

**Descriptions—Chemistry
of
Courses**

998. Physical Chemistry Seminar
Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course.
R: Open only to graduate students in Chemistry. Advances in physical chemistry reported by graduate students.
QA: CEM 998

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 20 credits. A student may earn a maximum of 99 credits in all enrollments for this course.
R: Open only to graduate students in Chemistry.

QA: CEM 999

CHINESE CHS

**Department of Linguistics and
Germanic, Slavic, Asian and
African Languages
College of Arts and Letters**

101. Elementary Chinese I
Fall. 4(4-1)
Pronunciation, writing system, and basic vocabulary and sentence patterns, with emphasis on conversation.
QA: CHS 101, CHS 102

102. Elementary Chinese II
Spring. 4(4-1)
P: CHS 101 or approval of department. Further work on conversation, character writing, and comprehension, with increasing emphasis on vocabulary building and grammar.
QP: CHS 101 QA: CHS 102, CHS 103

201. Second-Year Chinese I
Fall. 4(4-1)
P: CHS 102 or approval of department. Intermediate-level work on skills in conversation, comprehension, and grammar. Practice in composition.
QP: CHS 103 QA: CHS 201, CHS 202

202. Second-Year Chinese II
Spring. 4(4-1)
P: CHS 201 or approval of department. Further intermediate-level work on skills in conversation, comprehension, and grammar. Continued practice in composition.
QP: CHS 201 QA: CHS 202, CHS 203

301. Third-Year Chinese I
Fall. 4(4-0)
P: CHS 202. Advanced-level work on speaking, listening comprehension, reading, and writing skills, based on materials of cultural interest.
QP: CHS 203 QA: CHS 301, CHS 302

302. Third-Year Chinese II
Spring. 4(4-0)
P: CHS 301. Advanced-level work on speaking, listening comprehension, reading, and writing skills, based on materials of cultural interest.
QP: CHS 301, CHS 321 QA: CHS 302, CHS 303

350. Studies in the Chinese Language
Spring. 3(3-0)
P: CHS 201 or approval of department. Chinese phonology, morphology, and syntax.
QP: CHS 203

401. Fourth-Year Chinese I
Fall. 3(3-0)
P: CHS 302. Reading, discussion and writing based on original materials, including classical texts of cultural interest.
QP: CHS 303, CHS 321 QA: CHS 401, CHS 431

402. Fourth-Year Chinese II
Spring. 3(3-0)
P: CHS 401. Further reading, discussion and writing based on original materials, including classical texts of broad cultural interest.
QP: CHS 303, CHS 321 QA: CHS 401, CHS 420

499. Senior Thesis Research
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
R: Approval of department. An individual research project supervised by a faculty member that demonstrates the student's ability to do independent research and submit or present a major paper.

CIVIL ENGINEERING CE

**Department of Civil Engineering
College of Engineering**

271. Engineering Surveying
Fall, Spring. 4(3-3)
P: MTH 120. Application of surveying and error analysis to civil engineering problems. Earth work. Calculations. Layout and management of construction sites.
QP: MTH 112 QA: CE 252, CE 251

280. Introduction to Environmental Engineering
Fall, Spring. 3(3-0)
P: CEM 141 or CEM 151, MTH 132, CPS 130 or CPS 131. Elements of hydrology. Groundwater and surface water supply and contamination. Treatment systems for drinking water, wastewater, air, and solid and hazardous waste. Introduction to noise and radiation pollution.
QP: CEM 141, CEM 151, MTH 112, CPS 112 QA: CE 280

305. Structural Analysis
Fall, Spring. 3(3-0)
P: MSM 211, CE 390 or concurrently. R: Open only to Civil Engineering majors. Determinate and indeterminate plane structures. Linearity, stability, determinacy. Virtual-work calculation of forces and displacements. Flexibility and stiffness methods in plane structures.
QP: MMM 211 QA: CE 305, CE 306

312. Soil Mechanics
Fall, Spring. 3(2-3)
P: MSM 211. R: Open only to Civil Engineering and Agricultural Engineering majors. Engineering properties of soil and their measurement. Effective-stress concept. Permeability and seepage. Compaction. Consolidation, shear strength and stress-strain behavior.
QP: MMM 211 QA: CE 312

