



# OHIO STATE UNIVERSITY

## Credit by Examination 2008 - 2009



Office of Testing ♦ 820 Lincoln Tower ♦ 1800 Cannon Drive ♦ Columbus, OH 43210 ♦ 614-292-2241 ♦ [testing@exchange.ureg.ohio-state.edu](mailto:testing@exchange.ureg.ohio-state.edu)  
 ♦♦♦ We're Moving! Effective August 25<sup>th</sup> – visit us in 090 Pressey Hall ♦ 1070 Carmack Road ♦♦♦

### What is the Credit by Examination Program?

Students can earn credit toward graduation at Ohio State University upon successful completion of tests in the Credit by Examination Program. Successful completion of any of these tests results in a designation of “EM” credit on the student’s permanent record. The credit does not affect the student’s grade point average, but does count as hours toward graduation. The six types of exams that can produce EM credit at OSU are outlined below.

- A. Two categories of exams measure knowledge of specific OSU course content. Only students currently enrolled at OSU main campus may take these exams.
  1. **EM Tests (pages 2 – 4)** are constructed by faculty members and administered by OSU’s Office of Testing.
  2. **Departmental Exams (pages 4 – 7)** are administered by OSU’s academic units; this includes foreign language placement exams.
- B. Four categories of exams are administered nationwide to assess proficiency in various fields of study. Students need not be enrolled at OSU at the time these tests are taken.
  1. **CLEP Tests\* (page 8)** are computer based tests administered in OSU’s Office of Testing.
  2. **APP Tests\* (page 8)** are taken by high school students enrolled in the Advanced Placement Program to earn college credit.
  3. **DSST Exams (page 7)** are often taken by military personal and are administered at OSU’s Office of Testing.
  4. **IB Tests\* (page 7)** are taken by students participating in the International Baccalaureate Program to earn college credit.

\***Current** scores and credits for CLEP, APP, and IB exams are listed on page 7. **These credits are subject to change** as a result of ongoing departmental review.

### Who is eligible for the program?

All currently enrolled Ohio State University undergraduates are eligible to take EM Tests, Departmental Exams, and CLEP Tests. **Students still in high school** may take certain CLEP and APP examinations, with the credit awarded upon enrollment at Ohio State University. Regional campus students who are interested in departmental examinations should contact their local campus offices.

### Which OSU courses offer credit by examination?

The list of exams and their corresponding course credits follow on the next few pages. Students interested in earning EM credit for any Ohio State University course not listed should contact the department offering the course to determine if a proficiency examination is available.

### What are the restrictions on the program?

EM credit will NOT be awarded for courses that are prerequisites to those for which college credit has already been earned, or for any course in which a student has received either a mark at OSU or transfer credit from another institution. **Students currently enrolled in a course may take an EM test for that course only during the first week of the quarter.** Students are advised to check their individual college bulletins for exclusion information that would prevent the awarding of EM credit in any particular course, program, or subject area. Use the contact information on pages 7-8 to find the restrictions imposed by the national testing programs such as CLEP and DSST. Students who fail to obtain a credit-granting score on one type of exam may generally take another type of exam for the same course (for example, a student who does not earn credit from an IB or APP test may take a CLEP or EM test for the same course). **Please note that EM Tests cannot be repeated.**

### How much EM credit can be earned?

With approval from the appropriate academic units, students may earn up to 45-quarter hours of examination credit. Additional EM credit hours may be authorized by special action of the academic units and the Council on Academic Affairs.

### What are the examination fees?

The administration fee for EM tests administered by the Office of Testing is \$40. Charges for the national-level CLEP tests are described later in this publication. DSST exam fees vary depending on the specific test, but an additional administration fee is paid to the Office of Testing for each test.

The Office of Testing is a cashless office. Please plan to pay your exam fees by credit card, check, or money order.

### What test preparation help is available?

Information about the textbooks used to prepare for EM tests is included in the test descriptions in this brochure. Students taking a CLEP test are encouraged to visit [www.collegeboard.com/clep/](http://www.collegeboard.com/clep/) as part of their test preparation.

*For more information, or to schedule an exam, contact The Ohio State University Office of Testing at (614) 292-2241. The office is located in 820 Lincoln Tower, 1800 Cannon Drive through mid-August. The Office of Testing plans to move to 097 Pressey Hall, 1070 Carmack Road, in August. Please call 614-292-2241 for more information on this move or directions.*

This brochure is printed once per year. The information contained in this document is subject to change. To check for updates that took effect after this document went to print, visit <http://www.ureg.ohio-state.edu/ourweb/Tests/>.

## EM Tests

EM Tests, administered by the Office of Testing, may be scheduled by calling (614) 292-2241. There is a \$40 administration fee. Students must present their university identification cards upon arrival in the Office of Testing. If a prerequisite is listed for any Ohio State examination for credit, students may be asked to provide written evidence of having met that requirement, such as a grade slip showing completion of the course or a current registration form indicating enrollment in the course.

EM Tests are given throughout the quarter, but are not repeatable. **Students taking an EM test for a course in which they are currently enrolled must test within the first week of the quarter.**

The number appearing in parentheses after each course indicates the number of quarter credit hours awarded for that course. Check other sections of this brochure to determine if CLEP, APP, or IB tests are accepted for credit for the courses listed below.

## Accounting

### 211 Introduction to Financial Accounting (5)

Not open to students with credit for AMIS 201, AMIS 310, AMIS 501 or equivalent. The 2-hour multiple-choice examination is designed to test the student's understanding of the principles that govern the preparation of financial statements. The exam will also test the student's ability to interpret financial accounting information that serves as the basis for a wide variety of business decisions. Use of a calculator is allowed. Recommended text: Current text for AMIS 211 (available at University bookstores).

### 212 Introduction to Management Accounting (5)

It is recommended that the student have a level of knowledge comparable to that of students who have completed AMIS 211 and Economics 200 or equivalent. Not open to students with credit for AMIS 201, AMIS 310, AMIS 501 or equivalent. A 2-hour multiple-choice examination designed to test the student's understanding of the concepts and techniques that management accountants use to produce information for decision making. The exam will also test the student's comprehension of the types of cost information that management accountants use for making short-term planning and control decisions and for formulating long-range plans. Use of a calculator is allowed. Recommended text: Current text for AMIS 212 (available at University bookstores).

## Astronomy

### 161 Introduction to Solar System

#### Astronomy (5)

Physical nature of the sun and its family of planets, satellites, comets, and minor bodies; gravitation, light, and telescopes. Prerequisite: Math 075, 076 or 102, or Math Placement Level R. Not open to students with credit for Astronomy 171. A 3-hour essay exam. Recommended text: Hester, et al., *21st Century Astronomy*.

### 162 Introduction to Stellar, Galactic, and Extragalactic Astronomy (5)

Structure, motions, and evolution of stars, interstellar material, galaxies, and the universe as a whole. Prerequisite: Astronomy 161. Not open to students with credit for Astronomy 172. A 3-hour essay exam. Recommended text: Hester et al., *21st Century Astronomy*

### 171 Solar System Astronomy (5)

Development of astronomy and astrophysics; nature of the solar system, including planets, satellites, comets, asteroids, and the solar atmosphere. Prerequisite: Math 150. Not open to students with credit for Astronomy 161. GEC Phys Sci course. Recommended text: Hester et al., *21st Century Astronomy*.

### 172 Stellar, Galactic, and Extragalactic Astronomy (5)

Structure and evolution of stars, interstellar medium, galaxies and the universe. Prerequisite: Astronomy 171. Not open to students with credit for Astronomy 162. GEC Phys Sci course. Recommended text: Hester et al., *21st Century Astronomy*.

