Bacterial Diversity
Spring of even-numbered years. 3(3-0)
MPH 303, MPH 304, BCH 401 or BCH 453 or concurrently.
Morphological and physiological properties of diverse groups of bacteria and how these properties relate to a bacterial niche and importance.

Bacterial Diversity Laboratory
Spring of even-numbered years. 2(0-6)
MPh 831 or concurrently.
Representative groups of bacteria will be isolated and studied.

Advanced Soil Microbiology
Fall of odd-numbered years. 3(3-0)
Mph 425 or approval of department. Interdepartmental with the Department of Crop and Soil Sciences.
Biochemistry, biology, and community ecology of microorganisms indigenous to soil. Emphasis on current research problems.

Soil Microbiology Laboratory
Fall of odd-numbered years. 2(0-6)
MPh 842 concurrently or approval of department. Interdepartmental with the Department of Crop and Soil Sciences.
Fundamental techniques of dealing with microorganisms indigenous to soil. Metabolic activity of microorganisms. Interaction between microorganisms and plants.

Special Problems in Microbiology
Fall, Winter, Spring, Summer. 2 to 6 credits. May reenroll for a maximum of 12 credits. Approval of department.

Master's Thesis Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

Topics in Microbiology
Fall, Winter, Spring, Summer. 2(2-0)
May reenroll if different topic is taken. Approval of department.
Topics will be selected from taxonomic sub-sciences such as bacteriology, virology, protozoology, mycology, algology, and helminthology, and from intersectoral disciplines such as microbial genetics, immunology, physiology, and ecology.

Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

MILITARY SCIENCE M S

All University

General Military Science
Application of leadership techniques, the decision making process and staff planning. Military customs and traditions. Students will concurrently enroll in a selected non-Military Science course to fulfill military professional requirements.

Leadership Fundamentals
Winter. 0(0-1) Approval of department.

Basic Military Skills
Winter. 0(0-1) Approval of department or M S II standing.

MUSIC MUS

College of Arts and Letters

Chamber Music
Fall, Winter, Spring, Summer. 1(1-0)
May reenroll for a maximum of 15 credits. Approval of department.
Performance of works for small ensembles.

Band
A. Marching Band
Fall. 1 credit. May reenroll for credit. Membership determined by audition.
The Marching Band participates at football games.

B. Spartan Brass
Winter. 1 credit. May reenroll for credit. Membership determined by audition.
The Spartan Brass participates at basketball games.

C. Concert Band
Fall, Winter, Spring. 1 credit. May reenroll for credit. Membership determined by audition.
Public appearances are scheduled on campus each term.

D. Symphonic Band
Fall, Winter, Spring. 1 credit. May reenroll for credit. Membership determined by audition. A high level of achievement in performing ability is required.
Concerts are scheduled both on and off campus.

E. Wind Ensemble
Fall, Winter, Spring. 1 credit. May reenroll for a maximum of 12 credits. Membership determined by audition. The highest level of performance is required.
Full range of wind literature is performed. Public concerts are presented both on and off campus.

F. Repertory Band
Fall, Winter, Spring, Summer. 1 credit. May reenroll for a maximum of 12 credits. Membership determined by audition.
Public appearances are scheduled on campus each term.

Symphony Orchestra
Fall, Winter, Spring. 1(0-5) May reenroll for a maximum of 12 credits. Admission by audition.
Preparation and performance of symphonic works ranging from the orchestral repertoire of the classic composers, and modern repertoire for chamber orchestra. Rehearsals and performances with guest conductors.

Chamber Orchestra
Fall, Winter, Spring. 1(0-5) May reenroll for a maximum of 12 credits. Membership determined by audition.
A specialized ensemble of advanced performers concentrating on the repertoire of the classic composers, and modern repertoire for chamber orchestra. Rehearsals and performances with faculty and guest artists.

Music in Elementary Education
Fall, Winter, Spring, Summer. 4(3-3)
Elementary education majors.
Study of music learning strategies in the elementary schools. Music concepts and literature are developed through listening, performing, creative and analytical skills. Methods and materials are emphasized.

Class Instruments and Voice
Fall, Winter. 1(0-2) Knowledge of notation. Music majors, or approval of department.
Class instruction in piano, voice, violin, cello, clarinet, and cornet.