

Credit by Examination

What is the Credit by Examination Program?

Students can earn credit toward graduation at The Ohio State University by successfully completing 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 transcript. The credit does not affect the student’s GPA, but does count as hours toward graduation. The six types of tests that are available for EM credit at The Ohio State University are outlined below.

A. Two types of tests are created by The Ohio State University. These measure content knowledge for specific courses.

1. **EM Tests** (pages 2-4) are administered by the Testing Center.
2. **Departmental Exams** (pages 4-8) are administered by individual academic units, and include foreign language placement tests.

B. Four types of tests are administered nationwide to assess proficiency in various fields of study. These tests are open to students as well as non-students.

1. **DSST Exams*** are often taken by military personnel and are given in the Testing Center.
2. **CLEP Exams*** are computer-based tests administered by the Testing Center.
3. **IB Tests*** are taken by high school students in the International Baccalaureate Program.
4. **AP Tests*** are taken by high school students participating in the Advanced Placement Program.

**These credits are subject to change as a result of ongoing departmental review.*

Who is eligible for the program?

All currently enrolled undergraduates at The Ohio State University are eligible to receive credit for EM Tests, Departmental Exams, DSST and CLEP Exams. Students still in high school may take CLEP exams, IB Exams and AP Tests, with credit awarded upon admission to The Ohio State University. Regional campus students who are interested in Departmental Exams should contact their campus advising office. EM Tests are not available to incoming students until the first day of classes of their first term of enrollment.

Which courses participate in this program?

Tests and their corresponding course credits are listed within this brochure. Students interested in earning credit for any courses not listed within this brochure should contact the department which oversees the course in order to determine whether or not a proficiency exam is available.

What are the restrictions on the program?

EM credit will not be awarded for courses that are prerequisites to those for which credit has already been earned. EM credit will not be awarded for any course in which a student has received either a mark at The Ohio State University or transfer credit from another institution. Examination credit awarded by another higher education institution is evaluated as part of Ohio State’s transfer credit evaluation process. *Students currently enrolled in a course may take an EM Test for that course only during the first week of the term. (For Autumn Semester only, students can take the test and be enrolled in the course during the first 2 weeks of the term.)* Students are advised to check their individual major requirements for exclusion information that would prevent the awarding of EM credit for any particular course, program, or subject area. **EM Tests cannot be repeated.**

How much EM credit can be earned?

Students may generally apply up to 30 semester hours of EM credit toward a degree. Additional EM credit may be applied toward a degree with special action of academic units and the Council on Academic Affairs. Students who are interested in applying more than 30 semester hours of EM credit toward a degree must contact their academic advisors prior to testing.

What are the fees at the Testing Center?

EM Tests: \$60 exam fee*

CLEP Exams: \$80 exam fee* and \$30 administration fee

DSST Exams: \$80 exam fee* and \$50 administration fee

Fees that are collected during test registration are non-refundable. A penalty may be imposed for rescheduling.

**Exam fees (not administration fees) are waived for active-duty and reserve military personnel. The exam fee for EM Tests is also waived for veterans.*

How do students register for exams?

Registration is available online at testing.osu.edu.

What test preparation help is available?

Descriptions of EM Tests and Departmental Exams are included in this brochure. Information for nationwide tests can be found online at each test’s website. Testing Center staff cannot recommend any test preparation.

For any additional questions, the contact information for the Testing Center is listed at the top of this page.

This brochure is printed annually. Information in this brochure is subject to change without notice. For updates that took effect after this brochure went to print, please visit: testing.osu.edu

EM Tests

The following EM Tests are administered by the Testing Center. Students may schedule tests online at <http://testing.osu.edu/>. There is a \$60 administrative fee. This fee is waived for active-duty or reserve military personnel, and for veterans. Students must present their Buck-ID cards upon arrival at the Testing Center. If a prerequisite is listed for an EM Test, students may be asked to provide written evidence of having met that requirement. EM Tests are given throughout the term, 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 term.* The number appearing in the parentheses after each course indicates the number of semester credit hours for that course. Check pages 7-8 of this brochure to determine if DSST, CLEP, IB, or AP Tests are accepted for credit for the courses listed below.