### 291 Basic Astrophysics and Planetary Astronomy (5)

Motions and physical nature of objects in the solar system; Electromagnetic radiation, telescopes, and astronomical detectors. Prerequisite or concurrent: Physics 133. Intended only for BS students. A 3-hour exam combining numerical problems, short answer and multiple-choice questions. Use of a calculator is allowed. Recommended text: Zeilik, Gregory and Smith, *Astronomy & Astrophysics*.

### 292 Stellar, Galactic, and Extragalactic Astronomy and Astrophysics (5)

Observational and physical properties of the sun and stars; stellar structure and evolution; interstellar medium; galaxies, cosmology. Prerequisite: Astronomy 291. Intended only for BS students. A 3-hour exam combining numerical problems and short answer questions. Use of a calculator is allowed. Recommended text: Zeilik, Gregory and Smith, *Astronomy & Astrophysics*.

## Biology

### 101 Introductory Biology I (5)

The major concepts and principles of biology and their interrelationships. Not open to students with credit for 108, 110, 113 or H115. Credit for this course will not count toward the minimum number of hours required for graduation if a student completes 107 and 108, or 113 and 114, or H115 and H116. Recommended text: Campbell and Reece, *Essential Biology*.

### 102 Human Biology (5)

Human Biology with emphasis on anatomy & physiology (35%), human origins & evolution (22%), DNA & genetics (17%), and human diseases (10%). Not open to students with credit for 107, 110, 114 or H116. Credit for this course will not count toward the minimum number of hours required for graduation if a student completes 107 and 108, or 113 and 114, or H115 and H116. Recommended text: Mader, *Human Biology*, 7<sup>th</sup> edition.

### 113 Biological Sciences: Energy Transfer and Development (5)

Exploration of biology and biological principles; topics include macromolecules, cell function, structure and division, photosynthesis, respiration, protein synthesis, and genetics. Not open to students with credit for Biology H115. A 2-hour exam with matching, multiple-choice or short essay questions. Recommended text: Campbell, *Biology*, 6<sup>th</sup> edition.

### 114 Biological Sciences (5)

Continuation of 113; diversity, structure, function, behavior, and ecology among prokaryotes and eukaryotes. Not open to students with credit for H116. A 2-hour exam with matching, multiple-choice or short essay questions. Recommended text: Campbell, *Biology*.

**101 Introduction to Plant Biology I (5).** Plants and their relationships to humans and the biosphere; plant structure and function, growth, and development. Not open to students with credit for 102 or Biology 101 or 113. A 2-hour test with 100 multiple-choice questions. Recommended text: Nabors, *Introduction to Botany*.

### 102 Introduction to Plant Biology II (5)

Plant genetics and biotechnology, diversity and evolution. A 2-hour multiple-choice test. Recommended text: Nabors, *Introduction to Botany*.

## Bus Adm: Finance

### 620 Business Finance (4)

It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Economics 200 and 201 or equivalent and Accounting 310, 212, or equivalent. A 2-hour multiple choice exam designed to evaluate the student's understanding of financial statements, financial ratio analysis, time value of money, risk and return, valuation, cost of capital and capital budgeting. Recommended text: Brealey, Myers and Marcus, *Fundamentals of Corporate Finance*, latest edition. 620 covers chapters 1-12 and 17.

## Business Administration: Management of Human Resources

### 701 Introduction to Organizational Behavior (5)

Not open to students with credit for BUS-MHR 400 or equivalent. A 2-hour multiple-choice designed to evaluate the student's understanding of individual and group behavior in organizations, procedures for supporting and strengthening emergent behavior, and organizational interaction with environments. Recommended text: Hitt, Miller, Colella: *Organizational Behavior, A Strategic Approach* and DeCenzo, Robins: *Fundamentals of Human Resource Management*

## Bus Adm: Marketing & Logistics

### 650 Marketing (4)

Critical survey of field of marketing; structure, functions, policies, costs, and problems analyzed from consumer and other viewpoints; emphasis on principles, trends, and quantitative expression. It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Economics 200 or equivalent. A 2-hour multiple-choice exam designed to evaluate the student's understanding of the broad area of marketing described above. Recommended text: Berman & Evans, *Marketing*.

## Chemistry

**IMPORTANT:** All students who wish to test in chemistry must call the Chemistry Department at (614) 292-1204 or send an e-mail to [bailey.3@osu.edu](mailto:bailey.3@osu.edu) to obtain a referral from Ms. Mary Bailey before a chemistry test can be scheduled.

**Note:** Only non-programmable calculators may be used during the following examinations in the Chemistry series. Calculators may not be shared.

### 101 Elementary Chemistry (5)

An introductory course covering the fundamental principles of chemistry. Students must show proof of placement in Mathematics 116. Not open to students with credit for Chemistry 121 or H201. A 1-hour and 45-minute objective exam.

### 102 Elementary Chemistry (5)

Continuation of Chemistry 101; organic chemistry and biochemistry; a terminal course in chemistry for students requiring only two courses in chemistry. Students must have credit for Chemistry 101 or 121. A 1-hour and 45-minute objective exam.

### 121 General Chemistry (5)

A general course in fundamental chemical principles, including atomic theory, stoichiometry, electronic structure, bonding. Students must have had high school chemistry or the equivalent, and must show proof of placement in Mathematics 150. Not open to students with credit for Chemistry H201. A 1-hour and 45-minute objective exam.

### 122 General Chemistry (5)

Continuation of Chemistry 121; states of matter, solutions, kinetics, equilibrium, acids and bases. Students must have credit for Chemistry 121, or have a grade of A or A- in Chemistry 101 and must be eligible for Mathematics 150. Not open to students with credit for Chemistry 125 or H202. A 1-hour and 45-minute objective exam.

### 123 General Chemistry (5)

Continuation of Chemistry 122; aqueous equilibria and qualitative analysis, thermodynamics, electrochemistry, descriptive chemistry of non-metals and metals. Students must have credit for Chemistry 122 or 125. Not open to students with credit for Chemistry H203. A 1-hour and 45-minute objective exam.

### 125 Chemistry for Engineers (4)

Continuation of Chemistry 121 for engineering students; states of matter, solutions, kinetics, equilibrium, acids and bases, thermodynamics, and electrochemistry. Students must have credit for Chemistry 121 and must show proof of placement in Mathematics 151. Not open to students with credit for Chemistry H202 or 122. A 1-hour and 45-minute objective exam.

## Computer Science & Engineering

### 200 Computer Assisted Problem

#### Solving for Business (5)

CS&E 200 offers an EM exam – 5 credit hours equivalent. This exam is given in two parts – a written exam proctored at the University Testing Center and a lab exam given to only those who pass the written exam – with minimum scores for each topic. The content of this exam includes general computer topics – 5%, presentation graphics (PowerPoint) – 5%, spreadsheets (Excel) – 50% and databases (Access) – 40%. The emphasis of the course is on solving problems using spreadsheets and databases. A detailed list of topics, sample problems, and other course materials can be found on the CS&E200 website at [www.cse.ohio-state.edu/cis200](http://www.cse.ohio-state.edu/cis200). Permission of the Course Coordinator, Debra Gross, is required in order to take the exam. A referral form can be obtained during Ms. Gross's office hours as listed on her website at [www.cse.ohio-state.edu/~gross](http://www.cse.ohio-state.edu/~gross) (her office is located in Dreese Labs 489). She can also be reached at 292-7946 or at [gross.142@osu.edu](mailto:gross.142@osu.edu). It is recommended that candidates go through the course notes before attempting the exam. Notes are available through Cop-EZ for about \$25.

## Earth Sciences

### 100 Planet Earth: How it Works (5)

The materials of the Earth's crust, the processes that produce and modify them, and the development of the Earth and its life forms through time. Not open to students with credit for Geological (or Earth) Sciences 121 or 122. A 2-hour objective and essay exam. Recommended texts: Marshak, *Essentials of Geology*, 2003 and Murck and Skinner, *Geology Today: Understanding our Planet*, 1999; and a standard laboratory manual in introductory geology.

