symbols used in music and their practical application. For non-music majors. Class lab 2 hours.

1912 INTRODUCTION TO COLLEGE MUSIC THEORY, 2 hours credit
Coordination of visual and aural skills by means of drill sessions in rhythmic patterns, scales, intervals, and triads. Class lab 4 hours.
2012 MUSIC APPRECIATION I, 2 hours credit
For non-music majors. Designed to bring about increased awareness of our cultural heritage through an acquaintance with the elements of music in a variety of styles. The course will include listening to recorded music and live performances. Class 2 hours.

## 2022 MUSIC APPRECIATION II, 2 hours credit

For non-music majors. A continuation of Music Appreciation I, with emphasis on musical forms and music of the 20th century. This course will include listening to recorded music and live performances. Class 2 hours. Prerequisite: Music 2012.
2501 PERCUSSION CLASS, I hour credit
The study of fundamentals of all percussion instruments. The basic concepts of playing and teaching; survey of methods and materials. Class 2 hours.

## 2541 WOODWIND CLASS, I hour credit

The study of the flute, oboe, clarinet, bassoon and saxophone. Basic concepts of playing and teaching woodwind instruments; survey of methods and materials. Class 2 hours.
2551 WOODWIND CLASS, I hour credit
A continuation of Music 2541. Class 2 hours.
2561 BRASS CLASS, I hour credit
The study of the trumpet, trombone, French horn, baritone and tuba. Basic concepts of playing and teaching brass instruments; survey of methods and materials. Class 2 hours.

## 2571 BRASS CLASS, 1 hour credit

A continuation of Music 2561. Class 2 hours.

## 2913 ELEMENTARY HARMONY I, 3 hours credit

A study of the 18th and 19th century styles in music. Part-writing, melody harmonization, and analysis, from simple major triads through diatonic 7th chords. Prerequisite: Music 1901 or passing grade on theory evaluation test. Class 3 hours. Concurrent enrollment with Music 2921 recommended for Music Majors.

## 2921 ELEMENTARY EAR TRAINING I, I hour credit

A study of ear training problems from simple scale passages and tonic chord skips through intervals in all triads. Simple and compound meter; the unit and its division. Prerequisite: Music 1901 or passing grade on theory evaluation test. Lecture-Lab 2 hours. Concurrent enrollment with Music 2913 recommended for Music Majors.

## 2933 ELEMENTARY HARMONY II, 3 hours credit

A continuation of Music 2913. Prerequisite: Music 2913. Class 3 hours. Concurrent enrollment with Music 2941 recommended for Music Majors.

2941 ELEMENTARY EAR TRAINING II, 1 hour credit
A continuation of Music 2921. Prerequisite: Music 2921. Lecture-Lab 2 hours. Concurrent enrollment with Music 2933 recommended for Music Majors.
3101 PRINCIPLES OF CONDUCTING, 1 hour credit
A beginning course in the principles of both choral and instrumental conducting. Class 2 hours.

## 3111 INSTRUMENTAL CONDUCTING, I hour credit

The technique of reading scores and use of the baton in interpretaion of them. Practical experience in conducting instrumental groups. Class 2 hours. Prerequisite: Music 3101.
3121 CHORAL CONDUCTING, I hour credit
The technique of reading scores and use of the baton in interpretation of them. Practical experience in conducting choral groups. Class 2 hours. Prerequisite: Music 3101.

3132 MUSIC FOR ELEMENTARY TEACHERS I, 2 hours credit
A basic course in the rudiments of music for the general teacher. Functional approach to the study of theory, singing, rhythm, and piano keyboard, with performance of simple pieces. Class 2 hours.
3142 MUSIC FOR ELEMENTARY TEACHERS II, 2 hours credit Materials and methods for the general teacher in teaching music in elementary grades. Class 2 hours. Prerequisite: Music 3132 or permission.

3151 MUSIC ENSEMBLE, I hour credit
Participation in vocal, instrumental, or keyboard ensembles. Class 1-4 hours. Prerequisite: Permission. May be repeated for credit.

## 3233 MUSIC HISTORY I, 3 hours credit

A general study of music development starting during the ancient period and progressing through the Baroque. Lecture, recorded examples, required readings and listening. First semester. Class 3 hours. Prerequisite: Music 1222 or permission.

## 3243 MUSIC HISTORY II, 3 hours credit

A continuation of Music 3233 from Classical through Contemporary music. Second semester. Class 3 hours. Prerequisite: Music 3233 or permission.

3550-2 OPERA WORKSHOP, 0-2 hours credit
Opera production and performance, staging, properties, scenery, directing, performing. Classes and laboratory sessions arranged. May be repeated for credit. Prerequisite: Permission.

## 3512 VOCAL PEDAGOGY, 2 hours credit

Study of vocal teaching techniques including anatomy of vocal tract, physiological process, and acoustical properties, repertory for high school students. Class 2 hours. Prerequisite: Permission.

## 3660-4 WORKSHOP, 0-4 hours credit

A concentrated course of specific music activity utilizing lectures and practical application exercises. May be repeated for credit to a maximum of 6 hours credit.

3712 ELEMENTARY MUSIC METHODS, 2 hours credit
A professional training course for students preparing to teach elementary school music. Includes philosophies and practices of current leading music educators with classroom experience relating to conceptual approach. Class 2 hours. Prerequisite: Departmental permission.

3722 SECONDARY MUSIC METHODS, VOCAL, 2 hours credit
A professional training course for students preparing to teach secondary school vocal music. Study of philosophy, and pedagogy as applied to the teaching of vocal music. Class
3 hours. Prerequisite: Permission.

3742 SECONDARY MUSIC METHODS, INSTRUMENTAL, 2 hours credit
A professional training course for students preparing to teach secondary school instrumental music. Study of philosophy, psychology, and pedagogy as applied to the teaching of instrumental music. Class 3 hours. Prerequisite: Permission.

## 3752 MARCHING BAND METHODS, 2 hours credit

Administration, organization, and implementation of the school marching band. Fundamentals of drill, half-time show planning, charting, and scoring; precision marching, pageantry, and parade techniques. Class 2 hours. Prerequisite: Departmental permission.
3801-4 PRIVATE PIANO, $1-4$ hours credit
Individual piano lessons. May be repeated for credit.
3811-4 PRIVATE VOICE, $1-4$ hours credit
Individual voice lessons. May be repeated for credit.
3821-4 PRIVATE WOODWIND, $1-4$ hours credit
Individual woodwind lessons. May be repeated for credit.

## NURSING

## Delores Kruger, Assistant Professor and Department Chairman <br> Assistant Professors: Holeman, Jones, Morton, Yarbro; Instructors: Bennett, Brennan, Burnett, Burns, Conn, Fire, Hall, Milner.

The Department is utilizing Learning Experience Guides for Nursing Students (LEGS) which is a total nursing curriculum plan based on behavioral objectives, learning experiences utilizing multi-media, and self-tests for student evaluation. The basic tools of the curriculum are student guides in loose leaf format called LEGS. There are four guides; each guide has its own audiovisual components. LEGS allows students to see relationships in nursing early in the program. This is a selfdirected, non-lecture program.

## 1053 STRUCTURE OF MEDICAL TERMS, 3 hours credit

An introductory course in medical terminology. Emphasis on components of medical terms, definitions, spelling and correct usage. Enrollment not limited to nursing students. Not required of nursing students but highly recommended. Offered in summer sessions only.

## 1018 INTEGRATED NURSING I, 8 hours credit

Covers the fundamentals of nursing, including normal prenatal care, beginning communication, and growth and developmental tasks for all ages. Demonstration, group discussion, and audiovisual aids are used in the college lab setting. All clinical experience is supervised. First semester. Group discussion 5 hours, laboratory 9 hours. Prerequisite: Completion of or concurrent enrollment in Zoology 1124.