ASTRONOMY

1140 Introduction to Solar System Astronomy (3)

Physical nature of the sun and its family of planets, satellites, comets, and minor bodies; gravitation, light, and telescopes. Prerequisite: Math 1050 (075), or Math placement level R, or permission of instructor. Not open to students with credit for Astronomy 2291 (291), 161, 161H or 171. A 3-hour essay and short-answer exam. Recommended text: Chaisson and McMillan. *Astronomy Today*. Pearson, 2013. 8th Edition.

1144 Stellar, Galactic, and Extragalactic Astronomy (3)

Structure, motions, evolution of stars, interstellar material, galaxies, and the universe as a whole. Prerequisite: Math 1050 (075), or Math placement level R, or permission of instructor. Not open to students with credit for Astronomy 2292 (292), 172, 162, or 162H. A 3-hour essay and short-answer exam. Recommended text: Chaisson & McMillan. *Astronomy Today*. Pearson, 2013. 8th Edition.

2291 Basic Astrophysics and Planetary Astronomy (3)

Motions and physical nature of objects in the solar system, electromagnetic radiation, telescopes, and astronomical detectors. Prerequisite or concurrent: Physics 1251 (133). Not open to students with credit for 291. 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: Ryden & Peterson. *Foundations of Astrophysics*. Pearson, 2010. 1st Edition.

2292 Stellar, Galactic, and Extragalactic Astronomy and Astrophysics (3)

Observational and physical properties of the sun and stars; stellar structure and evolution; interstellar mediums; galaxies; and cosmology. Prerequisite: Astronomy 2291 (291). Not open to students with credit for 292. Intended only for BS students. A 3-hour exam combining numerical problems and short-answer questions. Use of a calculator is allowed. Recommended text: Ryden & Peterson. *Foundations of Astrophysics*. Pearson, 2010. 1st Edition.

BIOLOGY

1101 Introductory Biology (4)

The major concepts and principles of biology and their interrelationships. Not open to students with credit for 1113 or 1113H. A 1-hour 48-minute exam. Credit for this course will not count toward the minimum number of hours required for graduation if a student completes 1113 and 1114, or 1113H and 1114H. Recommended text: Campbell, Neil A., et al., *Essential Biology*. Benjamin Cummings, 2007. 7th Edition.

1102 Human Biology (4)

Human biology with emphasis on anatomy and physiology (30%), reproduction (30%), human origin and evolution (15%), DNA (15%), human diseases (5%), and miscellaneous (5%). Not open to students with credit for 1114 or 1114H. A 1-hour 48-minute exam. Credit for this course will not count toward the minimum number of hours required for graduation if a student completes 1113 & 1114, or 1113H & 1114H. Recommended text: Mader, Sylvia S., *Human Biology*. McGraw-Hill, 2007. 7th Edition.

1113 Biological Sciences: Energy Transfer & Development (4)

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 1113H. A 2-hour exam with matching, multiple-choice, or short-essay questions. Recommended text: Campbell, Neil A., et al., *Biology*. Benjamin Cummings, 2007. 8th Edition.

1114 Biological Sciences: Form, Function, Diversity, and Ecology (4)

Continuation of 1113. Diversity, structure, function, behavior, and ecology among prokaryotes and eukaryotes. Not open to students with credit for 1114H. A 2-hour exam with matching, multiple-choice, or short essay questions. Recommended text: Campbell, Neil A., et al., *Biology*. Benjamin Cummings, 2007. 8th Edition.

CHEMISTRY

IMPORTANT: All students who wish to test in chemistry must email the Department of Chemistry and Biochemistry at chemadvisors@chemistry.ohio-state.edu or call (614) 292-1204 or to obtain permission and a referral from Ms. Mary Bailey or Dr. Shuh Kuen (Mike) Chang before a chemistry test can be scheduled.