321. Introduction to Fluid Mechanics
Fall, Spring. 4(3-2)
P: MSM 306 or concurrently. R: Open only to Civil Engineering and Agricultural Engineering majors. Not open to students with credit in ME 332. Fluid properties, fluid statics, fluids in motion. Conservation of mass, energy and momentum. Dimensional analysis and similitude. Internal and external flows. Applications.
QP: MTH 310, MMM 306 QA: CE 321

337. Civil Engineering Materials I
Fall, Spring. 4(3-3)
P: MSM 211 or concurrently. R: Open only to Civil Engineering majors. Common civil engineering construction and paving materials: aggregates, inorganic cements, asphalts, concretes, wood and steel. Composition, structure, physical and mechanical properties, tests, and production mix design.
QP: MMM 211 QA: CE 308

346. Transportation
Fall, Spring. 3(3-0)
P: MTH 133. R: Open only to Civil Engineering, Engineering Arts, and Urban Planning students. Planning, design, and evaluation of transportation systems. Transportation demand, capacity, delay, and service quality. Elements of geometric design.
QP: MTH 113 QA: CE 346

370. Engineering Economics
Fall, Spring. 3(3-0)
P: MTH 133. R: Open only to College of Engineering students. Economic decision making in the context of evaluation of engineering projects. Net present worth and related methods of analysis. Depreciation. Before- and after-tax analysis. Sensitivity analysis, inflation, expected value.
QP: MTH 113 QA: CE 370

373. Construction Estimating and Scheduling
Fall. 3(3-0)
R: Open only to College of Engineering and Building Construction Management majors. Estimating quantities and costs for construction projects. Optimal scheduling of personnel and equipment subject to constraints and uncertainty.
QA: CE 372 CE 471

390. Civil Engineering Analysis
Fall, Spring. 3(3-0)
P: CPS 130 or CPS 131; MTH 235; MSM 211 or concurrently. R: Open only to College of Engineering majors. Application of numerical methods and computing to civil engineering problems. Random variables in civil engineering. Problem solving methods. Report preparation.
QP: CPS 112, MTH 310, MMM 211 QA: CE 390

400. Structural Mechanics
Fall. 3(3-0)
P: CE 305, CE 390. R: Open only to Civil Engineering majors. Matrix methods of structural analysis. Flexibility method. Direct stiffness method for plane structures. Elastic supports, inclined supports, member releases and non-prismatic members. Application software.
QP: CE 306, CE 390 QA: CE 400, CE 410

405. Design of Steel Structures
Fall, Spring. 3(3-0)
P: CE 305. R: Open only to Civil Engineering majors. Design of steel beams, columns, tension members and connections. Stability and plastic strength.
QP: CE 306, CE 390 QA: CE 405

406. Design of Concrete Structures
Fall, Spring, Summer. 3(3-0)
P: CE 305, CE 337. R: Open only to Civil Engineering majors. Design of reinforced concrete beams, slabs, columns and footings.
QP: CE 306, CE 308, CE 390 QA: CE 406

407. Structural System Design
Spring. 3(3-0)
P: CE 405 or concurrently; CE 406. R: Open only to Civil Engineering majors. Building or bridge design using steel, concrete, wood, or other materials. Approximate methods. Wind and earthquake forces.
QP: CE 405, CE 406 QA: CE 407

418. Geotechnical Engineering
Fall. 4(4-0)
P: CE 312, CE 390. R: Open only to Civil Engineering majors. Shallow foundation design including bearing capacity, stress distribution, and settlement analysis. Pile foundations. Design of retaining structures including rigid walls, braced excavations, and sheet-pile walls. Stability of slopes and embankments.
QP: CE 312, CE 390 QA: CE 418, CE 419

421. Engineering Hydrology
Fall. 3(3-0)
P: STT 351; CE 321 or concurrently. R: Open only to College of Engineering, College of Natural Science, and Crop and Soil Sciences majors. Hydrologic cycle, streamflow, precipitation, evapotranspiration, infiltration, groundwater. Quantitative methods of analysis: probability, unit hydrograph, routing, and flow nets. Groundwater supply development, well flows.
QP: CE 321, STT 351 QA: CE 421