## 1027 INTEGRATED NURSING II, 7 hours credit

Treats beginning physical and mental illness for all ages. Includes labor and delivery and postpartum care with emphasis on practice in problem solving. Demonstration, group discussion, and audiovisual aids are all utilized. Second semester. Group discussion 4 hours, laboratory 9 hours. Prerequisite: Nursing 1018, and completion of or concurrent enrollment in Biology 2034.

2039 INTEGRATED NURSING III, 9 hours credit
Deals with physical and mental illness of all ages, including complications of pregnancy. Emphasis is on decision making. Third semester. Group discussions 5 hours, laboratory 12 hours. Prerequisite: Nursing 1018 and Nursing 1027.

## 2049 INTEGRATED NURSING IV, 9 hours credit

Covers the transition from the classroom to the job. It presents nursing history, trends in nursing, legal aspects of nursing, community health and an over view of leadership skills. Prerequisite: Nursing 1018, 1027, 2039.

## 3102 OVERVIEW OF PROFESSIONAL NURSING, 2 hours credit

An introductory course for the Registered Nurse student who has a change in career goals. Lecture 2 hours. Prerequisite: Admission to B.S.N. Program.

## 3115 NURSING PROCESS I, 5 hours credit

Initial instruction in nursing physical assessment; function of the nursing history and plan of patient care using assessment and history. Group discussion 3 hours, laboratory 4 hours. Prerequisite: Nursing 3102 or concurrent enrollment.

## 3123 STRATEGIES IN HEALTH CARE TEACHING, 3 hours credit

Focus is on active student participation in learning selective theories, teaching skills and behaviors. Group discussion 3 hours. Prerequisite: Admission to B.S.N. Program.

## 3133 LEADERSHIP IN NURSING, 3 hours credit

Introduction to principles of leadership. Includes planning, organization and initiating patterns of change in nursing. Group discussion 3 hours.

# PHYSICAL SCIENCE 

Bob Vowell, Professor and Department Chairman<br>Associate Professors: Crane, Finke, Harwood, Hawk, Nalley, Snider, Stanton;<br>Assistant Professor: Seals.<br>Instructor: Buckley

## Chemistry

## 1004 DESCRIPTIVE CHEMISTRY, 4 hours credit

A one-semester terminal course for non-science majors. Principal concepts and theories of chemistry are critically examined from the layman's point of view. No credit for students who take later chemistry courses. Lecture 4 hours.

## 1015 GENERAL CHEMISTRY, 5 hours credit

-A beginning course in the fundamental concepts and theories of chemistry, and application of these principles to selected elements and compounds. Students who have had high school chemistry and a composite score of 18 on the ACT Test must take Chemistry 1364. (Exception: A student with an ACT composite score of 26 or above who has not had high school chemistry must take Chemistry 1364.) Lecture 4 hours, laboratory 2 hours. Prerequisite: Two semesters of high school algebra or concurrent enrollment in Math 1213.

## 1225 GENERAL CHEMISTRY, 5 hours credit

A continuation of Chemistry 1015. Lecture 4 hours, laboratory 2 hours. Prerequisite: Chemistry 1015.

## 1364 GENERAL CHEMISTRY, 4 hours credit

Principles of general chemistry, with emphasis upon theory and its applications to structure and reactions. Lecture 4 hours. Prerequisite: High school chemistry and a composite score on the ACT Test of 18 or above. Students who meet these requirements must take this course. Chemistry 1361 must be successfully completed before credit is received in this course.

## 1361 GENERAL CHEMISTRY LABORATORY, 1 hour credit

Selected laboratory experiences to test application of chemical theory. Laboratory 2 hours. Prerequisite: Chemistry 1364 or concurrent enrollment.

1474 GENERAL CHEMISTRY, 4 hours credit
A continuation of Chemistry 1364 . Lecture 4 hours. Chemistry 1471 or equivalent must be successfully completed before credit is received in this course. Prerequisite: Chemistry 1364.

## 1471 GENERAL CHEMISTRY LABORATORY, I hour credit

Chemical principles involved in detection of common cations and anions by semi-micro laboratory techniques. (Note: Students majoring or minoring in chemistry, who take this course, will not be required to take Chemistry 2222.) Laboratory 2 hours. Prerequisite: Chemistry 1361 and Chemistry 1474, or concurrent enrollment.
2112 THEORY OF CHEMICAL ANALYSIS, 2 hours credit
Modern theories of solutions of electrolytes applied to analytical chemistry. Lecture 2 hours. Prerequisite: Chemistry 1225 or equivalent.

## 2222 QUALITATIVE ANALYSIS, 2 hours credit

Analysis for common cations, anions, and acid radicals by semi-micro laboratory techniques. Lecture 1 hour, laboratory 4 hours. Prerequisite: Chemistry 2112 or concurrent enrollment.

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## 2204 ORGANIC CHEMISTRY, 4 hours credit

A one-semester course for home economics students. Deals with the occurrence, methods of preparation, characteristic reactions and properties of the more common organic compounds with special reference to the compounds studied in foods. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 1474 and Chemistry 1471 or equivalent.

## 3304 PHYSIOLOGICAL CHEMISTRY, 4 hours credit

Study of organic and inorganic chemical processes involved in selected anatomical structures. Resulting chemical responses serve as guidelines in predicting and interpreting physiological responses. Prerequisites: Chemistry 1015 or equivalent and departmental approval.

## 3314 ORGANIC CHEMISTRY, 4 hours credit

Nomenclature, structure, reactions, stereochemistry, and mechanisms of both aliphatic and aromatic compounds. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 1474 and Chemistry 1471 or equivalent.

## 3324 ORGANIC CHEMISTRY, 4 hours credit

A continuation of Chemistry 3314. The second semester of a two-semester sequence. Lecture 3 hours, laboratory 3 hours. Prerequisite: 3314.

## 3333 CHEMISTRY OF WATER AND WASTE, 3 hours credit

Inorganic chemistry of natural water supplies, pollution and water treatment. Lecture 1 hour, laboratory 6 hours. Prerequisite: Chemistry 2112.

## 3343 ORGANIC ANALYSIS, 3 hours credit

Characterization, derivatization, and identification of unknowns consisting of one or more organic compounds. Instrumental methods of analysis as applied to the identification of organic compounds, including practical laboratory work with IR, NMR, GLC, and TLC. Lecture 1 hour, laboratory 6 hours. Prerequisite: Chemistry 3324, or concurrent enrollment.

## 3345 ORGANIC CHEMISTRY, 5 hours credit

A one-semester introduction to the fundamentals of organic chemistry and methods of preparations, reactions, and uses of cyclic, acyclic, and heterocyclic compounds. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 1474 and Chemistry 1471 or equivalent.

## 4024 INSTRUMENTAL METHODS OF ANALYSIS, 4 hours credit

Theoretical and laboratory study of modern analytical techniques, both qualitative and quantitative with emphasis on instrument types, their components and methodology. Lecture 2 hours, laboratory 6 hours. Prerequisite: Chemistry 2223.

## 4333 INORGANIC CHEMISTRY, 3 hours credit

A survey of all of the elements and important compounds based on atomic structure and position in the periodic system; effect of atomic size, ionic size, and charge on the properties of elements. Prerequisite: Senior standing or permission.

## 4343 INORGANIC CHEMISTRY II, 3 hours credit

Introduction to theoretical implications underlying bonding, stereochemistry, and other structural concepts in inorganic chemistry. Ionic, valence bond, molecular orbital, and crystal field theories. Mechanisms of reactions in solution. Prerequisite: Chemistry 4333.