### 110 History of Life on Earth - Global Change in the Biosphere (5)

3.5 billion years of biosphere global change: Introduction to major evolutionary and extinction events; processes responsible for change; and biosphere, atmosphere, and lithosphere interrelationships. Recommended text: Ausich, W.I. and N. Gary Lane, *Life of the Past*, Prentice Hall, 1999, 321 pgs.

### 121 Physical Geology (5)

Minerals and rocks and their origin; land forms and how they are produced; structural features of the Earth's crust. A 2-hour objective exam. Recommended texts: Plummer & McGeary, *Physical Geology*, 1999; Thompson and Turk, *Modern Physical Geology*, 1997; Skinner & Porter, *The Dynamic Earth*, 2000; Freeman, *Geoscience Laboratory*, 1996.

## Economics

### 200 Principles of Microeconomics (5)

Introduction to economic theory: supply and demand for goods and services; market structure; the distribution of income. Recommended texts: Lipsey and Courant, *Microeconomics*, Addison-Wesley; Parkin, *Microeconomics*, Addison-Wesley.

### 201 Principles of Macroeconomics (5)

Theory of national income determination; economic fluctuations; money; government policy; international economics. Recommended texts: Abel, Bernanke and Croushore, *Macroeconomics*, Pearson and Bade and Parking, *Foundations of Macroeconomics*, Peason / Addison Wesley.

## History

The Department of History has compiled a one page study suggestion sheet for EM examinations in history. This fact sheet can be obtained at the Office of Testing in 820 Lincoln Tower.

### 111 Western Civilization: Antiquity to The Seventeenth Century (5)

A 2-hour essay exam. Ancient civilizations (Near East, Greece, Rome); barbarian invasions; medieval civilizations (Byzantium, Islam, Europe), Renaissance and Reformation. Recommended text: McKay, Hill, Buckler, *History of Western Society*, Vol. I.

### 112 Western Civilization through Modern Times (5)

A 2-hour essay exam. Political, scientific, and industrial revolutions; nationalism; the two world wars; decline of empires; the cold war. Recommended text: McKay, Hill, Buckler, *History of Western Society*, Vol. II

### 151 American Civilization to 1877 (5)

Not open to students with credit for History 103, 121, 122, or 230. A 2-hour essay exam. Covers the general social, political, constitutional, and economic development of the United States from the Pre-Columbian period through the era of Reconstruction. Recommended text: Nash & Jeffrey, *The American People*, Vol. I

### 152 American Civilization since 1877 (5)

Not open to students with credit for History 104, 122, 123, or 230. A 2-hour essay exam. Covers the general social, political, constitutional, and economic development of the United States from the Reconstruction era to the present. Recommended text: Nash & Jeffrey, *The American People*, Vol. II

### 181 World History to 1500 U (5)

History of the human community to 1500, primary emphasis on history of civilizations, and secondary emphasis on patterns of regional and hemispheric integration. Recommended text: Richard Bulliet, *The Earth and Its Peoples*, Vol. I

### 182 World History, 1500 to Present U (5)

History of the human community from 1500 to the present, primary emphasis on processes of global integration, and secondary emphasis on comparative civilization. Recommended text: Richard Bulliet, *The Earth and Its Peoples*, Vol. II.

## Horticulture and Crop Science

### 200 Crop Science (5)

It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Biology 101 or 113 or equivalent. A 2-hour objective exam. Covers the importance of plants to human existence and the ecological principles that are the foundation for all crop-growing systems. Topics include: ecology, research in plant science, agriculture and its effects on the earth's ecosystems, climate and soils, agricultural biodiversity, carbon and energy flow in agriculture, input and fate of plant nutrients, plant populations and resources, weeds and pests, crop ecosystems, and social influences and requirements. Recommended text: Hartmann's *Plant Science*, 4<sup>th</sup> ed. McMahon, Kofranek, Rubatzky. Prentice Hall Publishing.

## Mathematics

The Department of Mathematics offers credit by examination for the courses listed below. However, exams for math 050, 075, or 104 are given only for determination of placement level, at no charge; no examination credit is awarded. Students who believe their math placement results are inaccurate may schedule a proficiency test (similar to a final exam) over the course of their initial placement. Students who demonstrate proficiency will be permitted to schedule more advanced courses. Examinations over other courses may be available upon request. Arrangements should be made through the Math Counseling Office, 250 Mathematics Building, 231 West 18<sup>th</sup> Avenue, Columbus, OH 43210; phone (614) 292-6994.

### 130 Mathematical Analysis for Business I (4)

Equations, inequalities, absolute value, functions, polynomials, exponential and logarithmic functions, matrices, and applications to business. Prerequisite: 104 or placement M or N on the OSU Math Placement Test, or written permission of department. Not open to students with credit for 150 or higher numbered mathematics course.

### 131 Mathematical Analysis for Business II (4)

Differential calculus, limits, definition of derivative, calculation of derivative, curve sketching applications. Prereq: 130, 148, 150 or Math Placement code L. Not open to students with credit for 151 or higher.

### 132 Mathematical Analysis for Business III (5)

Integral calculus, indefinite integration, area and definite integrals, improper integrals, functions of several variables, maxima, minima. Prereq: 131 or 151. Not open to students with credit for 152 or higher.

### 148 Algebra & Trigonometry and Their Applications (4)

Applications from chemistry, physics and biology involving integer and rational exponents, solving and graphing linear and quadratic equations, systems of equations, trigonometry and acute angles, vectors and exponential equations. Prereq: 104 or satisfactory score on OSU Math Placement Test. Not open to students with credit for Mathematics 150 or higher numbered mathematics course.

### 150 Elementary Functions (5)

Polynomial and rational functions; Inverse functions; logarithmic, exponential and trigonometric functions and their graphs; complex numbers. Prereq: 148 or satisfactory score on OSU Math Placement Test or permission of department. Not open to students with credit for Mathematics 151, 161, H161 or H190 or higher mathematics course.

### 151 Calculus and Analytical Geometry I (5)

Limits, continuity, derivatives, Mean Value Theorem, extrema, curve sketching, related rates, differentiation of logarithmic, exponential and trigonometric functions. Prereq: 150 or satisfactory score on OSU Math Placement Test. Not open to students with credit for 141 or 152 or higher numbered mathematics course.

### 152 Calculus and Analytical Geometry II (5)

Integrals, area, fundamental theorems of calculus, logarithmic and exponential functions, trigonometric and inverse trigonometric functions, methods of integration, applications of integration, polar coordinates. Prereq: 151. Not open to students with credit for 153 or higher numbered mathematics course.

### 153 Calculus and Analytical Geometry III (5)

Indeterminant forms, Taylor's formula, improper integrals, infinite series, parametric curves and vectors in the plane; vectors, curves and surfaces in space. Prereq: 152. Not open to students with credit for 254 or higher.

### 254 Calculus and Analytical Geometry IV (5)

Partial differentiation, LaGrange multipliers, multiple integrals, line integrals, and Green's Theorem. Prereq: 153. Not open to students with credit for 255 or higher.

## Physics

Note: Calculators may be used.

### 111 General Physics: Mechanics (5)

Prerequisite: Math 148 or equivalent. A 1-hour 48-minute objective exam. Covers kinematics, vectors, and projectile motion, Newton's laws, friction, circular motion, gravitation, work, power, kinetic energy, potential energy, conservation of energy and momentum, center of mass, torque, rotational dynamics, statics, pressure, and kinetic theory. Recommended text: Giancoli, *Physics*, 5<sup>th</sup> edition, (chapters 2-10, 13), Prentice Hall, 1998.

### 112 General Physics: Electricity, Magnetism, and Light (5)

Prerequisite: Physics 111. A 1-hour 48-minute objective exam. Covers Coulomb's law, Electric Field, Electric Potential, DC circuits, capacitors, magnetic fields and forces, Faraday's law, RC circuits, simple harmonic motion, reflection and refraction of waves, mirrors and lenses. Recommended text: Same as for Physics 111 (chapters 16-21, 11, 23).