- 422. Applied Hydraulics**
Spring, 3(2-2)
P: CE 321 or ME 332; CE 390 or ME 391. R: Open only to Civil Engineering, Mechanical Engineering, and Agricultural Engineering majors. Fundamentals of open-channel flow. Rapidly and gradually varied nonuniform flow analysis. Confined flows past submerged bodies, in pipe networks, and in turbo machinery. Design applications.
QP: CE 321, CE 390 QA: CE 422, CE 423
- 431. Pavement Design and Analysis I**
Fall, 3(3-0)
P: CE 312, CE 337. R: Open only to Civil Engineering majors. Highway and airfield pavement structural design. Performance measures. Failure mechanisms, popular thickness design procedures, and design considerations for surface friction, pavement joints, and drainage.
QP: CE 308 QA: CE 494
- 433. Rehabilitation of Highway and Airfield Pavements**
Spring of odd-numbered years, 3(3-0)
P: CE 431 R: Open only to Civil Engineering majors. Distress mechanisms. Developing and conducting quantitative surveys for structural and functional evaluation. Development of maintenance and rehabilitation strategies. Predictive performance models.
QP: CE 494 QA: CE 842
- 441. Highway Operations**
Fall, 3(3-0)
P: STT 351, CE 346. R: Open only to Civil Engineering majors. Driver and vehicle characteristics affecting traffic flow. Traffic flow density, highway speed and capacity. Signal control of intersections and networks. Risk management and liability.
QP: STT 351, CE 346 QA: CE 441
- 442. Airport Planning and Design**
Spring, 3(3-0)
P: CE 346. R: Open only to Civil Engineering majors. Components of the airport system including ground access facilities, aircraft characteristics, air traffic control, airport configuration, capacity analysis.
QP: CE 346 QA: CE 442
- 448. Transportation Planning**
Spring, 3(3-0)
P: CE 346, STT 351. R: Open only to Civil Engineering majors. Transportation planning process and procedures. Estimation of travel demand using traditional models of trip generation, trip distribution, modal split, and traffic assignment. Use of "quick-response" procedures. Traffic impact of new facilities.
QP: CE 346, STT 351 QA: CE 448
- 449. Highway Design**
Fall, 4(3-3)
P: CE 271, CE 346. R: Open only to Civil Engineering majors. Geometric design of highways as related to operation, capacity and safety. Alignment, drainage and pavement design. The use of CAD systems in preparing contract plans.
QP: CE 346, CE 252 QA: CE 347
- 474. Contracts and Ethics**
Spring, 3(3-0)
R: Open only to College of Engineering and Building Construction Management seniors and graduate students. Contract and specification preparation. Concepts of liability. Case studies in professional ethics.
QA: CE 374
- 480. Water and Wastewater Analysis Laboratory**
Fall, 1(0-3)
C: CE 481 R: Open only to majors in Civil Engineering and Environmental Engineering. Chemical and microbial analysis of water and wastewater.
QP: CEM 384, STT 351 QA: CE 481
- 481. Environmental Engineering Chemistry**
Fall, 3(3-0)
P: CEM 361, CHE 201, CE 280. Chemistry of environmental processes including alkalinity, precipitation-dissolution reactions, chemical complexation and redox reactions. Engineering applications to processing plants for water and wastewater.
QP: CEM 384, STT 351 QA: CE 481
- 483. Water and Wastewater Treatment**
Fall, 3(3-0)
P: CE 280, CE 321. R: Open only to Civil Engineering majors. Distribution of water and collection of sewage. Theory and design of water treatment processes.
QP: CE 280, CE 321 QA: CE 483
- 485. Solid and Hazardous Waste Management**
Spring, 3(3-0)
P: CE 280. R: Open only to College of Engineering majors. Design of solid waste collection and disposal systems. Definition of hazardous waste problems and selection of treatment alternatives.
QP: CE 280 QA: ENE 832, ENE 816
- 487. Microbiology for Environmental Health Engineering**
Spring, 3(3-0)
P: CEM 361, CHE 201. R: Open only to College of Engineering majors. Use and control of microorganisms for the protection of public health and the environment. Thermodynamics of microbial populations and microbial transformations.
QP: CEM 361, CHE 300
- 490. Independent Study**
Fall, Spring, Summer, 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to Civil Engineering majors. Approval of department. Civil engineering problem of specific interest to the student and a faculty member. May be analysis or design.