## 4353 PHYSICAL CHEMISTRY I, 3 hours credit

A fundamental course in physical chemistry, including application of thermodynamics, kinetics and theory of physical properties of matter as applied to chemical systems. Lecture 3 hours. Prerequisite: Chemistry 2223 and Mathematics 2234.

## 4351 PHYSICAL CHEMISTRY LABORATORY, I hour credit

Apparatus, methods and calculations employed in physio-chemical measurements. Laboratory 3 hours. Prerequisite: Physical Chemistry 4353 or concurrent enrollment.

4363 PHYSICAL CHEMISTRY II, 3 hours credit
A continuation of Chemistry 4353. Lecture 3 hours. Prerequisite: Physical Chemistry 4353.

## 4361 PHYSICAL CHEMISTRY LABORATORY, I hour credit

A continuation of Chemistry 4351. Laboratory 3 hours. Prerequisite: Physical Chemistry 4363 or concurrent enrollment.

4403 BIOCHEMISTRY I, 3 hours credit
An introduction to the chemistry and metabolism of carbohydrates, lipids, and proteins. Basic concepts of biochemistry of vitamins and enzymes, biological oxidations, bioenergetics. Lecture 3 hours. Prerequisite: Chemistry 3324 or permission from department.
4401 BIOCHEMISTRY LABORATORY, 1 hour credit
Qualitative and quantitative examination of biochemical materials and reactions. Laboratory 3 hours. Prerequisite: Chemistry 2223 and Biochemistry 4403 or concurrent enrollment.

4413 BIOCHEMISTRY II, 3 hours credit
A continuation of Biochemistry 4403, Lecture 3 hours. Prerequisite: Biochemistry 4403.

## 4411 BIOCHEMISTRY LABORATORY, I hour credit

-A continuation of Biochemistry Laboratory 4401. Laboratory 3 hours. Prerequisite: Biochemistry Laboratory 4401, Biochemistry 4413 or concurrent enrollment.

4442 CHEMICAL LITERATURE, 2 hours credit
Introduction to the library resources of chemistry. Use of the original literature, abstracts and publications. Lecture 2 hours. Prerequisite: Permission of the department.
4453 ADVANCED GENERAL CHEMISTRY, 3 hours credit
A course for teachers. Reviews modern theories and concepts applicable to beginning chemistry courses. Lecture 3 hours. Prerequisite: Permission of the department.

## 4472 METHOD OF TEACHING PHYSICAL SCIENCES, 2 hours credit

Methods in teaching the physical sciences for secondary school. Lecture and laboratory demonstrations, 2 hours. Prerequisite: 15 hours of college chemistry and permission of the department.

4491-4 SPECIAL PROBLEMS IN CHEMISTRY, 1 - 4 hours credit
Training in independent work. Experimental investigations of an assigned problem. Laboratory 3-12 hours. Prerequisite: Senior standing and permission of the department.

## Geology

1015 PHYSICAL GEOLOGY, 5 hours credit
Igneous, sedimentary and metamorphic rocks; results of erosion of the earth's surface by streams, oceans, winds, glaciers; phenomena of mountains, volcanoes, earthquakes, and interior of the earth. Field trips. Lecture 4 hours, laboratory 3 hours.
1024 HISTORICAL GEOLOGY, 4 hours credit
Geological history of the earth as revealed in the character and fossil content of the rocks. Field trips. Lecture 3 hours, laboratory 3 hours.

## Physical Science

## 1055 GENERAL PHYSICAL SCIENCE, 5 hours credit

A lecture-laboratory course designed for students with a non-scientific background. The course attempts to integrate the various areas of physical science into a comprehensible whole. This course is designed for non-science majors. Lecture 3 hours, laboratory 2 hours, 1 hour arranged. Prerequisite: Two years of high school algebra or equivalent.

## Physics

## 1004 DESCRIPTIVE PHYSICS, 4 hours credit

A survey course in general physics. Topics include mechanics, heat, sound, electricity, magnetism, and modern physics. For students who wish only four semester hours of physics. No credit for students who take later physics courses. Lecture 4 hours.

4452 ADVANCED LABORATORY, 2 hours credit
Experiments in heat, mechanics, optics, nuclear physics, and solid-state physics. Laboratory 6 hours. Prerequisite: Permission of department.
4491-3 SPECIAL PROBLEMS, 1 - 3 hours credit
An individual study course of advanced nature. Subject material varies with background and interests of the student, and may be either classwork or laboratory. Laboratory work will be of research quality with individual guidance from a faculty member. Prerequisite: 11 hours of College Physics and permission of instructor.


1493 UNITED STATES HISTORY SINCE 1865, 3 hours credit
A survey of the development of the United States from 1865 to the present. Lecture 3 hours.

## 2112 OKLAHOMA HISTORY AND GOVERNMENT, 2 hours credit

A survey of the development of Oklahoma from the time of the discovery of America to the present. Lecture 2 hours.

## 2023 PERSONAL AND FAMILY HISTORY, 3 hours credit

The collection, analysis and writing of personal history within the student's own family or community. Methods of accumulating data from written, oral and visual materials will be studied, and students will write a mini-biography on some member of their family or a surrogate family. Lecture 3 hours.

## 2473 EASTERN CIVILIZATION, 3 hours credit

The culture and civilizations of the Middle East, India and the Far East from earliest times to the twentieth century. Lecture 3 hours.

## 3013 COLONIAL LATIN AMERICA, 3 hours credit

The development of colonial social, political, economic, and religious institutions, and their impact upon Latin America today, from discovery and exploration through the wars for independence. Lecture 3 hours.

## 3023 REPUBLICAN LATIN AMERICA, 3 hours credit

The development of the independent republics in the Twentieth Century. Lecture 3 hours.
3103 THE WEST IN AMERICAN HISTORY TO 1828, 3 hours credit
The Turner thesis and the significance of the westward movement in American history, with special emphasis on the Anglo-American frontier and on migration into the Mississippi Valley. A comparison of the English, French and Spanish approaches to the frontier. Lecture 3 hours. Prerequisite: History 1483.

## 3113 THE WEST IN AMERICAN HISTORY SINCE 1828, 3 hours credit

Development of the trans-Mississippi and far Western frontiers, with special attention to the Southwest. Exploration, the fur trade, Indian relations, overland migration, transportation, territorial acquisition, mining and cattle frontiers, and the agrarian revolt. Lecture 3 hours. Prerequisite: History 1483 and 1493.
3133 CONSITUTITIONAL HISTORY OF THE UNITED STATES, 3 hours credit
The origin and development of the Constitution of the United States with special emphasis on interpretation of the Constitution by the courts. Lecture 3 hours. Prerequisite: History 1483 and Political Science 1113.
3153 CONTEMPORARY AMERICAN AFFAIRS, 3 hours credit
The United States in the Age of the Cold War, from the origins of the rift with Russia in the diplomacy of World War II through the crises in Korea and Vietnam. Lecture 3 hours. Prerequisite: History 1483 and 1493.

## 3233 ENGLAND TO 1689, 3 hours credit

The English people in their political, social, and institutional development from earliest times through the Glorious Revolution. Lecture 3 hours.
3243 ENGLAND SINCE 1689, 3 hours credit
Emergence of cabinet government, the Industrial Revolution, the Napoleonic era and empire problems, and the development of England to the present. Lecture 3 hours.

## 3343 HISTORY OF THE PLAINS INDIANS

A study of the plains Indians, their origins, migrations, social and cultural development, and the impact of European contact and United States Indian policies. Lecture 3 hours. Prerequisite: History 1483 or 1493 and junior standing.
3353 AMERICAN NEGRO HISTORY, 3 hours credit
A study of the Negro in American History from the development of the slave trade through emancipation and up to the present time. Emphasis is placed upon the influence of the Negroes in the history of the United States, and upon the institutional relationships that have developed as a result of their presence in the United States. Lecture 3 hours. Prerequisite: History 1483 and 1493.

