

**892. Seminar**  
Fall, Spring. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Open only to graduate students in College of Agriculture and Natural Resources, College of Engineering, College of Human Medicine, College of Natural Science, College of Osteopathic Medicine, or College of Veterinary Medicine.  
Student review and presentation of selected topics in microbiology and public health.  
QA: MPH 800

**899. Master's Thesis Research**  
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 24 credits in all enrollments for this course.  
R: Open only to graduate students in Microbiology and Public Health.

QA: MPH 899

**991. Topics in Microbiology**  
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
Topics are selected from traditional subdisciplines such as bacteriology, virology, cell biology, and immunology or from transecting subdisciplines such as microbial genetics, physiology, molecular biology and ecology.  
QA: MPH 900

**999. Doctoral Dissertation Research**  
Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course.  
R: Open only to graduate students in Microbiology and Public Health.

QA: MPH 999

## MILITARY SCIENCE MS

### Department of Military Science Office of the Provost

**101. Leadership: The Military Profession**  
Fall, Spring, Summer. 1(1-1)  
Analysis of military profession from several academic perspectives. Technical, ethical, and personal ramifications of officership. Introduction to military leadership. Lab introduces military skills.  
QA: MS 101, MS 102

**102. Leadership: Land Navigation**  
Fall, Spring. 1(1-1)  
Military topographic and special maps: intersection, resection, modified resection, and polar coordinates. Tactical operation overlays. Preview of small unit leader's role in the Army. Lab: use of lensatic compass.  
QA: MS 102, MS 203

**201. Leadership Assessment Program, the Military Leader**  
Fall, Spring, Summer. 1(1-1)  
Individual leadership development using standardized assessment technology. Administration, personal relations, and decision making. Military writing and professional obligations. Lab includes rappelling and marksmanship.  
QP: MS 103 QA: MS 201, MS 202

**202. Leadership: First Aid/Fitness Training**  
Fall, Spring, Summer. 1(1-1)  
Emergency first aid including casualty evaluation, lifesaving measures, CPR, and environmental injury prevention. Leader's role in implementing Army Physical Fitness Program. Individual and group fitness programs. Lab: hands on leadership training.  
QP: MS 201 QA: MS 103, MS 201

**301. Leadership: Command and Control Communication**  
Fall, Spring, Summer. 3(3-2)  
P: MS 202.  
Wire and radio communications for tactical operations. Encryption/decryption, use of codes, and electronic warfare. Theories and models of behavioral sciences for leadership. Lab emphasizes communication skills.  
QP: MS 202 QA: MS 301, MS 302

**302. Leadership: Small Unit Tactics**  
Fall, Spring, Summer. 3(3-2)  
P: MS 301.  
Military topographic and special maps: intersection, resection, modified resection, and polar coordinates. Tactical operation overlays. Preview of small unit leader's role in the Army. Lab: use of lensatic compass.  
QP: MS 301 QA: MS 302, MS 303

**401. Leadership: Management**  
Fall, Spring, Summer. 3(2-3)  
P: MS 302.  
Army training personnel administration and logistics systems, and the leader's role as a trainer and effective manager. Oral and written communication. Leadership assessment and development. Lab: practical experience in unit administration.  
QP: MS 302 QA: MS 401, MS 402

**402. Military Law, Ethics and Professionalism**  
Spring, Summer. 3(2-3)  
P: MS 401.  
Military legal system. Application of military justice. Fundamental values and principles of conduct in the profession of arms. Development of subordinates and the role of noncommissioned officers. Lab includes leadership development assessment.  
QP: MS 401 QA: MS 402, MS 403

**490. Independent Study in Military Science**  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.  
R: Open only to juniors and seniors. Approval of department.  
Individual research in areas related to military science.  
QA: MS 499

## MUSIC MUS

### School of Music College of Arts and Letters

**112. Chamber Music**  
Fall, Spring. 1(0-2) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of broad range of chamber music literature.  
QA: MUS 112

**114. Marching Band**  
Fall. 1(0-9) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of broad range of marching band literature at football games.  
QA: MUS 118A

**115. Spartan Brass**  
Spring. 1(0-2) A student may earn a maximum of 6 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of broad range of brass literature at basketball and hockey games.  
QA: MUS 118B

**116. Campus Band**  
Fall, Spring. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course.  
Rehearsal and performance of broad range of band literature chosen from baroque period to the present.  
QA: MUS 118F

**117. Concert Band**  
Fall, Spring. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of broad range of wind literature from various historical periods and styles.  
QA: MUS 118C

**118. Wind Symphony**  
Fall, Spring. 1(0-5) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of broad range of wind literature from various periods and styles.  
QA: MUS 118E

**120. Symphony Orchestra**  
Fall, Spring. 1(0-5) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of symphonic and operatic repertoire.  
QA: MUS 133A

**121. Chamber Orchestra**  
Fall, Spring. 1(0-4) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of representative chamber works of baroque, classic and contemporary composers.  
QA: MUS 133B

**123. Collegiate Choir**  
Fall, Spring. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of representative literature for mixed choir with emphasis on renaissance, baroque, classical, romantic, and contemporary composers.  
QA: MUS 189

**124. Choral Union**  
Fall, Spring. 1(0-2) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
University and community chorus. One evening rehearsal per week, culminating in performance of a major work with orchestra.  
QA: MUS 191

**125. Glee Club, Men and Women**  
Fall, Spring. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course.  
Rehearsal and performance of broad range of choral literature chosen from medieval period to the present.  
QA: MUS 192

**126. State Singers**  
Fall, Spring. 1(0-4) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Mixed choir performing music from all periods.  
QA: MUS 190

**127. University Chorale**  
Fall, Spring. 1(0-4) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Mixed chamber choir for experienced singers performing representative literature from all periods.  
QA: MUS 193

**129. Percussion Ensemble**  
Fall, Spring. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course.  
R: Audition required.  
Rehearsal and performance of representative works for percussion and mallet ensembles.  
QA: MUS 112