QA: CE 499
- 491. Civil Engineering Design Project**
Fall, Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to Civil Engineering majors. Approval of department. Planning, specification, and design of a civil engineering project or facility.
QA: CE 494
- 801. Experimental Methods for Structures and Materials**
Spring of even-numbered years, 3(2-2)
Principles of instrumentation and experimental measurement techniques for materials and structural systems. Statistical methods for design and analysis of experiments.
QP: CE 308 QA: CE 801
- 802. Structural Dynamics**
Fall, 3(3-0)
Dynamic loads and characteristics of structures. Steady-state and transient behavior. Numerical solutions and method of normal modes. Applications such as earthquake engineering.
QP: CE 405, CE 406 QA: CE 802
- 804. Advanced Structural Mechanics I**
Fall, 3(3-0)
Advanced linear structural mechanics. Potential energy principle. Finite element formulations. Applications to space frames. Plates and shell structures.
QP: CE 400 QA: CE 804
- 805. Advanced Design of Steel Structures**
Spring, 3(3-0)
Flexural and torsional instability of columns and beams. Slender cross-sectional elements, design of beam-columns. Torsion, plastic design, plate girders, composite steel-concrete construction, connections.
QP: CE 405 QA: CE 906
- 806. Advanced Design of Reinforced Concrete**
Fall of even-numbered years, 3(3-0)
Analysis and design of reinforced concrete components under multiaxial loads. Modeling, analysis and design of continuous reinforced concrete systems.
QP: CE 406 QA: CE 805
- 807. Concrete Materials and Technology**
Summer, 3(3-0)
Concrete properties and production, structure-property relations. Advances in concrete technology. Special engineering applications.
QP: CE 308 QA: CE 890, CE 803
- 808. Prestressed Concrete Structures**
Fall of odd-numbered years, 3(3-0)
Prestressing principles, methods and materials. Analysis and design of prestressed concrete elements and structures.
QP: CE 406 QA: CE 806
- 810. Reliability-Based Design in Civil Engineering**
Fall, 3(3-0)
Probabilistic treatment of live and dead loads: earthquakes, floods, material properties, and capacity. Reliability basis of design specifications, reliability index, probability of failure, design for reliability. Reliability of engineering systems.
QP: STT 351, CE 406, CE 418 QA: CE 890
- 812. Mechanical Properties of Soils**
Fall, 3(2-3)
Permeability, consolidation theory, stress-strain behavior, conditions of failure, shear strength. Laboratory determination of soil properties including interpretation of experimental data.
QP: CE 418, CE 419 QA: CE 817
- 815. Selected Topics in Geotechnical Engineering**
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Selected topics related to soil stabilization, highway and airport soils, and frozen ground engineering.
QP: CE 418 QA: CE 815, CE 819, CE 820
- 818. Advanced Geotechnical Design**
Spring, 3(3-0)
Foundations and earth retaining structures. Bearing capacity, settlement, and lateral resistance of deep foundations. Advanced design of retaining structures using in-situ test data. Numerical solution of geotechnical problems.
QP: CE 418, CE 419 QA: CE 818
- 821. Groundwater Hydraulics**
Fall, 3(3-0)
Physical properties of porous media. Equations of flow in saturated media. Flow nets, well flow and parameter measurement. Transport processes and the advective-dispersion equation for conservative contaminants.
QP: CE 321, CE 421 QA: CE 821
- 822. Experimental Fluid Mechanics in Civil Engineering**
Fall of even-numbered years, 3(1-6)
Design and conduct of laboratory experiments in fluid mechanics. Computer-based data acquisition. Interpretation and analysis of experimental data.
QP: CE 422
- 826. Environmental Fluid Mechanics**
Spring, 3(3-0)
Pollutant dispersion: mixing phenomena, molecular diffusion, turbulent dispersion, shear flow dispersion. The convective-diffusion equation: analytical solutions, simplified solutions. Momentum, mass and heat transport.
QP: CE 321, CE 423 QA: CE 826
- 828. Free Surface Flow**
Spring of even-numbered years, 3(3-0)
Steady and unsteady open-channel flow: profile synthesis, surge and wave phenomena, computer modeling. Coastal engineering: wave theory, wave statistics, breakwater design.
QP: CE 422 QA: CE 828, CE 824