## 3373 THE ANTEBELLUM SOUTH, 3 hours credit

Cultural, economic and social history of the South from colonial times to the Civil War. Lecture 3 hours. Prerequisite: History 1483.

## 3383 THE NEW SOUTH, 3 hours credit

The political, economic and social development of the American South from 1865 to the present, with particular attention to the problems arising from changes in agriculture, the beginnings of industry and the relations between the races. Lecture 3 hours. Prerequisite: History 1493.

## 4033 AMERICAN DIPLOMATIC HISTORY TO 1900, 3 hours credit

A survey of American foreign policy from the War for Independence to 1900, with emphasis on the efforts of the United States government to obtain recognition from the Continental European States, to protect and expand foreign trade, to defend neutral rights and to maintain peace. Lecture 3 hours. Prerequisite: History 1483 and 1493.

## 4043 AMERICAN DIPLOMATIC HISTORY SINCE 1900, 3 hours credit

A survey of American foreign policy from the end of the Spanish-American War to the present, with emphasis on the emergence of the United States as a world power, the involvement of the United States in World Wars One and Two, the attempt to establish and maintain world peace and peace keeping organizations, and the place of the United States in an interdependent world. Lecture 3 hours. Prerequisite: History 1493.

4243 AMERICAN COLONIAL HISTORY, 3 hours credit
The political, economic, social and cultural history of the colonies in North America from the earliest settlements to the preliminaries of the great war for empire. The modification of European institutions and ideals in the New World. Lecture 3 hours. Prerequisite: History 1483.

4253 REVOLUTIONARY AMERICA, 1754-1783, 3 hours credit
The French and Indian War; the British imperial system; the causes and immediate consequences of the War for American Independence. Lecture 3 hours. Prerequisite: History 1483.
4263 THE EARLY NATIONAL PERIOD IN THE UNITED STATES, 3 hours credit The drafting and adoption of the federal Constitution and the organization of a new national government. The origin and development of political parties; the conflict between nationalism and sectionalism; foreign policy and territorial expansion in the period from 1783 to 1824. Lecture 3 hours. Prerequisite: History 1483.
4273 THE MIDDLE PERIOD IN AMERICAN HISTORY 1824-1861, 3 hours credit A political history of the period between 1824 and 1861. The impact of nationalism, liberalism, and sectionalism upon American life in the middle period. Lecture 3 hours. Prerequisite: History 1483 and 1493.

## 4283 CIVIL WAR IN AMERICA, 3 hours credit

The political, military, diplomatic, economic and social problems encountered by the Union and the Confederacy; leading personalities and events of the war between the states. Lecture 3 hours, Prerequisite: History 1483.

## 4293 RECONSTRUCTION AND TRANSITION IN THE UNITED STATES,

## 3 hours credit

An intensive study of the major economic, political and social changes in the United States in the aftermath of the Civil War, with emphasis on the processes and problems of reconstruction in the southern states, and with special attention to the rise of modern industrialism and to the organization of labor and the farmers. Lecture 3 hours. Prerequisite: History 1493.
4303 THE EMERGENCE OF THE UNITED STATES AS A WORLD POWER, 1890-1920, 3 hours credit
An intensive study of the three decades in which the United States first emerged as a major factor in international affairs. The Spanish American War and the acquisition of an overseas empire; Progressivism and other reform movements in the early twentieth century; neutrality; World War I and the Treaty of Versailles. Lecture 3 hours. Prerequisite: History 1493 and Junior standing.

## 4363 FRENCH REVOLUTION AND NAPOLEONIC ERA, 3 hours credit

The period of the French Revolution and Napoleon including the origins of the revolution, the course of its development, the rise of Napoleon, the Napoleonic wars and their effect on Europe. Lecture 3 hours. Prerequisite: History 1123.

## 4373 HISTORY OF EUROPE, 1815-1870, 3 hours credit

Europe at the end of the Napoleonic Era; the Congress of Vienna and the Congress system; the revolutions of 1830 and 1848; the unification of Italy and Germany. Lecture 3 hours. Prerequisite: History 1123.

## 4383 HISTORY OF EUROPE, 1870-1918, 3 hours credit

The growth of alliances; economic and political imperialism; World War I and its origin. Lecture 3 hours. Prerequisite: History 1123.

## 4403 EUROPE, THE AGE OF ABSOLUTISM 1748-1789, 3 hours credit

The growth of divine-right monarchy in Europe and the balance of power; the rationalists and the age of Enlightenment. Lecture 3 hours. Prerequisite: History 1113 and 1123.

## 4413 THE RENAISSANCE AND REFORMATION, 3 hours credit

The decline of Feudalism and Manorialism and the rise of the national state; the revival of culture and the arts; the decline of the universal church; the Protestant Reformation. Lecture 3 hours. Prerequisite: History 1113 and 1123.

## 4433 RUSSIA TO 1815, 3 hours credit

A survey of the political, institutional, societal and economic development of Russia from the Kievan period to the end of the Napoleonic wars. The course will include the origins of Russian society, the rise of Muscovy, the growth of the Russian Empire, origins and development of autocracy and serfdom and Russia's emergence as a great power. Lecture 3 hours. Prerequisite: History 1113.

## 4443 RECENT EUROPEAN HISTORY, 3 hours credit

The quest for security in the 1920 's, the rise of the dictators and the road to war. World War II and its aftermath. Lecture 3 hours. Prerequisite: History 1123.

4453 MODERN RUSSIA FROM 1815 TO THE PRESENT, 3 hours credit
Europe after the Napoleonic Wars, Russia in the Nineteenth Century, the nature of the old regime, the emergence of the underground movement, revolutionary literature, the revolutions of 1917, and modern communist Russia. Lecture 3 hours. Prerequisite: History 1123.

## 4463 MODERN FAR EAST, 3 hours credit

The institutional background and the impact of the occidental world on the East from the early Nineteenth Century. Problems of modern China, Japan and India, and their relations with the West, especially the United States. Lecture 3 hours. Prerequisite: History 2473, or permission.

## 4483 DIPLOMATIC HISTORY OF MODERN EUROPE, 3 hours credit

A discussion and analysis of the major personalities, events and trends in European diplomacy from the post Napoleonic settlement into the Atomic Age. Attention will be focused primarily upon the major nations of Western Europe. Russia, the Balkan states and the area of Eastern Europe will be treated only in so far as they interact with the Western European powers. Prerequisite: History 1123.

## 4493 RECENT AMERICAN HISTORY, 3 hours credit

The United States in the Age of the Great Depression, with primary stress on the social problems and popular movements of the 1920's, the New Deal policies of Franklin D. Roosevelt and the circumstances under which the nation became involved in World War II. Lecture 3 hours. Prerequisite: History 1483 and 1493.

## 4772 METHODS OF TEACHING HISTORY, 2 hours credit

Problems and methods of instruction of history and closely-allied fields. Lecture 2 hours.
Prerequisite: Twenty hours of history and department approval.
government, and an examination of their collective role in the development of public policies and in the solution of national problems. Lecture 3 hours.
3213 INTERNATIONAL RELATIONS, 3 hours credit.
The political dynamics and machinery of international relations, with emphasis on the norms and techniques of nationalism, imperialism, collective security and the formation and execution of foreign policy. Lecture 3 hours.

## 3223 INTERNATIONAL ORGANIZATION, 3 hours credit

An analysis of the background, formation, aims, activities and accomplishments of international governmental organizations, with emphasis on the United Nations and related agencies. Lecture 3 hours.