### 113 General Physics: Physics Optics and Modern Physics (5)

Prerequisite: Physics 112. A 2-hour objective exam. Covers interference and diffraction of waves, polarization of light, special relativity, Bohr Atom, particle nature of light and wave nature of matter, Uncertainty Principle, quantum numbers for an atom, chemical bonds, nuclear energy, radioactive decay. Recommended text: Same as for Physics 111 (Chapters 11, 12, 24, 26-31).

## Psychology

### 100 General Psychology (5)

Introductory psychology, a prerequisite to advanced courses; the application of the scientific method to behavior; topics include learning, motivation, perception, personality, physiological basis of behavior. A 2-hour objective exam covering topics included in the above description as well as development and statistics. Recommended text: David G. Myers, *Psychology*, 7<sup>th</sup> edition.

## Departmental Exams

This section describes examinations administered by individual departments of instruction. Details on the special arrangements necessary to take these tests can be obtained by calling the individual numbers listed below, all of which have area code 614.

The number appearing in parentheses after each course indicates the number of quarter hours credit awarded for that course. Check the other sections of this brochure to determine if CLEP or APP Tests are accepted for credit for the courses listed below.

## Aeronautical & Astronautical Engineering

292-2691

These exams are administered through the department. Please direct your questions to the department at the above number.

### 200 Elements of Aeronautics and Astronautics (5)

### 201 Elements of Aeronautics and Astronautics (5)

## Agricultural, Environmental and Development Economics

292-6285

### 200 Principles of Food and Resource Economics (5)

Not open to students with credit for Economics 200. A 3-hour objective-essay exam comprised of multiple-choice questions and calculation-type problems. Covers the strengths of a market economy; production, consumption and price determination; government regulation of markets; human resources and land-policy problems. Recommended text: *The Micro-Economy Today with Discover Econ with Solman Videos* by Shiller, McGraw Hill.

## Biochemistry

292-6771

### 211 Elements of Biochemistry I (3)

A survey of biochemistry in a two-quarter sequence stressing the qualitative rather than the quantitative approach. Prereq: Chemistry 102 or 122. Credit does not count toward a major in biochemistry. Recommended text: Campbell, *Biochemistry*, 3<sup>rd</sup> edition.

### 212 Elements of Biochemistry II (3)

A continuation of 211. Prereq: 211. Credit does not count toward a major in biochemistry. Recommended text: Campbell, *Biochemistry*, 3<sup>rd</sup> edition.

### 511 Introduction to Biological Chemistry (4)

It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Chemistry 123 and 235 or 241, and 2 quarters of biological sciences; or equivalents. An individual exam will be designed for each student to emphasize the general aspect of biochemical knowledge equivalent to that presented in Biochemistry 511. Students lacking knowledge in some relatively specialized area will not be penalized.

## 613, 614, 615 Biochemistry and Molecular Biology (12)

It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Chemistry 242 or 253; 2 quarters of biological sciences; or equivalents. Those students with credit for Biochemistry 511 are not ordinarily admitted. An exam that emphasizes the general aspects of biochemical knowledge equivalent to that presented in Biochemistry 613, 614 and 615 will be prepared as required. Recommended text: Voet and Voet, *Biochemistry*, 3<sup>rd</sup> edition.

## Computer Science and Engineering

292-5813

### 101 Computer Aided Problem Solving CSE

The CS&E 101 EM Exam is given in two parts by the department. First a 2 hour written exam is given by the department coordinator. If the student passes the written test by 80%, a lab exam is given. The written exam consists of the following topics: General Computer Knowledge & Internet Topics (10%), Word Processing (5%), Presentation Graphics (5%), Spreadsheets (40%), Databases (40%). Recommended text: In order to prepare for the course we suggest that you get a copy of the course notes available from Cop-Ez. This book contains both the lecture notes and problems that you will find in the Excel and Access portions of the exam.

## Consumer and Textile Sciences

292-4389

### 270 Aesthetics of Appearance (3)

A 2-hour multiple-choice, objective exam; also includes a visual analysis of appearance, apparel & interior furnishings products. Covers elements and principles of design as applied to aesthetic norms, color psychology, body concerns, personality expression, and social context. A score of 80 is required to gain EM credit in this course. Recommended text: Fiore & Kimle, *Understanding Aesthetics for the Merchandising & Design Professional*.

## Food, Agricultural, and Biological Engineering

292-6891

### 232 Ag & Con SM Sml Air-Cool Eng (4)

### 240 Ag & Con SM Fabri of Metal (4)

### 241 Ag & ConSM Bldg Mtrl and Const Agr (4)

### 371 Ag & ConSM Land Surveying (2)

## Human Nutrition

292-4485

### 310 Fundamentals of Human Nutrition (5)

Nutrient and food energy needs of the human biological system throughout the life cycle with consideration of socio-psychological factors. It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed 5 credit hours of biological sciences or an equivalent, a comprehensive introductory chemistry course, and an introductory nutrition course. A 2-hour objective and essay exam. A score of 80% is necessary to pass. Recommended text: Wardlaw G, *Perspectives in Nutrition*, 7<sup>th</sup> edition.

## Mathematics

292-6994

Students who feel that their mathematics placement into 050, 075, or 104 is incorrect or who wish to qualify for more advanced courses will have an opportunity to take a proficiency exam.

Students will not take another placement test, but rather an exam similar to a final over the course of their initial placement. A score of 70% or higher is required for consideration of being moved ahead. While any student is welcome to take advantage of this testing opportunity, experience has shown that only about 5% of those who test actually succeed in advancing their placement.

Students interested in scheduling for a test should contact the Math Counseling Office, 250 Math Building, 231 W. 18<sup>th</sup> Avenue, Columbus, OH 43210.

## Music

292-6571

Examinations must be arranged through the area chairperson for each course. Contact the School of Music, 110 Weigel Hall, 1866 College Road, Columbus, OH 43210.

### 201 Music

### 220 Introduction to Music Technology (3)

### 221 Music Theory I (3)

### 222 Music Theory II (3)

### 223 Music Theory III (3)

### 225 Aural Training I (2)

### 226 Aural Training II (2)

### 261 Applied Music Methods and Materials I (1 or 2)

### 262 Applied Music Methods and Materials II (2)

### 263 Applied Music Methods and Materials III (2)

### 264 Applied Music Methods and Materials IV (2)

### 421 Music Theory IV (3)

### 422 Music Theory V (3)

### 423 Music Theory VI (3)

### 424 Aural Training III (2)

### 425 Aural Training IV (2)

### 426 Aural Training V (2)

## Natural Resources

292-2265

### 232 Landscape Maintenance (4)

Students who feel that they have sufficient expertise in the course content of Hort/Nat Res 232 may obtain credit for this course upon successful completion of an exam administered by the appropriate instructors (Dr. Davis Sydnor). A single lecture-based exam, covering various aspects of landscape maintenance such as transplanting, pruning, staking, mulching, nutrition, pest and pathogen control, physiological disorders, soil modification.

### 631 Arboriculture (5)

Environmental factors affecting plant growth and the planting, fertilization, pruning, cabling, and diagnosis of disorders in commercial arboriculture, city, forestry, park, and industrial grounds maintenance. It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Horticulture 435; Plant Biology 436; Entomology 460.01 and Plant Pathology 401. A 2-hour essay exam. Recommended text: See instructor.

## Physics

292-5713

### 131 Introductory Physics: Particles and Motion (5)

A presentation of the major concepts of physics from a contemporary point of view, for students majoring in physical sciences, mathematics, or engineering. It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Physics 131. Students must show proof of eligibility to enter Mathematics 152. Not open to students with credit for Physics 131. A 2-hour objective exam. Recommended text: Knight, *Physics for Scientists and Engineers*, extended (Chapters 1-13); or equivalent chapters in other texts such as Halliday, Resnick and Walker, *Fundamentals of Physics*, 6<sup>th</sup> ed; Serway and Jewett, *Physics for Scientists and Engineers*, 6<sup>th</sup> ed.