**Descriptions—Civil Engineering
of
Courses**

- 829. Fluid Transients**
Spring of even-numbered years. 3(3-0)
Application of unsteady flow concepts and wave mechanics to hydraulic engineering; method of characteristics, surges and water hammer in piping systems, resonance phenomena.
QP: CE 321 QA: CE 829
- 831. Pavement Design and Analysis II**
Spring. 3(3-0)
Theoretical models for analysis of pavement systems. Evaluation and application of current design practices related to elastic and plastic theory. Formulation of improved design procedures.
QP: CE 494 QA: CE 840
- 835. Engineering Management of Pavement Networks**
Spring of odd-numbered years. 3(3-0)
Theoretical and statistical analysis of pavement networks. Engineering monitoring. Determination of distress mechanisms and engineering solutions. Assignment of priorities to the engineering actions.
QA: CE 890
- 837. Transportation Materials Engineering**
Fall of even-numbered years. 3(3-0)
Engineering characteristics of soils and materials commonly used in transportation facilities. Relationships of material engineering properties to pavement design and performance. Material behavior under cyclic loading.
QP: CE 418 QA: CE 815
- 838. Selected Topics in Highway and Airfield Engineering**
Fall of odd-numbered years. 1 to 4 credits.
A student may earn a maximum of 6 credits in all enrollments for this course.
Topics in pavement engineering such as nondestructive deflection testing and back calculation of layer moduli, advanced application of finite element theory in slab design, or fracture mechanics analyses of joint and crack performance.
QP: CE 494
- 839. Stabilizing Unbound Granular Materials**
Fall of even-numbered years. 3(3-0)
P: CE 431.
Improving performance and engineering properties of various granular materials through the use of mechanical processes, and chemical or mineralogical additives. Characterization of engineering properties of stabilized materials.
QP: CE 418 QA: CE 819
- 841. Traffic Flow Theory**
Spring. 3(3-0)
Microscopic and macroscopic traffic flow models, queueing theory. Gap acceptance. Simulation models for network analysis. Intelligent vehicle highway systems.
QP: STT 351 QA: CE 843
- 842. Advanced Airport Systems Design**
Fall of odd-numbered years. 3(3-0)
Analysis and design of airport systems using computer models. Design parameters, demand analysis. Runway orientation and capacity, airside delay, vehicle processing. Passenger processing.
QP: CE 442
- 843. Simulation and Optimization of Urban Traffic Flow**
Fall of even-numbered years. 3(3-0)
P: CE 841.
Statistical analysis of highway geometric designs and operational-control strategies with respect to the optimal flow of traffic: intersection, arterial, network design and control models. Traffic simulation. System management and optimization.
QP: CE 441, CE 449 QA: CE 841
- 844. Highway and Traffic Safety**
Fall of odd-numbered years. 3(3-0)
Analysis of highway geometric design alternatives and operational-control strategies with respect to accident probabilities. Statistical methods of pattern identification. Countermeasure selection and evaluation methodology. Risk management.
QP: CE 843, STT 423 QA: CE 844
- 845. Public Transportation System Planning**
Fall of odd-numbered years. 3(3-0)
Planning and operating urban and rural transportation systems. System technology and management. Budgeting and programming of transportation services. Environmental impact statements. Paratransit and demand-responsive systems.
QP: CE 346 QA: CE 845, CE 941
- 846. Statewide Transportation Network Evaluation**
Spring of even-numbered years. 3(3-0)
Transportation system measures, needs studies, sufficiency ratings. Cost allocation models, programming and budget constraints. Corridor analysis, transportation economics, demand elasticity.
QP: CE 346 QA: CE 846
- 848. Travel Demand Analysis**
Fall of even-numbered years. 3(3-0)
Advanced topics in travel demand modeling. Disaggregate and behavioral models, error analysis, and model sensitivity. Economic investment and analysis in demand context. Activity modeling.
QP: CE 448 QA: CE 848
- 849. Transportation Research Methods**
Spring. 3(3-0)
Application and interpretation of quantitative methods and design of experiments for transportation research; ANOVA, non-parametric, discriminant analysis, factor analysis, multivariate regression, SPSS.