## 3483 THE AMERICAN EXECUTIVE, 3 hours credit

A comprehensive study of the Presidency, with emphasis on the development of the power, influence, philosophy and personalities of the office. The course will compare the office of the Presidency with the office of governor in the various states. Lecture 3 hours.

4013 COMPARATIVE GOVERNMENT, 3 hours credit
A comparative study of modern political institutions and processes, with particular attention to European political systems. Lecture 3 hours.

## 4023 THE DEVELOPING NATIONS, 3 hours credit

An analysis of political institutions and processes with emphasis on selected developing countries in Africa, Asia, Latin America and the Middle East. Lecture 3 hours.

4053 PROBLEMS OF AMERICAN FOREIGN POLICY, 3 hours credit
A survey of American policies with regard to current international conflicts and problems, with a descriptive analysis of the manner in which these courses or actions are determined and carried out by federal agencies, and an intensive examination of major alternatives to the existing policies. Lecture 3 hours. Prerequisite: Political Science 1113 and 3213 or consent of the instructor.

## 4253 THE JUDICIAL PROCESS, 3 hours credit

An analysis of the court system in the United States, focusing on the United States Supreme Court, lower federal courts, federal-state judicial relations, and the role of the judicial system in American policy processes. Lecture 3 hours.

4491-3 SELECTED TOPICS IN POLITICAL SCIENCE, $1-3$ hours credit An intensive analysis of a selected political problem or special topic in government. May be repeated, with a different topic, for additional credit. Prerequisite: Political Science $1113,2113,3023$ or 3113.

## 4613 EARLY POLITICAL THOUGHT, 3 hours credit

A study of the fundamental contributions to Western political thought from the Classical period to the early 19th Century. Lecture 3 hours.

## 4653 CONTEMPORARY POLITICAL THOUGHT, 3 hours credit

An analysis of 19th and 20th Century political thought and philosophy, with an emphasis on the concepts of democracy, conservatism, liberalism, socialism, fascism, communism, and the welfare state. Lecture 3 hours.

## 4793 SENIOR SEMINAR IN POLITICAL SCIENCE, 3 hours credit

The study and application of research methods and techniques, with special attention to the problems of value, fact, opinion, bias, symbol and myth. Prerequisite: Senior standing and departmental permission.

## Religious Education

1112 OLD TESTAMENT LITERATURE, 2 hours credit
A survey course covering the entire Old Testament. Lecture 3 hours.

## 3373 SOCIOLOGY OF THE COMMUNITY, 3 hours credit

The community, its structure, systems and processes. The influence of geography and patterns of settlement upon urban and rural life. Population growth and migratory patterns. Lecture 3 hours. Prerequisite: Sociology 1113.

## 3413 GERONTOLOGY, 3 hours credit

An indepth study of various aspects of aging from a broad interdisciplinary perspective. Lecture 3 hours. Prerequisite: Sociology 1113.

## 3513 POVERTY AND SOCIAL WELFARE, 3 hours credit

A study of the causes and consequences of poverty in America. An analysis of both historical and contemporary reform measures developed to deal with the problems created by poverty. Lecture 3 hours. Prerequisite: Sociology 1113 and Sociology 2023.

## 4003 CRIMINOLOGY, 3 hours credit

An analysis of theories of criminal behavior, the police, courts, and penal systems. Lecture 3 hours. Prerequisite: Sociology 1113 and 2023.

## 4013 JUVENILE DELINQUENCY, 3 hours credit

An indepth analysis of juvenile delinquency with regard to its development, treatment and prevention. Lecture 3 hours. Prerequisite: Sociology 1113 and 2023.

## 4023 FIELD EXPERIENCES, 3 hours credit

Planned and supervised experience or observation in agency settings. Readings and comprehensive report. Prerequisite: Sociology 1113, 2023, and 3223.

## 4323 SOCIAL CHANGE, 3 hours credit

Functions, components and patterns of social change. Innovation and invention, diffusion, social conflict and modernization. A critical consideration of modern American social movements, their causes and results. Lecture 3 hours. Prerequisite: Sociology 1113 and 2023.

## 4491-3 SPECIAL PROBLEMS, $1-3$ hours credit

Intensive independent readings or study on definite problems or special subjects, based on pre-approved outlines or plans, with regular conferences and with oral and written reports. Prerequisite: 15 hours of Sociology and permission of the departmental chairman. May be repeated with a different topic for a total of 6 hours.
4793 SENIOR SEMINAR: SELECTED TOPICS IN SOCIOLOGY, 3 hours credit
Intensive studies of a major sociological concern, such as criminology, demography, race and ethnic relations, mass communication, theory, etc. Prerequisite: Sociology 1113, Sociology 3123, and Sociology 3223.

## Anthropology

1113 INTRODUCTION TO ANTHROPOLOGY, 3 hours credit A general introduction to the principles of physical and cultural anthropology, including an analysis of cultures of prehistoric and existing preliterate peoples and their impact on modern cultures. Lecture 3 hours.

## 4491-3 SPECIAL PROBLEMS, $1-3$ hours credit

An individual study course of advanced nature. Subject matter varies with background and interest of the student, and may be classwork or laboratory. Prerequisite: Permission of department. May be repeated for a total of six hours credit.

## Speech

## 1113 FUNDAMENTALS OF SPEECH, 3 hours credit

An introductory course designed to acquaint the student with the basic theory of the art of public speaking and to provide experience in the preparation and delivery of short talks. Lecture 3 hours.

## 1133 VOICE AND DICTION, 3 hours credit

A general study of the structure of the vocal mechanism; principles of vocal quality, articulation and pronunciation. Lecture 3 hours.

> Completion of Fundamentals of Speech is required for enrollment in classes numbered 2000 or above.

2143 DEBATE, 3 hours credit
Acquaints the student with the complexity of social problems, methods of research, methods of logical analysis and development, construction of briefs, and techniques of refutation; practice in preparation and delivery of sustained arguments. Lecture 3 hours.

## 2313 DISCUSSION METHODS, 3 hours credit

An overview of the nature of discussion and its essential function in democratic decisionmaking; a study of methods for defining the discussion question, securing information, constructing and defending arguments, and preparing discussion outlines; a review of contemporary theory regarding structure and processes in groups. Observation and practice in information sharing and decision-making groups. Lecture 3 hours.

## 2443 FUNDAMENTALS OF BROADCASTING, 3 hours

The organization and function of broadcasting. Introduction to the techniques used in radio and television broadcasting. Lecture 3 hours.

## 2533 ORAL INTERPRETATION OF LITERATURE, 3 hours credit

A beginning study and practice in oral reading of literature, with emphasis on the oral expression of logical and emotional meaning in literature, and the selection of material. Lecture 3 hours.

## 3002 PARLIAMENTARY PROCEDURE, 2 hours credit

An intensive study of Robert's Rules of Parliamentary Procedure, with some practical experience in application. Lecture 2 hours.

## 3011 PARLIAMENTARY PROCEDURE LABORATORY, I hour credit

Participation in student government during term of office. Recognized campus organization officers may enroll if minutes are recorded. Prerequisite: Speech 3002 or concurrent enrollment. May be repeated for 2 hours credit.

## 3113 ARGUMENTATION AND ADVOCACY, 3 hours credit

Nature of argumentative controversy: studies in analysis, evidence, reasoning, and refutation; variables of form and method. Lecture 3 hours. Prerequisite: Upper-division standing.

## 3121-4 FORENSICS LABORATORY, $1-4$ hours credit

Preparation for the participation in intercollegiate forensics and competitive speech activities including debate, discussion, original oratory, extemporaneous and impromptu speaking and oral interpretation. Prerequisite: Speech 2143 or permission.