## Physics (continued)

### 132 Introductory Physics: Electricity and Magnetism (5)

It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Physics 132. Students must show proof that Physics 131 was completed with a passing grade and eligibility to enter Mathematics 153. A 2-hour objective exam. Recommended text: Knight, *Physics for Scientists and Engineers*, extended (Chapters 25-33); or equivalent. See list for Physics 131.

### 133 Introductory Physics: Thermal Physics, Waves and Quantum Physics (5)

It is advised that the student have a level of knowledge or experience comparable to that of students who have successfully completed Physics 133. Students must show proof that Physics 132 was completed with a passing grade and of eligibility for Mathematics 254. A 2-hour objective exam. Recommended text: Knight, *Physics for Scientists and Engineers*, extended (Chapters 20-22, 24, 36-40, plus selected topics); or equivalent. See list for Physics 131.

## Soil Science

292-2265

### 300.01 Soil Science (3)

Students should have knowledge or experience equivalent to those having completed Chemistry 101, 121 or equivalent. A 2-hour objective exam covers the processes and factors important in the formation and differentiation, behavior, and management of soils. Emphasis is placed on the roles of soil physical and chemical composition on biological activity, nutrient cycling, and water retention and movement. Recommended text: Brady, Weil, Singer & Munns, *Introduction to Soils*.

## Departmental Exams: Foreign Language examinations

This section describes the procedures for taking foreign language examinations for credit and placement. Please read all instructions carefully concerning these examinations since there are significant differences in the programs offered by each department.

Students unconditionally admitted to the university are required to take the placement exam in the language used for admission. A student is not required to continue this language regardless of the score of the placement exam.

The number appearing in parentheses after each course indicates the number of quarter hours credit awarded for that course. Check the other sections of this brochure to determine if EM, CLEP, or APP Tests are accepted for credit for the courses listed below.

**Placement test coordination** The Foreign Language Center coordinates and administers the computerized placement tests in French, German, and Spanish. The Foreign Language Center also serves as a clearinghouse for placement tests in other languages.

**Placement testing** Students who have had two or more years of the same language in high school are required to take a placement/proficiency test in that language. Those students who do not intend to register for a language course and/or desire EM credit for previous language study or experience must also take the tests. When the preliminary results indicate eligibility for EM credit above the 104 level, the student may be asked to take a supplementary proficiency test, which is given by special arrangement. Students are asked to contact the appropriate department for information about these supplementary exams. Transfer students without language transfer credit take the placement exam during their orientation program. Students are advised to continue their study of the language immediately.

**Quarterly testing schedule** French, German, Latin, Italian and Spanish placement exams are regularly scheduled as part of new student orientation programs. Details concerning these exams are provided in the orientation literature. Exams for these languages may also be taken during the quarter. Students who did not take these exams during Orientation should contact the Foreign Language Center; Latin should contact the department.

## Arabic

A proficiency examination is usually curriculum free and requires no knowledge of a particular textbook, only a level of demonstrable ability in the language. However, knowledge of one or more of the textbooks listed under each course might help in shaping students' expectations about the examination. Only the department of instruction administers these tests and they include oral and written components. Students who wish to schedule a test should contact the Department of Near Eastern Languages and Cultures, 300 Hagerty Hall; phone (614) 292-9255.

### 101.01 Elem Mdn Standard Arabic I (5)

Recommended text: Alish, *Ahlan wa Sahlan: Functional Modern Standard Arabic*, Yale UP. Lessons 1-10

### 102.01 Elem Mdn Standard Arabic II (5)

Recommended text: Alish, *Ahlan wa Sahla: Functional Modern Standard Arabic*, Yale UP. Lessons 11-20.

### 103.01 Elem Mdn Standard Arabic III (5)

Recommended text: Alish, *Ahlan wa Sahla: Functional Modern Standard Arabic*, Yale UP. Lessons 21-30.

### 104.01 Inter. Mdn Standard Arabic I (5)

Recommended text: Alish, *Intermediate Arabic I*, (84).

## Chinese

Administered only by the department of instruction, placement and EM credit examinations normally are offered by appointment. Students with previous knowledge of Chinese who do not seek EM credit for this experience but who wish to enroll initially in a course above the level of Chinese 101 are required to take the appropriate placement examination(s) before permission to enroll will be granted. Students who do desire EM credit for previous language study or experience must pass the relevant examination(s) with an acceptable score.

**Note:** A native speaker of Chinese is required to be anyone who graduated from a high school in which the principle language of instruction was Chinese..

Requests for further information may be addressed to the Department of East Asian Languages and Literatures, 398 Hagerty Hall; phone (614) 292-5816, or e-mail [knicey.1@osu.edu](mailto:knicey.1@osu.edu).

### 101.01 Level One Modern Chinese I (5)

### 102.01 Level One Modern Chinese II (5)

### 103.01 Level One Modern Chinese III (5)

### 104.01 Level Two Modern Chinese IV (5)

### 205 Level Two Modern Chinese (5)

### 206 Level Two Modern Chinese (5)

### 210 Intensive 2nd Level Chinese I (5)

### 211 Intensive 2nd Level Chinese II (5)

### 310 Intensive 2nd-3rd Level Chinese I (5)

### 311 Intensive 2nd-3rd Level Chinese II (5)

### 507 Level Three Modern Chinese I (5)

### 508 Level Three Modern Chinese II (5)

### 509 Level Three Modern Chinese III (5)

### 510 Intensive 3rd Level Chinese I (5)

### 511 Intensive 3rd Level Chinese II (5)

## French, Italian, Spanish and Portuguese

Students who have had French or Spanish in high school before entering Ohio State University must take a placement test. Those students who do not intend to register for a language course but who desire EM credit for previous language study or experience should also take these tests. It should be noted that these examinations are given to Autumn Quarter orientation participants at the time and location specified in the orientation literature. Other students are asked to contact the Department for applicable testing information.

These objective computerized placement tests permit immediate awarding of EM credit for 101.01, 102.01, 103.01 and 104.01 in French and Spanish if the test scores are high enough.

When the preliminary test results indicate eligibility for EM credit for French and Spanish 104.01 or above, the student is asked to take a supplementary proficiency test. This test is given by special arrangement and students are asked to contact the Department for information. There is no awarding of EM credit to native speakers for lower level language courses. Placement tests for students entering Ohio State University with previous training in Italian or Portuguese can be arranged at any time by contacting the departmental office. The placement tests in Italian and Portuguese permit immediate awarding of EM credit for Italian 103 and Portuguese 103 if the test scores are high enough. Students who do not intend to register for an Ohio State language course in Italian and Portuguese but desire EM credit for previous study of these languages can take the tests.

Questions should be addressed to:

**Department of French and Italian** 200 Hagerty Hall, 1775 College Road, Columbus, OH 43210; phone (614) 292-4938.

**Department of Spanish and Portuguese** 298 Hagerty Hall, 1775 College Road, Columbus, OH 43210; phone (614) 292-4958.

## French and Italian

No EM credit is given to native speakers for 101.01 – 104.01. A placement test is available for students who have previous coursework in Italian and want EM credit for Italian 101-104. The exam is available online in 100 Hagerty Hall during the computer lab hours of operation. The results are automatically sent to the Registrar.

**Note:** Students participating in the University Orientation Program should plan to take the test during orientation.

### 101 Elementary Italian I (5)

Recommended text: *Prego! An Invitation to Italian*, 5<sup>th</sup> edition.

### 102 Elementary Italian II (5)

Requires equivalent knowledge of Italian 101 completion. Recommended text: *Prego! An Invitation to Italian*, 5<sup>th</sup> edition.