Note: Only non-programmable calculators may be used during the following tests in the chemistry series. Calculators may not be shared.

1110 Elementary Chemistry (5)

Introductory chemistry for non-science majors, including: dimensional analysis, atomic structure, bonding, chemical reactions, states of matter, solutions, chemical equilibrium, acids and bases, and topics in organic and biological chemistry. Topics in organic and biological chemistry may be included. Students must show proof of placement in Math 1116 (116) or higher. Not open to students with credit for Chemistry 102, 1210 (121), 1250, 1610, or 1910H (201H). A 2-hour 30-minute objective exam.

1210 General Chemistry I (5)

First course for science majors covering: dimensional analysis, atomic structure, the mole, stoichiometry, chemical reactions, thermochemistry, electron configuration, bonding, molecular structure, gases, liquids, and solids. Prerequisite: high school chemistry or equivalent, and proof of placement into Math 1150 (150) or higher is required. Not open to students with credit for Chemistry 122, 1250, 1610 (161), or 1910H (201H). 2-hour objective exam.

1215 General Chemistry Bridge (2)

A bridge course for students with credit for CHEM 121 who want to move on to CHEM 1220. Topics include: gases, liquids, and solids. Prerequisite: 121, 161, or 201H; and proof of placement into Math 1150 (150) or higher. Not open to students with credit for CHEM 1210, 122, or 123. A 75-minute objective exam.

1220 General Chemistry II (5)

A continuation of 1210 for science majors covering: solutions, kinetics, chemical equilibrium, solubility and ionic equilibria, qualitative analysis, thermodynamics, electrochemistry, descriptive chemistry, coordination compounds, and nuclear chemistry. Prerequisites: 122, 125, 1210, 1250, 1610, or 1910H, and proof of placement in Math 1150 (150) or higher. Not open to students with credit for Chemistry 123, 1620 (163), or 1920H (203H). A 2-hour 30-minute objective exam.

1250 General Chemistry for Engineers (4)

First course for engineering majors covering: dimensional analysis, atomic and molecular structure, the mole, stoichiometry, chemical reactions, states of matter, solutions, kinetics, equilibrium, acids and bases, thermodynamics, and electrochemistry. Prerequisite: One unit of high school chemistry and placement into Math 1150 (150) or higher. Not open to students with credit for Chemistry 121, 125, 1210, 1610, or 1910H. A 2-hour 30-minute objective exam.

COMPUTER SCIENCE&ENGINEERING

1222 Introduction to Computer Programming in C++ for Engineers and Scientists (3)

Approval from Dr. Naeem Shareef is required to take the multiple-choice exam in the Testing Center. Dr. Shareef can be contacted at shareef.1@osu.edu. Introduction to computer programming in C++ with applications in engineering and the physical sciences; algorithm development; and programming lab experience. C++ loops and conditionals, functions, arrays, file input and output, and pointers. Students should have some programming experience. Two part exam consisting of: a multiple-choice exam at the Testing Center, and a programming exam administered by the Department of Computer Science and Engineering at a Linux workstation. Students must pass the multiple-choice exam to become eligible to take the programming exam. The multiple-choice exam is 2-hours. **Not open to students with credit for CSE 1222, 2122, 2221 or 2231.** Recommended text: Dale, Weems. *Programming and Problem Solving with C++: Brief Edition*. Fifth Edition. Available at: <http://proquest.safaribooksonline.com>

2111 Modeling and Problem Solving with Spreadsheets and Databases (3) Permission of the Course Coordinator, Ms. Lori Rice, is required to take this exam. To obtain a referral from Ms. Rice, visit her office hours, which are listed on the website: <http://www.cse.ohio-state.edu/~rice/>. Her office is located at 489 Dreese Labs. Her contact information is: (614) 292-7946, or email rice.134@osu.edu. Spreadsheet and database modeling/programming concepts and techniques to solve business related problems; efficient/effective data handling; computational analysis and decision support; computer concepts; networking; and project integration. The test is given in two parts: a written exam at the Testing Center and a lab given only to those who pass the written exam with a minimum score of 80%. The content of this exam includes: advanced spreadsheet topics (Excel) (45%), database management systems (Access) (40%), spreadsheet modeling (Excel) (10%), and text functions (Excel) (5%). A detailed list of topics, sample problems, and other course materials can be found on the course website: <http://www.cse.ohio-state.edu/cse2111/>. A 2-hour 30-minute exam. It is recommended that candidates obtain the textbooks and course notes before attempting the exam.