## 3313 ADVANCED PUBLIC SPEAKING, 3 hours credit

A continued emphasis on the development of the art of public speaking: specific attention to longer speeches and speeches for special occasions, and the development of delivery skills and performance ability. Lecture 3 hours.

## 3353 DISCUSSION AND CONFERENCE LEADERSHIP, 3 hours credit

A course designed for the person desiring to develop practical leadership techniques for

## 4523 PSYCHOLOGY OF COMMUNICATION, 3 hours credit

Examination of psychological factors underlying speech comprehension, the speaker's adjustment to an audience, and the attitudes, beliefs, and predispositions of listeners toward the appeal of the spoken word. Lecture 3 hours. Prerequisite: Speech 3633 or 9 hours of Psychology and/or Sociology, or departmental permission.
4772 TEACHING SPEECH IN THE SECONDARY SCHOOL, 2 hours credit Study of the basic program of speech in the secondary schools; organization of materials, procedures, and techniques of instruction. Visitation and observation of the teaching situation. Lecture 2 hours. Prerequisite: Departmental permission and 20 hours SpeechDrama.


## TECHNOLOGY

Roy Byrd, Assistant Professor and Department Chairman Professor: Spradley;<br>Assistant Professors: Cottingham, Hicks, Jones, Scott, Sutherlin; Instructors: Holloway, Kervin, Mathis.

## Corrections

2003 CORRECTIONAL TREATMENT METHODS, 3 hours credit
A study of correctional institutions, methods of correctional treatment and the social services provided to convicted persons and their dependents. An analysis of the criminal behavior that characterizes the different types of offenders. Lecture 3 hours. Prerequisite: CJ 1113, CJ 1033, and Soci 1113.

2033 CORRECTIONAL INSTITUTIONS AS A SOCIAL SYSTEM, 3 hours credit The study of social systems within correctional institutions. The effects of deprivation of liberty, heterosexual relationships, autonomy, security. Cultures and subcultures as a response to imprisonment. Lecture 3 hours. Prerequisites: CJ 1113 and Soci 1113.

## 2053 PROBATION AND PAROLE, 3 hours credit

Role and structure of state pardon and parole boards; options of the governor; legal duties of pardon and parole boards, parole and probation officers, rights of inmates to be considered for parole; effects of parole actions on the community; legal limitations placed on parolees, revocation of parole. Lecture 3 hours. Prerequisite: CJ 1113, Corrections 2003, and Psychology and/or Sociology 6 hours.

## 2063 MANAGEMENT OF CORRECTIONAL INSTITUTIONS, 3 hours

Problems of management of the correctional process. Includes security, information systems, case management, evaluation of progress, custody and discipline as related to rehabilitative efforts, problems of recidivism and the condemned, education and training in rehabilitative programs. Lecture 3 hours. Prerequisite: Corrections 2003 and 2033.

## Criminal Justice

## 1013 INTRODUCTION TO CRIMINAL JUSTICE, 3 hours credit

A study of the historical development of the criminal justice system, contemporary agencies, and processes involved in the system; an introduction to the three main components; police, courts and corrections. Lecture 3 hours.
1023 COMMUNITY RELATIONS, 3 hours credit
Critical consideration of the criminal justice system's capacity to deal with crime, and its relationship with the citizenry. Emphasis will be placed on programs to provide effective community relations. Lecture 3 hours. Prerequisite: CJ 1013.

## 1033 CRIMINAL LAW, 3 hours credit

A review of criminal law. The administration of justice as it exists in the municipality under state statutes. The rights and privileges of the accused and jurisdiction of violators. Lecture 3 hours.

## 1113 APPLIED CRIMINOLOGY, 3 hours credit

Applications of criminology in the Criminal Justice System. An overview of the past, present, and future trends in crime causation. Emphasis will be placed on the relationship of man and criminal behavior. Lecture 3 hours. Prerequisite: CJ 1013 or concurrent enrollment.

## 2001-3 INDEPENDENT STUDY IN CRIMINAL JUSTICE, $1-3$ hours credit

Selected study projects which will include topics not covered in detail in the Criminal Justice curriculum. Prerequisite: Sophomore standing and department permission.
3003 JUVENILE JUSTICE SYSTEM, 3 hours credit
The study of the Juvenile Justice System in America. Juvenile crime, the courts, community services, including prevention and rehabilitation of juveniles. Lecture 3 hours.

3033 CONCEPTS OF CRIMINAL JUSTICE, 3 hours credit
A study of current and emerging theories and concepts in Criminal Justice. Includes methods of instruction developed for effectiveness, supervision, and productivity. Lecture 3 hours. Prerequisite: 12 hours of Criminal Justice or departmental permission.

## 3103 SPECIAL PROBLEMS, 3 hours credit

The identification and critical analysis of existing and emerging problems within the Criminal Justice System. Lecture 3 hours. Prerequisite: 12 hours of Criminal Justice or departmental permission.

## 4013 CRIMINAL JUSTICE PLANNING, 3 hours credit

A systematic approach to planning, organizing, budgeting and implementing a Criminal Justice System, includes evaluation and validation. Lecture 3 hours. Prerequisite: 18 hours of Criminal Justice or departmental permission.

## Law Enforcement

## 2003 SECURITY SYSTEMS, 3 hours credit

A study of techniques used in providing security to government, industry, business, and private institutions. The functions of criminal justice personnel in crime prevention management. Lecture 3 hours. Prerequisite: CJ 1113 and CJ 1033.

## 2033 POLICE PATROL AND TRAFFIC FUNCTIONS, 3 hours credit

The role and responsibilities of the police patrol emphasizing the enforcement of laws, traffic regulations and defensive driving. Lecture 3 hours. Prerequisite: CJ 1033 and 1133.
2053 CRIMINAL INVESTIGATION, 3 hours credit
Methods and techniques of gathering, preserving, and presenting all types of criminal evidence, and scientific and laboratory aids used in criminal detection and investigation. Preservation and use of direct evidence perceived by witnesses. Lecture 3 hours. Prerequisite: CJ 1013 and CJ 1033.

## 2063 CRIMINALISTICS, 3 hours credit

Application of biological and physical sciences to the investigation of crime, showing relationship between the crime scene, forensic science and the legal rules governing the admissibility of evidence into a court of law. Lecture 3 hours. Prerequisites: LE 2053 or concurrent enrollment.

## Data Processing

## 1013 INTRODUCTION TO DATA PROCESSING, 3 hours credit

Survey of the industry; keypunching and sorting operation; terminology; programming in the BASIC language utilizing interactive terminals; computer capabilities and effects on business and society. Lecture 3 hours.

1023 RPG PROGRAMMING, 3 hours credit.
Report program generation as it is applied to business applications. Lecture 2 hours, laboratory 2 hours.

1063 DATA PROCESSING MATH, 3 hours credit
Fundamentals of linear systems, matrices, determinants, linear programming, logic and Boolean algebra. Lecture 3 hours. Prerequisite: Math 1213.
2001-3 SPECIAL PROBLEMS IN DATA PROCESSING, $1-3$ hours credit
Assigned study projects which will include topics not covered in detail in the Data Processing curricula and based on student needs. Laboratory 3-9 hours. Prerequisite: Sophomore standing and departmental permission.

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## 2043 ASSEMBLY LANGUAGE PROGRAMMING, 3 hours credit

Includes machine and assembly programming, debugging, housekeeping, techniques, loops, indexing, and subroutines. Lecture 2 hours, laboratory 2 hours. Prerequisite: DP 1013.

## 2053 COBOL PROGRAMMING, 3 hours credit

Emphasis on elements of the language and the coding of business applications. 4 hours lecture-laboratory. Prerequisite: DP 1013.

## 2061-3 COMPUTER OPERATIONS, $1-3$ hours credit

Actual work assignments involving University computer operations. Enrollment limited to 10 students per semester. 32 clock hours per semester credit hour. Prerequisite: DP 2033.