### 103 Intermediate Italian I (5)

Requires equivalent knowledge of Italian 102 completion. Recommended text: *Prego! An Invitation to Italian*, 5<sup>th</sup> edition.

### 104 Intermediate Italian II (5)

Requires equivalent knowledge of Italian 103 completion. Recommended text: *Prego! An Invitation to Italian*, 5<sup>th</sup> edition.

### 101.01 Elementary French I (5)

Recommended text: *Invitation, au monde francophone*, 2<sup>nd</sup> edition.

### 102.01 Elementary French II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed French 101.01 or 5 credit hours of French 101.51. Recommended text: *Invitation, au monde francophone*, 2<sup>nd</sup> edition.

## French and Italian (Continued)

### 103.01 Intermediate French I (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed French 102.01 or 5 credit hours of French 102.51. Recommended text: *Invitation, au monde francophone*, 2<sup>nd</sup> edition.

### 104.01 Intermediate French II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed French 103.01 or 5 credit hours of French 103.51 or French 112. Recommended text: *Bravo*, 5<sup>th</sup> edition.

## Spanish

No EM credit is given to native speakers for 101.01 – 250.

### 101.01 Elementary Spanish I (5)

Recommended text: *Amistades!*

### 102.01 Elementary Spanish II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Spanish 101.01. Recommended text: *Amistades!*

### 103.01 Intermediate Spanish I (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Spanish 102.01. Recommended text: *Amistades!*

### 104 Intermediate Spanish II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Spanish 103.01. Recommended text: De Paseo.

### 401 Review Grammar (5)

Review of major grammatical principles, with extensive oral and written practice. Recommended text: *Investigacion de Gramatica*.

## German

Students should consult the Department of German for full particulars. These EM exams (also called "German Placement Tests") should be taken no more than one quarter prior to continuing the study of German. Proficiency examinations in German 104 and in some 200-level courses can be arranged through the department. Native speakers of German who completed the equivalent of a high school diploma in a German speaking country are not eligible for EM credit through testing. All questions pertaining to the above may be addressed to the Department of German, 498 Hagerty Hall, 1775 College Road, Columbus, OH 43210; phone (614) 292-6985.

**Note:** Students participating in the University Orientation Program for Autumn Quarter should plan to take these tests at the time and location specified in the orientation literature.

The test is a computer-adaptive placement exam. It consists of multiple-choice items of varying levels of difficulty. The duration of the test depends on how consistently a student performs at a given level. Feedback about the student's placement is available in the Foreign Language Center, 100 Hagerty Hall; phone (614) 292-4361.

### 101.01 Elementary German I (5)

### 102.01 Elementary German II (5)

### 103.01 Intermediate German I (5)

## Greek and Latin

Students are asked to contact the Department of Greek and Latin, 414 University Hall, 230 North Oval Mall, Columbus, OH 43210; phone (614) 292-2744 for testing information. These tests should not be taken more than one quarter prior to continuing the study of Greek and Latin.

The examination for EM credit and placement in Latin 101.01, 102.01 and 103.01 is an objective one of the multiple-choice type. The best preparation is extensive reading in Latin and review of grammar.

EM credit for Latin 101.01, 102.01, 103.01 will be granted on the basis of the linguistic competence shown on the examination. Credit for higher-level courses may be granted after an individual interview and may also require the completion of a further examination. Students should consult the Department of Greek and Latin about earning credit for courses numbered 104 or higher in Latin and for Greek 101, 102, 103 and 104.

The introductory courses in Greek 101, 102 and 103 cover all the basic forms and syntax of language and require the acquisition of a basic reading vocabulary. In Greek, the equivalent material is to be found in Hansen and Quinn, *Greek: An Intensive Course* (Fordham UP). The first stage of intermediate Greek (beyond Greek 103) assumes the ability to read and comprehend the simpler prose of Xenophon, Plato and the New Testament.

The introductory courses in Latin -- 101 and 102 -- cover most of the basic forms and syntax of the language and require the acquisition of a basic vocabulary in Latin.

In Latin, the material contained in Chapters 1 through 40 of F.M. Wheelock, *Latin*, (Barnes and Noble College Outline Series No. 104), provides an approximate equivalent.

The first stage of Intermediate Latin 103 consists of continuation, consolidation and refinement of the basic forms and syntax through review drills and of introduction to reading in Latin prose and poetry. Completion of the course assumes the ability to read and comprehend prose as represented by Cicero and poetry as represented by Catullus.

**Note:** Students participating in the University Orientation Program for Autumn Quarter should plan to take these examinations at dates and times specified in the orientation literature.

## Greek

### 101 Elementary Ancient Greek I (5)

Text: Hansen & Quinn, *Greek: An Intensive Course*.

### 102 Elementary Ancient Greek II (5)

It is advised that the student have a level of knowledge or experience equal to that of students who have successfully completed Greek 102. Recommended text: Hansen & Quinn, *Greek: An Intensive Course*.

### 103 Intermediate Ancient Greek I (5)

It is advised that the student have a level of knowledge or experience equal to that of students who have successfully completed Greek 103. Recommended text: Hansen & Quinn, *Greek: An Intensive Course*.

## Latin

### 101 Elementary Latin I (5)

Not open to students with credit for Latin 100. Covers basic elements of Latin, with particular attention to reading proficiency. Recommended text: Wheelock, *Latin*.

### 102 Elementary Latin II (5)

It is advised that the student have a level of knowledge or experience equal to that of students who have successfully completed Latin 102.01. Not open to students with credit for Latin 100. Recommended text: Wheelock, *Latin*.

### 103 Intermediate Latin I (5)

Intermediate readings with emphasis on authors of the first century B.C. It is advised that the student have a level of knowledge or experience equal to that of students who have successfully completed Latin 103.01. Recommended text: Wheelock, *Latin*.

### 104 Intermediate Latin II (5)

Intermediate readings in Latin poetry and prose. It is advised that the student have a level of knowledge or experience equal to that of students who have successfully completed Latin 104.

## Hebrew

Only the department of instruction administers these tests. Students who wish to schedule a test should contact the Department of Near Eastern Languages and Cultures, 300 Hagerty Hall; phone (614) 292-9255. All tests consist of a 1-hour written examination. Native speakers of Hebrew are not eligible for EM credit.

### 101 Elementary Hebrew I (5)

Requires knowledge of Edna Amir Coffin's *Lessons in Modern Hebrew*, Level I (chapters 1-4); or equivalent.

### 102 Elementary Hebrew II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Hebrew 101. Requires knowledge of Edna Amir Coffin's *Lessons in Modern Hebrew*, Level I (chapters 1-8); or equivalent.

### 103 Intermediate Hebrew I (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Hebrew 102. Requires knowledge of Edna Amir Coffin's *Lessons in Modern Hebrew*, Level I (chapters 1-12); or equivalent.

### 104 Intermediate Hebrew II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Hebrew 103. Requires knowledge of Edna Amir Coffin's *Lessons in Modern Hebrew*, Level I (chapters 1-16).

## Japanese

Administered only by the department of instruction, placement and EM credit examinations normally are offered by an appointment during each quarter. Students with previous knowledge of Japanese who do not seek EM credit for this experience but who wish to enroll initially in a course above the level of Japanese 101 are required to take the appropriate placement examination(s) before permission to enroll will be granted. Students who do desire EM credit for previous language study or experience, whether or not they intend to register for a language course above Japanese 101, must achieve an acceptable score on the relevant examination(s). Exams are 30 minutes.

Requests for further information may be addressed to the Department of East Asian Languages and Literatures, 398 Hagerty Hall; phone (614) 292-5816.