QP: CE 351 QA: CE 849
- 890. Independent Study in Civil Engineering**
Fall, Spring, Summer. 1 to 4 credits.
A student may earn a maximum of 9 credits in all enrollments for this course.
R: Approval of department.
Research problems of limited scope not pertaining to thesis accomplished under CE 899 or CE 999.
QA: CE 880
- 891. Selected Topics in Civil Engineering**
Fall, Spring, Summer. 2 to 4 credits.
A student may earn a maximum of 9 credits in all enrollments for this course.
Selected topics in new or developing areas of civil engineering.
QA: CE 890
- 899. Master's Thesis Research**
Fall, Spring, Summer. 1 to 8 credits.
A student may earn a maximum of 24 credits in all enrollments for this course.
QA: CE 899
- 902. Random Vibration of Structural and Mechanical Systems**
Spring of even-numbered years. 3(3-0)
Interdepartmental with Mechanical Engineering and Materials Science and Mechanics.
P: CE 802 or ME 860, CE 810 or STT 351.
Probabilistic modeling of random excitations (e.g., earthquake, aerodynamic, and ocean wave loadings). Response of single and multiple degree-of-freedom systems to random excitation. Designing against failure. Nonstationary and nonlinear problems.
QP: CE 802, ME 823, STT 351, STT 441 QA: CE 807
- 904. Advanced Structural Mechanics II**
Spring. 3(3-0)
P: CE 804.
Complementary energy, hybrid finite element, applications of plasticity theory. Nonlinear analysis of frames. Nonlinear finite elements. Computer implementation.
QP: CE 804 QA: CE 890
- 906. Advanced Theory of Concrete Composites and Structures**
Spring of odd-numbered years. 3(3-0)
P: CE 806.
Applications of fracture mechanics and plastic theories to modeling the mechanical behavior of concrete composites and structures. Fiber reinforced concrete.
QP: CE 406 QA: CE 905, CE 803
- 915. Earth Structures**
Fall of odd-numbered years. 3(3-0)
P: CE 812.
Design of earth dams and embankments. Natural and cut slopes, slope stability analysis. Embankments on soft foundations, seepage analysis, earth reinforcement. Instrumentation.
QP: CE 817 QA: CE 915
- 916. Soil Dynamics**
Spring. 3(3-0)
P: CE 812.
Vibration fundamentals and wave propagation in soil media. Dynamic soil properties. Theory and design of foundations for vibratory loads. Characteristics of ground motion during earthquakes. Soil liquefaction. Settlement under transient and repeated load
QP: CE 817 QA: CE 916
- 921. Advanced Topics in Groundwater**
Spring of even-numbered years. 3(3-0)
P: CE 821.
Formulation and use of numerical simulation to model the physics of flow and contaminant transport in complex settings or the mechanics of immiscible fluids in porous media.
QP: CE 821 QA: CE 921
- 929. Selected Topics in Hydraulics**
Fall of odd-numbered years. 1 to 3 credits.
A student may earn a maximum of 6 credits in all enrollments for this course.
P: CE 826 or CE 828 or CE 829.
Advanced fluid mechanics and hydraulics related to civil and environmental engineering.
- 999. Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 24 credits.
A student may earn a maximum of 72 credits in all enrollments for this course.
QA: CE 999

CLASSICAL STUDIES CLA

**Department of Romance and
Classical Languages
College of Arts and Letters**

- 120. English from Latin and Greek Roots**
Fall of odd-numbered years. 3(3-0)
Prefixes, suffixes, and roots of English vocabulary from Greek and Latin word elements.
QA: CLA 220
- 121. Medical Terminology**
Spring of odd-numbered years. 3(3-0)
Basic Greek and Latin word elements used in the formation of prefixes, suffixes, and roots.
QA: CLA 221
- 300. Greek Civilization**
Fall. 3(3-0)
R: Not open to freshmen.
Political, social, religious, and intellectual life of ancient Greece from the Mycenaean period to the death of Alexander the Great, through such authors as Homer, Herodotus, Aeschylus, Euripides, Aristophanes, Thucydides, and Plato.
QA: CLA 326
- 310. Roman Civilization**
Spring. 3(3-0)
R: Not open to freshmen.
Enduring features of Roman civilization to Justinian. Political institutions, religion, architecture, literary forms, creative arts, and gender roles.
QA: CLA 327
- 350. Greek and Roman Literature in English Translation**
Fall. 3(3-0)
R: Not open to freshmen.
Representative works of major Greek and Roman authors.
QA: CLA 304, CLA 305