## 2083 SYSTEMS ANALYSIS, 3 hours credit

Feasibility study, problem definition, study of existing systems, new systems requirements, designing new systems, cost analysis, selling the systems, implementation, charting, forms design. Lecture 3 hours. Prerequisite: DP 2033 or concurrent enrollment.

## 2112 FORTRAN PROGRAMMING, 2 hours credit

Elements of FORTRAN IV programming language with emphasis on using the computer as a tool. 3 hours lecture-laboratory. Prerequisite: Math 1213.
2173 ADVANCED ASSEMBLY LANGUAGE PROGRAMMING, 3 hours credit Assembly language programming for RCA Spectra 70 and IBM 360 computers. Includes use of the commercial instruction set and fixed point arithmetic. Lecture 2 hours, laboratory 2 hours. Prerequisite: DP 2043 or departmental approval.

## 3023 FACILITIES MANAGEMENT, 3 hours credit

Site planning, preparation and layout. Facility and data security, job scheduling, library maintenance, supervision of data processing personnel, and job control language. Lecture 3 hours. Prerequisite: DP 2033.

3043 MANAGEMENT INFORMATION SYSTEMS, 3 hours credit
Management of information systems ranging from serial sequential files to large-scale direct access data base systems. Communication networks with on-line data collections and information retrieval. Lecture 3 hours. Prerequisite: DP 2033.
3053 ADVANCED COBOL PROGRAMMING, 3 hours credit
Advanced COBOL Programming techniques involving file processing and systems programming. Lecture 2 hours, laboratory 2 hours. Prerequisites, DP 2033 and DP 2053.
3082 ADVANCED PROGRAMMING PROBLEMS, 2 hours credit
Students are assigned a particular design problem and are required to decide on the type of computer needed, card design, file organization, and to write the program using Cobol as the basic language, arithmetic subroutines in Fortran and input-output routines in machines and/or assembly language. Laboratory 6 hours. Prerequisite: Concurrent Enrollment in Data Processing 2083.

## Design

1013 ENGINEERING GRAPHICS I, 3 hours credit
The fundamentals of engineering graphics with emphasis on drafting and sketching techniques. Lecture 1 hour, laboratory 4 hours.

## 1023 ENGINEERING GRAPHICS II, 3 hours credit

Orthographic projection in solution of problems of the point, line, and plane; projections, intersections, and surface development of solids; working drawings, and graphic analysis. Lecture 1 hour, laboratory 4 hours. Prerequisite: Design 1013 or equivalent.

## 1032 PRODUCT PLANNING AND ESTIMATING, 2 hours credit

Fundamentals of cost estimating for building or production designs. Includes consideration of facilities, equipment, personnel, and current materials as related to job or product cost. Plant layout and product designs are analyzed. Lecture 1 hour, laboratory 2 hours.

## 1072 TOOL DESIGN, 2 hours credit

A study of machine shop practices, foundry, and forging procedures; with an introduction to jig and fixture design. Lecture 1 hour, laboratory 3 hours. Prerequisite: Design 1013.

## 2001-3 SPECIAL PROBLEMS IN DESIGN, $1-3$ hours credit

Assigned study projects which will include topics not covered in detail in the drafting curricula and based on student needs. Laboratory 3-9 hours. Prerequisite: Sophomore standing or departmental permission.

## 2013 ARCHITECTURAL DESIGN I, 3 hours credit

The study and development of plans and details that are devoted to the representation of residential structure. Lecture 1 hour, laboratory 4 hours. Prerequisite: Design 1023.

## 2073 INDUSTRIAL ILLUSTRATION, 3 hours credit

The study of basic procedures used by industry to make three dimensional drawings. Drawing devoted to the actual industrial methods and problems for a better understanding of industrial needs. Lecture 1 hour, laboratory 4 hours. Prerequisite: Design 1023.

## 2102 MATERIALS TESTING, 2 hours credit

Testing materials for compression, tension, shear, hardness, and physical characteristics. The tests are run on wood, steel, aluminum, nonferrous metals, concrete, plastic and various connections of these materials. Lecture 1 hour, laboratory 2 hours.

## 2123 SURVEYING, 3 hours credit

Measurement of distance, compass surveying, leveling, use of transit, standia survey, topography, triangulation and land surveys. Lecture 2 hours, laboratory 3 hours. Prerequisite: Math 1613 or concurrent enrollment.

## 2163 STRUCTURAL DESIGN, 3 hours credit

The design of and determination of the size, the shape, and the function of structural members. The analytical and graphical solutions of structural problems utilizing architectural and machine elements. Lecture 3 hours, laboratory 2 hours. Prerequisite: Design 1013, Design 2102 and Math 1715.

## 3004 MACHINE DRIVES AND LINKAGES, 4 hours credit

Plane motion analysis of machine elements such as linkages, cams, gears, and drives. The dynamics of rotating machine elements. Lecture 3 hours, laboratory 2 hours. Prerequisite: Math 1613 and concurrent enrollment in Physics 1114.

3024 ARCHITECTURAL DESIGN II, 4 hours credit
The study of design and engineering features of building construction which have an important bearing on safety, durability, and comfort of buildings and similar structures. Lecture 2 hours, laboratory 4 hours. Prerequisite: Design 2013.

## 3034 MACHINE DESIGN, 4 hours credit

The designing of machinery that is composed of a combination of certain machine elements. The solutions of the problems of transmitting power by utilizing elements such as gears, pulleys, cams, etc. Lecture 4 hours, laboratory 2 hours. Prerequisite: Design 2163.

## 4013 COMPUTER-AIDED GRAPHICS AND DESIGN, 3 hours credit

Application and use of FORTRAN, BASIC and Assembly language programs for production of graphic output and design criteria data. Laboratory exercises will require solution of graphic, structural, and machine design problems. Lecture 1 hour, laboratory 4 hours. Prerequisite: 22 semester credit hours in design drafting or departmental permission.

## Electronics

For non-electric technology majors. Lecture 2 hours, laboratory 2 hours. Prerequisite: Math 1613 or concurrent enrollment.
1014 ELECTRICITY, 4 hours credit
Elementary principles of electricity covering basic electric units, Ohm's law, Kirchhoff's Laws, a-c and d-c circuit solutions, magnetisms and electrical measuring instruments. Lecture 3 hours, laboratory 4 hours. Prerequisite: Math 1213 or concurrent enrollment
1024 NETWORK ANALYSIS, 4 hours credit
A study of equivalent circuits, resistance networks, impedance networks and coupled circuits. Lecture 3 hours, laboratory 4 hours. Prerequisite: Electronics 1014 and Math 1613 or concurrent enrollment.

1054 INTRODUCTION TO ELECTRONICS, 4 hours credit
A study of static characteristics of vacuum tubes and semiconductor devices with elementary applications in amplifiers and power supply. Lecture 3 hours, laboratory 4 hours. Prerequisite: Electronics 1014 or concurrent enrollment.
2001-3 SPECIAL PROBLEMS IN ELECTRONICS, 1 - 3 hours credit
Guidance in independent work. Assigned study projects which will include topics not covered in detail in electronics curricula and based on student needs. Laboratory 3-9 hours. Prerequisite: Sophomore standing and departmental permission.

## 2014 ELECTRONIC AMPLIFIERS, 4 hours credit

The analysis and design of multistage transistor and vacuum tube amplifiers including compensation techniques and feedback. The study of power supplies and audio devices. Lecture 3 hours, laboratory 4 hours. Prerequisite: Elect. 1054 or equivalent.