### 101.01/51 Elementary Modern Japanese I (5)

### 102.01/51 Elementary Modern Japanese II (5)

### 103.01/51 Elementary Modern Japanese III (5)

### 104.01/51 Elementary Modern Japanese IV (5)

### 206 Intermediate Modern Japanese (5)

### 507 Third Year Japanese I (5)

### 508 Third Year Japanese II (5)

### 509 Third Year Japanese III (5)

## Korean

Administered only by the department of instruction, placement and EM credit examinations normally are offered only during the first week of each quarter. Students with previous knowledge of Korean who do not seek EM credit for this experience but who wish to enroll initially in a course above the level of Korean 101 are required to take the appropriate placement examination(s) before permission to enroll will be granted. Students who do desire EM credit for previous language study or experience must pass the relevant examination(s) with an acceptable score. EM credit for any course listed here in which a student receives a minimally passing score will be granted only upon successful completion of the next course in the sequence. Native speakers or anyone leaving Korea after high school graduation are not eligible.

Requests for further information may be addressed to the Department of East Asian Languages and Literatures, 398 Hagerty Hall, phone (614) 292-5816.

## Korean (continued)

### 101 Elementary Modern Korean I (5)

A one-hour spoken and written exam in "Han'gul", basic sentence structure, and simple conventional expression. Students should be familiar with polite informal speech style. Recommended text: *Integrated Korean: Beginning 1 and Workbook: Beginning 1*, University of Hawaii Press.

### 102 Elementary Modern Korean II (5)

A one-hour spoken and written exam in "Han'gul", orthography and exchanges of simple information. The student should be familiar with polite informal and polite formal speech styles. Recommended text: *Integrated Korean: Beginning 1 and Workbook: Beginning 1*, and *Integrated Korean: Beginning 2 and Workbook 2*; both University of Hawaii Press.

### 103 Elementary Modern Korean III (5)

Continuation of 102. Students should be familiar with both the polite formal and polite informal speech styles. They should also be able to conjugate and use basic clausal connectives. Recommended text: *Integrated Korean: Beginning 2 and Workbook: Beginning 2*, University of Hawaii Press.

### 104 Elementary Modern Korean IV (5)

Continuation of 103. Must be familiar with both the polite formal and polite informal speech styles and have the knowledge of complex sentences and the plain and intimate speech styles. Recommended text: *Integrated Korean: Intermediate 1 and Workbook: Intermediate 1*, University of Hawaii Press.

### 205 Intermediate Modern Korean I (5)

A one-hour spoken and written exam designed to test the mastery of intermediate level of Korean language in speaking, listening, reading, and writing. Students should have the knowledge of plain and intimate speech styles and the knowledge of most of the clausal connectives. Recommended text: *Integrated Korean: Intermediate 1 and 2 and Workbook: Intermediate 1 and 2*, University of Hawaii Press.

### 206 Intermediate Modern Korean II (5)

Continuation of 205. Students are expected to have the complete knowledge of different levels of speech styles and to use them without difficulty in speaking, listening, reading, and writing. Most of the complex clause conjugations should be mastered. Recommended text: *Integrated Korean: Intermediate 2 and Integrated Korean Workbook: Intermediate 2*, University of Hawaii Press.

The following Korean exams are 1-hour in length. Recommended text: *Modern Korean: An Intermediate Reader*; University of Hawaii Press.

### 507 Korean (Adv. Modern Korean I) (5)

### 508 Korean (Adv. Modern Korean II) (5)

### 509 Korean (Adv. Modern Korean III) (5)

## Modern Greek

Only the department of instruction administers these tests. Students who wish to schedule a test should contact the Department of Greek and Latin, 414 University Hall, 230 N. Oval Mall; phone 292-2744.

### 101 Elementary Modern Greek I (5)

Requires knowledge of Dimitra Dimitra's *Ellinika Tora 1+1*, (lessons 1-8); or equivalent.

### 102 Elementary Modern Greek II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Modern Greek 102. Requires knowledge of Dimitra's *Ellinika Tora 1+1*, (lessons 9-16); or equivalent.

### 103 Intermediate Modern Greek I (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Modern Greek 103. Requires knowledge of Dimitra's *Ellinika Tora 2+2*, (lessons 1-5); or equivalent.

### 104 Intermediate Modern Greek II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Modern Greek 104. Requires knowledge of Dimitra's *Ellinika Tora 2+2*, (lessons 6-11); or equivalent.

## Persian

Only the department of instruction administers these examinations. For additional information contact the Department of Near Eastern Languages and Cultures, 300 Hagerty Hall; 614-292-9255.

### 101 Elementary Persian I (5)

### 102 Elementary Persian II (5)

### 103 Elementary Persian III (5)

### 104 Intermediate Persian I (5)

## Russian & Slavic Languages

No EM credit is given to native speakers for 101-

104. The test should be taken not more than one quarter prior to continuing study in Russian. The following are 60-minute exams.

### 101.01 Elementary Russian I (5)

### 102.01 Elementary Russian II (5)

### 103.01 Intermediate Russian I (5)

### 101.01 Elementary Polish I (5)

### 102.01 Elementary Polish II (5)

### 103.01 Intermediate Polish I (5)

### 104.01 Intermediate Polish II (5)

### 101.01 Elementary Czech I (5)

### 102.01 Elementary Czech II (5)

### 103.01 Intermediate Czech I (5)

### 104.01 Intermediate Czech II (5)

### 101.01 Elementary Romanian I (5)

### 102.01 Elementary Romanian II (5)

### 103.01 Intermediate Romanian I (5)

### 104.01 Intermediate Romanian II (5)

### 101.01 Elementary Ukrainian I (5)

### 102.01 Elementary Ukrainian II (5)

### 103.01 Intermediate Ukrainian I (5)

### 104.01 Intermediate Ukrainian II (5)

## Turkish

Only the department of instruction administers these tests. For additional information contact the Department of Near Eastern Languages and Cultures, 300 Hagerty Hall, phone (614) 292-9255.

### 101 Elementary Turkish I (5)

Requires mastery of G.L. Lewis, *Turkish*, (lessons 1-5); and supplemental materials provided by the department or the equivalent of these materials and the text.

### 102 Elementary Turkish II (5)

Requires mastery of G.L. Lewis, *Turkish*, (lessons 6-11); and supplementary materials provided by the department or the equivalent of these materials and the text.

### 103 Elementary Turkish III (5)

Requires mastery of G.L. Lewis, *Turkish*, (lessons 12-16), the ability to read prose and poetry in pieces of short to moderate length and the ability to write in lengths of a page or two.

### 104 Intermediate Turkish I (5)

Requires a thorough command of Turkish grammar, the ability to read and discuss prose and poetry in pieces of moderate length and to write prose at the length of about two pages.

## Yiddish

Only the department of instruction administers these tests. For additional information, contact the Department of Germanic Languages and Literatures, 498 Hagerty Hall, 292-6985.

### 101 Elementary Yiddish I (5)

Requires ability to converse in simple Yiddish about everyday matters. Recommended text: Uriel Weinreich, *College Yiddish*, Chapters 1-3.

### 102 Elementary Yiddish II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Yiddish 101. Ability to carry out simple dialogue in present, future, or past tense. Recommended text: Uriel Weinreich, *College Yiddish*, Chapters 4-7.

### 103 Intermediate Yiddish I (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Yiddish 102. Ability to use complex sentence structures, and to read and understand short texts in the original with the aid of a dictionary. Recommended text: Uriel Weinreich, *College Yiddish*, Chapters 8-10.

### 104 Intermediate Yiddish II (5)

It is advised that the student have a level of knowledge or experience exceeding that of students who have successfully completed Yiddish 103. Ability to converse with a greater facility, and to read Yiddish prose with a dictionary. Recommended text: Uriel Weinreich, *College Yiddish*, Chapters 11-13.

## DSST Exams

Information about DSST exams can be found at [http://www.dantes.doded.mil/dantes\\_web/examination\\_s/DSST.htm](http://www.dantes.doded.mil/dantes_web/examination_s/DSST.htm). The Office of Testing administers these tests by appointment only. Please call the main office at (614) 292-2241 to schedule an exam. Contact OSU Admissions Office's Undergraduate Transfer Evaluation Area for information about obtaining credit.