2221 Software I: Software Components (4)

Course concerns component-based software from the client programmer's perspective. The CSE 2221 Placement Exam is designed to assess a student's readiness for these topics using brief handwritten programs and coded modules showing master of: variables, types, expressions, and assignment statements; fundamental data types; simple input; conditional control structures; and iterative control structures. This placement exam is only offered on specific testing dates. Satisfactory performance on the placement exam for CSE 2221 fulfills the prerequisite requirements for 2221, but it does not result in academic credit for 2221 or 1223. Please contact the CSE Department Undergraduate Advising Office at (614) 292-1900 or ugadvising@cse.ohio-state.edu, or the Testing Center for scheduling information. A 1-hour exam. Recommended text: Horstmann, C., *Java for Everyone: Late Objects*. Second Edition, Chapters 1-4. Available at Safari Books Online: <http://proquest.safaribooksonline.com/book/programming/java/9781118063316>.

EARTH SCIENCES

1100 Planet Earth: How It Works (4)

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 121 or 122. A 2-hour 30-minute objective and essay exam. Recommended texts: Marshak, Stephen. *Earth: Portrait of a Planet*. Murck, Barbara W. and Skinner, Brian J., *Geology Today: Understanding Our Planet*. McConnell, et al., *The Good Earth*.

1110 History of Life on Earth: Global Change in the Biosphere (3)

3.5 billion years of biosphere change: introduction to major evolutionary and extinction events; processes responsible for change; and biosphere, atmosphere, and lithosphere interrelationships. A 2-hour exam. Recommended text: Ausich, W.I., and Lane, Gary N., *Life of the Past*. Prentice Hall, 1999.

1121 Dynamic Earth (4)

Plate tectonics, rock forming processes, climate change, and energy resources. Prerequisite: Math 1075 (104) or above. Not open to students with credit for 121. A 2-hour exam. Recommended texts: Plummer & McGeary. *Physical Geology*. 1999. Thompson & Turk. *Modern Physical Geology*. 1997. Skinner & Porter. *The Dynamic Earth*. 2000. Freeman, *Geoscience Laboratory*. 1996.

ECONOMICS

2001.01 Principles of Microeconomics (3)

Introduction to economic theory, supply and demand for goods and services, market structure, and the distribution of income. A 2-hour exam. Recommended text: Mankiw, N. Gregory. *Principles of Microeconomics*. Cengage Learning, 2014. 7th Edition.

2002.01 Principles of Macroeconomics (3)

Theory of national income determination, economic fluctuations, money, government policy, and international economics. A 2-hour exam. Recommended text: Mankiw, N. Gregory. *Principles of Microeconomics*. Cengage Learning, 2014. 7th Edition.

ENGINEERING

For questions regarding either of these exams, please contact Amanda Crall @ crall.25@osu.edu

1186.01 Fundamentals of Engineering for Transfers (CAD)

This exam is designed for transfer students who are missing the 3D visualization, technical graphics, and CAD component in their transfer credits. These students have typically received transfer credit for ENGR 1188 and/or 1187.

1187 Fundamentals of Engineering for Transfers (MATLAB)

This exam is designed for transfer students who are missing the MATLAB programming component in their transfer credits. These students have typically received transfer credit for ENGR 1186 and/or 1188.

HISTORY

EXAM WILL NOT BE GIVEN THE WEEK OF OR BEFORE FINALS.