## 2044 COMMUNICATION CIRCUITS, 4 hours credit

The study of transmitters and receivers including resonant circuits, coupled circuits, r-f power amplifiers, oscillators, A.M. and F.M. modulation and demodulation, transmission lines, antennas and wave propagation. Lecture 3 hours, laboratory 4 hours. Prerequisite: Electronics 2014 or equivalent.

## 2064 PULSE AND SWITCHING CIRCUITS, 4 hours credit

A study of nonsinusoidal waveforms, switching circuits, pulse generating and waveshaping circuits with applications involving industrial electronic systems. Lecture 3 hours, laboratory 4 hours. Prerequisite: Electronics 1024 and 1054.

## 2112 ROTATING MACHINES, 2 hours credit

Principles of motors, generators and other rotating devices as energy converters. Included are DC, single-phase, and three-phase systems. Lecture 1 hour, laboratory 2 hours. Prerequisite: Elect. 1024.

## 3033 AUTOMATIC CONTROL SYSTEMS, 3 hours credit

An introduction to linear automatic control systems. The analysis of elementary servomechanisms and process control systems. Lecture 2 hours, laboratory 2 hours. Prerequisite: Electronics 2014.
3043 TELEVISION SYSTEMS, 3 hours credit
Principles of television, color and closed systems. Lecture 2 hours, laboratory 2 hours. Prerequisite: Elect. 2044.

## 3123 ELECTRONIC PRINCIPLES OF COMPUTERS, 3 hours credit

The elements of both Analog and Digital computers and the organization of these elements in a functional computer; primarily involving the use of electronic circuits to perform calculations. Lecture 2 hours, laboratory 2 hours. Prerequisite: Electronics 2064.

## 4013 ELECTRONIC DESIGN AND ANALYSIS, 3 hours credit

The analysis, design and/or modification of electronic systems. The feasibility study, writing specifications, cost analysis, environmental testing and quality control. Lecture 2 hours, laboratory 2 hours. Prerequisite: 24 credit hours in electronics or departmental permission.

## Technology

## 3013 TECHNICAL REPORT WRITING, 3 hours credit

Basic principles of organizing informal material into a clear, concise and accurate industrial report. Topics include letters, memos, minutes of meetings, trip reports, progress reports, proposals and technical reports. Lecture 3 hours. Prerequisite: Junior standing or Departmental permission.

## 3023 PRINCIPLES OF SUPERVISION, 3 hours credit

General principles of Industrial supervision. Topics include Supervisor's functions, human resources and motivation, worker attitudes, and the art of leadership. Lecture 3 hours. Prerequisite: Junior standing or Departmental permission.

## 4003-6 DIRECTED OBSERVATION AND ON-THE-JOB INTERNSHIP,

 3-6 hours creditDirected observation and on-the-job internship served in an area directly related to the student's technical specialty. The job should be approved by the major advisor prior to starting the internship. The intern's supervisor is requested to complete an evaluation form concerning the student's job performance. The form will be filed with the Chairman of the Technical Department. Laboratory 6-12 hours. Prerequisite: Technology 3013 and 3023 or Departmental permission.

## 4012 UNION-MANAGEMENT RELATIONS, 2 hours credit

The structure, history, and goals of labor unions. A study of Federal and State labor relations laws, current issues in collective bargaining and arbitration. Lecture 2 hours. Prerequisite: Tech 3023 or departmental permission.

## 4033 INDUSTRIAL ORGANIZATIONS, 3 hours credit

A study of the factors that affect the organization and management of an industrial enterprise. Topics include the internal organization, managerial controls, management's functions, wage and salary administration, job evaluations, and budgetary controls. Lecture 3 hours. Prerequisite: Junior standing or departmental permission.
4491-3 INDEPENDENT STUDY IN TECHNOLOGY, $1-3$ hours credit
Assigned research, reading, and reports based on the needs of the individual student and directly related to the student's technical specialty. Individual guidance will be provided by a faculty member. Prerequisite: Junior standing or departmental permission. The total number of hours earned in Independent Study may not exceed four.
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Degree ..... 105
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Ethnic Studies Minor ..... 127 ..... 127
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Extension Courses ..... 76 ..... 76
Extra-Curricular Activities ..... 58 ..... 58
Facilities, Academic ..... 30
Faculty ..... 16
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Financial Aids ..... 34
Fine Arts Center ..... 30
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Full-Time Student ..... 47
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Grades to Parents ..... 51
Grade Points ..... 51
Grading System ..... 50
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Graphics Barn ..... 30
Guaranteed Bank Loan ..... 36
Guidance Services ..... 53
Gymnasium ..... 30, 58
Health Courses ..... 158
Health Services ..... 60
Health and Physical Education, Department of ..... 98
High School Seniors ..... 75
History of Cameron ..... 25
History Courses ..... 189
Home Economics Courses ..... 164
Home Economics, Department of ..... 101
Housing ..... 33, 64
Howell Hall ..... 30
Humanities Courses ..... 166
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Insurance for Students ..... 61
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Law Enforcement Courses ..... 20
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Library Science Courses ..... 171
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Mathematics Courses ..... 172
Mathematics, Department of ..... 104
Mathematics and Data ..... 105
Mathematics and Electronics ..... 105
Degree
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Mathematics Tutorial
58
Laboratory
92
Medical Technology
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Meteorology Courses ..... 176
Military Science Courses
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Military Science, Department of Bachelor
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Music Courses
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Music, Department of
Music, Department of ..... 32
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Old Baptist Student Union ..... 72
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Orientation, Freshmen ..... 47
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Physical Science Building ..... 186
Physical Science Courses ..... 111
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Piano Rental Fees ..... 63
Placement ..... 193
Political Science Courses ..... 66
Post Office ..... 48
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Pre-Professional Programs ..... 50Probation, Scholastic


[^0]:    *Since the number of student openings in the schools of medical technology are limited, and because these schools show preference for individuals who have completed a baccalaureate degree, students who can are strongly advised to complete a Bachelor of Science degree with a major in Biology, Chemistry or Natural Science.

[^1]:    *Should be taken in the professional semester.

[^2]:    *Should be taken in the professional semester.

[^3]:    *A minimum cumulative grade point average of 2.5 in requirements of the major field.

[^4]:    *Not required if equivalent courses were taken in high school.
    **1513 and 1613 duplicate 1715.

[^5]:    *A minimum of 24 semester hours of resident credit earned at Cameron and a total of 40 hours of upper division (Junior and Senior) courses must be completed by students in this program.

[^6]:    * No grade of less than "C" in a course in the major field will count on these requirements.

[^7]:    *Those persons meeting all the requirements of the certificate (see page 100) will be
    considered to have met the college requirement for a subject minor.
    **For the student who is interested in acquiring basic speaking and listening skills in more than one language, rather than a concentrated study of just one. Any combination of
    foreign language credits is acceptable.

[^8]:    *OBSERVATION AND STUDENT TEACHING
    Observation, participation and teaching, and the directing of extraclass group activities under the guidance of a selected classroom teacher. Prerequisites: Nine hours of professional education and admission to student teaching. A sufficient amount of advanced work in teaching fields must be done in residence at Cameron to provide a basis for the evaluation of readiness for student teaching. Student teaching is offered to seniors in fall and spring semesters.

[^9]:    2223 QUANTITATIVE ANALYSIS, 3 hours credit
    Laboratory techniques of quantitative analysis, includes both volumetric and gravimetric methods. Lecture 1 hour, laboratory 6 hours. Prerequisite: Chemistry 2112 or concurrent enrollment.

[^10]:    2033 SYSTEMS CONCEPTS, 3 hours credit
    Understanding the data processing function through design of input and output systems requirements and systems flowcharting. A study of the most commonly confronted data processing applications: payroll, inventory, billing, sales reporting, etc. Lecture 3 hours. Prerequisite: DP 1013.