## IB Tests\*

Please click on the FAQ link at <http://www.ibo.org> for information on the IB program. To transfer IB credit to OSU, call the Admissions office at (614) 292-3980.

For the **higher level exams**, OSU will award 8 hours of transfer credit for **each** exam passed with a score of 4 or higher as follows:

Anthropology	Special credit (8 hours)
Biology	113, 114
Chemistry	121, 122
English	220 (5) and special credit (3)
Geography	240 (5) and special credit (3)
History	597 (5) and special credit (3)
Math	151, 152
Music	Special credit (8)
Psychology	100 (4) and special credit (4)

## CLEP Tests\*

The College Level Examination Program (CLEP) tests are computer based tests administered in the Office of Testing at Ohio State University. General information about CLEP can be found at <http://www.collegeboard.com/clep/index.html>.

To schedule a CLEP test at Ohio State University, please call (614) 292-2241. Two separate fees are collected, a \$70 testing fee payable to CLEP and a \$20 administration fee payable to OSU. Military personnel may be eligible for reduced rates.

**Students who wish to earn OSU EM credit through the CLEP program must have their official score reports sent to the Admissions Office, Enarson Hall, 154 West 12<sup>th</sup> Avenue.**

The minimum scores required to earn OSU course credit are listed on the next page.

## CLEP (Continued)

Course Number	CLEP Test Name	Required Score
Accounting & Management Information Systems 310	Accounting, Principles of	50
Biology 101	Biology	50
Economics 200	Microeconomics, Principles of	50
Economics 201	Macroeconomics, Principles of	50
French 101.01, 102.01, 103.01	French, Level 1	60
French 101.01, 102.01, 103.01, 104.01	French, Level 2	67
German 101.01, 102.01 and 103.01	German, Level 1	52
German 101.01, 102.01, 103.01, 104.01	German, Level 2	65
HDFS 364	Human Growth & Development	70
Political Science 101	American Government	65
Sociology 101	Sociology, Introductory	50
Spanish 101.01, 102.01, 103.01	Spanish, Level 1	57
Spanish 101.01, 102.01, 103.01, 104	Spanish, Level 2	66

Effective AU '07, the Math Department no longer accepts direct CLEP credit. Only transferred CLEP credit on a transcript from another college or university will be accepted.

## APP Tests\*

The Advanced Placement Program (APP) tests approved for EM credit at OSU are listed in this section. Each May, examinations for each subject are administered nationally and scored range from 5 (extremely qualified) to 1 (no credit recommendation).

Please note that students who want to earn EM credit through the Advanced Placement Program must have their official score reports sent to the Office of Testing, score recipient code #1592. Contact APP at 1-888-225-5427 to designate Ohio State University as an official score recipient.

The current scores required to earn OSU course credit are:

APP Subject and Course	Score level	Qtr hrs credit
<b>American Government And Politics</b>		
Political Science 101	5	5
<b>Art History</b>		
History of Art General Credit	4 or 5	5
<b>Comparative Government And Politics</b>		
Political Science 100	5	5
<b>American History</b>		
History 151	4 or 5	5
<b>Biology</b>		
Biology 101	3	5
Biology 113	4	5
Biology 113,114	5	10
<b>Chemistry</b>		
Chemistry 121	3	5
Chemistry 121,122	4 or 5	10

APP Subject and Course	Score level	Qtr hrs credit
<b>Greek and Latin</b>		
Vergil		
Latin 101, 102, 103, 104	3, 4, or 5	20
<b>Lyric: Horace/Catullus</b>		
Latin 101, 102, 103, 104, 214	3, 4, or 5	25
<b>Computer Science &amp; Engineering</b>		
<b>Computer Science A</b>		
CSE 201	4 or 5	4
<b>Computer Science AB</b>		
CSE 201	3	4
CSE 201, 214	4 or 5	4
<b>Economics</b>		
<b>Microeconomics</b>		
Economics 200	4 or 5	5
<b>Macroeconomics</b>		
Economics 201	4 or 5	5
<b>English Composition and Literature/Language</b>		
English 110.01	4	5
English H110.01	5	5
<b>Environment Science</b>		
Natural Resources 201	4 or 5	5
<b>European History</b>		
History 111	4 or 5	5
<b>French Language or Literature</b>		
French 101, 102, 103	3	15
French 101, 102, 103, 104	4	20
French 101, 102, 103, 104, 201	5	25
<b>German Language</b>		
German 101, 102, 103	3	15
German 101, 102, 103, 104, 201	4 or 5	25
<b>German Literature</b>		
German 101.01, 102.01, 103.01	3	15
German 101.01, 102.01, 103.01, 104.01	4	20
German 101.01, 102.01, 103.01, 104.01, 201	5	25
<b>Geography</b>		
Geography 200	4 or 5	5
<b>Italian</b>		
Italian 101, 102, 103	3	15
Italian 101, 102, 103, 104	4	20
Italian 101, 102, 103, 104, 202	5	25
<b>Mathematics</b>		
<b>Calculus AB</b>		
150, 151	3,4, or 5	10
<b>Calculus BC</b>		
150,151	3	10
150, 151, 152	4 or 5	15
<b>Music History</b>		
Music 251	3, 4, or 5	5
<b>Music Theory</b>		
Music 221	3	3
Music 221, 224	4	5
Music 221, 222, 225	5	8
<b>Physics</b>		
<b>Physics B</b>		
Physics 111	4	5
Physics 111, 112	5	10
<b>Physics C</b>		
<b>Mechanics</b>		
Physics 131	4 or 5	5
<b>Electricity &amp; Magnetism</b>	4 or 5	*Y
<b>Psychology</b>		
Psychology 100	4 or 5	5
<b>Spanish Language or Literature</b>		
Spanish 101.01, 102.01, 103.01	3	15
Spanish 101.01, 102.01, 103.01, 104.01	4 or 5	20

APP Subject and Course	Score level	Qtr hrs credit
<b>Statistics</b>		
Statistics 145	3	5
Statistics 245	4, or 5	5
<b>World History</b>		
History 181	4 or 5	5

\*Y – By Arrangement with Department Evaluator Only

## Advanced Placement Test Frequently Asked Questions

◆ **When I took the AP test, the credit offered was different than the credit offered when I submitted scores. What credit should I receive?**

Credit is awarded based on the date of the test, not the date OSU receives your score report. Contact the Office of Testing to find out a previous year's credit criteria.

◆ **I sent scores to Ohio State, but my credits are not posted.**

First, verify on your student transcript that Ohio State University (1592) is listed as a score recipient. If not, contact the College Board at 1-888-225-5427 to have scores sent to Ohio State.

If Ohio State is listed as a recipient institution, verify the accuracy of your name and SSN. If these items are incomplete or inaccurate, we need to simply update your record – call the Office of Testing at 614-292-2241.

◆ **I have my student grade report from AP. Can OSU post scores from it?**

No. OSU is contractually obligated to only award credit when a score report is received directly from the College Board.

◆ **When are scores posted?**

We receive and post scores electronically, so they generally are posted the same day we receive them. Scores sent to OSU on exam day are generally received and processed by July 10<sup>th</sup>. Scores sent after exam day are generally received within a calendar month from when they were sent.

◆ **How can I verify my credits are posted?**

Use Buckeye Link ([www.buckeyelink.osu.edu](http://www.buckeyelink.osu.edu)) to view your grades, credits, advising report, and degree audit. Your academic advisor can also help.

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**Always contact the Office of Testing before paying to have scores sent multiple times.**

**Do not wait until the quarter of graduation to investigate missing AP Credits!**

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\* CLEP, APP, and IB: Scores and credits for these programs are subject to change as a result of ongoing departmental review.