The Department of History has compiled a one-page study suggestion sheet for EM Tests. This can be obtained at the Testing Center or from the Undergraduate History Handbook at:

https://history.osu.edu/sites/history.osu.edu/files/UHObrocSemester_1.pdf. (See page 27.)

1151 American Civilization to 1877 (3)

Covers the social, political, constitutional, and economic development of the United States from the colonial period through the era of Reconstruction. A 2-hour essay exam. Recommended text: Nash, Gary B., et al., *American Civilization to 1877, Volume 1*. Pearson, 2011, 7th edition.

1152 American Civilization since 1877 (3)

Covers the social, political, constitutional, and economic development of the United States from the end of the Reconstruction era to the present. A 2-hour essay exam. Nash, Gary B., et al., *The American People, Volume 2*. Pearson, 2011, 7th edition

1211 Western Civilization to the 17th Century (3)

Ancient civilizations (Near East, Greece, Rome), barbarian invasions, medieval civilizations (Byzantium, Islam, Europe), Renaissance, and Reformation. A 2-hour essay exam. Recommended text: McKay, John P., et al., *History of Western Society*. Bedford/St. Martin's 2010, 10th edition.

1212 Western Civilization, 17th Century to Present (3)

Political, scientific, and industrial revolutions; nationalism; the two World Wars; decline of empires; and the Cold War. A 2-hour essay exam. Recommended text: McKay, John P., et al., *History of Western Society*. Bedford/St. Martin's 2010, 10th edition.

1681 World History to 1500 (3)

History of the human community to 1500: primary emphasis on history of civilizations, and secondary emphasis on patterns of regional and hemispheric integration. A 2-hour essay exam. Recommended text: Bulliet, Richard. *The Earth and Its Peoples, Volume 1*. Cengage, 2014 6th edition.

1682 World History: 1500 to Present (3)

History of the human community from 1500 to the present: primary emphasis on processes of global integration, and secondary emphasis on comparative civilization. A 2-hour essay exam. Recommended text: Bulliet, Richard. *The Earth and Its Peoples, Volume 2*. Cengage, 2014 6th edition.

HORTICULTURE & CROP SCIENCE

2200 Horticulture and Crop Science (3)

It is advised to have a level of knowledge or experience comparable to students who have successfully completed Biology 1101, 1113, or equivalent. A 2-hour objective exam that 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; climates 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: McMahan, Peg, et al., *Plant Science*. Prentice Hall, 2010. 5th Edition.

MATHEMATICS

The Department of Mathematics offers credit by examination for the courses listed below. However, tests for Math 1050 or 1075 are given only for determination of placement level at no charge—no examination credit is given. Students who believe their math placement results are inaccurate may schedule a proficiency test (similar to a final exam) for the course of their initial placement. Students who demonstrate proficiency will be permitted to schedule more advanced courses. Arrangements should be made through the Math Advising Office, 250 Mathematics Building, 231 West 18th Avenue. Math Advising's phone number is (614) 292-6994, or email at mathadvisors@math.osu.edu.

1130 College Algebra for Business (4)

Algebraic, exponential, and logarithmic functions; matrix algebra; and applications to business. A 2-hour exam. Prerequisite: Math placement level N; C- or better in 1075; or credit for 104. Not open to students with credit for any higher numbered math course.

1131 Calculus for Business (5)

Survey of calculus of one and several variables, and applications to business. A 2-hour exam. Prerequisite: Math placement level L; C- or better in 1130, 1148, or 1150; credit for 130 or 148. Not open to students with credit for any math course numbered 1151 or higher, or quarter system courses 132, 151.xx, or higher.

1148 College Algebra (4)

Functions: polynomial, rational, radical, exponential, and logarithmic; introduction to right-angle trigonometry; and applications. A 2-hour exam. Prerequisite: Math placement level N; C- or better in 1075; or credit for 104 or 148. Not open to students with credit for any higher numbered math course.

1149 Trigonometry (3)

Trigonometric functions and their properties: vectors, polar coordinates, and complex numbers. Prerequisite: C- or better in 1148, or permission of department. Not open to students with credit for 1144, or for any math course 1150 (150) or above.

1150 Precalculus (5)

Functions: polynomial, rational, radical, exponential, logarithmic, trigonometric, and inverse trigonometric; and applications. A 2-hour exam. Prerequisite: Math placement level M. Not open to students with credit for any higher numbered math course.

1151 Calculus I (5)

Differential and integral calculus of one real variable. A 2-hour exam. Prerequisite: Math placement level L; or C- or better in: 1144, 1148 and 1149, 1150, or 150. Not open to students with credit for any higher numbered math course.

1152 Calculus II (5)

Integral calculus, sequences and series, parametric curves, and polar coordinates. A 2-hour exam. Prerequisite: C- or better in 1151, 1156, 1161.xx, 152.xx, 161.xx, 114, or 1114. Not open to students with credit for any higher numbered math course.

1172 Engineering Mathematics A (5)

Techniques of integration, Taylor Series, differential calculus of server variables, and applications. Prerequisite: C- or better in 1114 (114), 1151, 1156, 1161.xx, 152.xx, 161.xx, or 161.01H. Not open to students with credit for 1152, 1534 (153.xx), or 1544 (154); or for any math course numbers 1172 or above; or for any quarter system math course numbered 254.xx or above. Not open to students majoring in math, pre-actuarial science, or actuarial science.

2153 Calculus III (5)

Multivariable differential and integral calculus. A 2-hour exam. Prerequisite: C- or better in 1152, 1172, 1534, 1544, 1181H, or 4184H; or credit for 153.xx, 154, 162.xx, or 162.01H. Not open to students with credit for any higher numbered math course.

MOLECULAR GENETICS

1101 Introduction to Plant Biology (5)

Plants and their relationship to humans and the biosphere: plant structure and function; growth and development; plant genetics and biotechnology; plant diversity and evolution; and practical and economic uses of plants. A 2-hour multiple-choice exam. Not open to students with credit for PlntBio 101 or 102, Biology 1101 (101), 1113 (113), 1113H, 1114 (114), 1114H, 115H, or 116H. Recommended text: Berg, Linda R., *Introductory Botany: Plants, People, and the Environment*. Thomson-Brooks/Cole, 2008. 2nd Edition.

PHYSICS

Calculators are permitted on these tests. An equation sheet is provided with each test. A copy of this equation sheet can be obtained at the Testing Center in advance of taking the test. Only the copy of the equation sheet provided on test day may be taken into the testing room.

1200 Mechanics, Kinematics, Fluids, and Waves (5)

Covers: kinematics, vectors, 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, simple harmonic motion, fluids, waves, sound waves, interference, diffraction, and standing waves. A 1-hour 45-minute exam. Prerequisite: Math 1148, 1150, or equivalent. Recommended text: Giancoli, Douglas C., *Physics*. Prentice Hall, 2014. 7th Edition. (Ch. 1-12)

1201 E&M, Optics, Modern Physics (5)

Covers: Coulomb's Law, electric field, electric potential, DC circuits, capacitors, magnetic fields and forces, Faraday's Law, polarization, reflection and refraction of waves, mirrors and lenses, optical instruments, interference and diffraction of light, special relativity, wave nature of matter, quantum mechanics, nuclear energy, and radioactive decay. A 1-hour 45-minute exam. Prerequisite: Physics 1200 or 111. Recommended text: Giancoli, Douglas C., *Physics*. Prentice Hall, 2014. 7th Edition. (Ch. 16-28, 30-31)

1210 Bridging from 111 to equivalent of Physics 1200: Oscillations, Fluids, Waves (2)

Algebra-based introduction to classical physics: pressure, simple harmonic motion, fluids, waves, sound waves, and standing waves. For students that have credit for 111 but need credit equivalent for 1200. A 1-hour exam. Prerequisite: Physics 111. Not open to students with credit for 1200 (113).

1211 Bridging from 112 to equivalent of Physics 1201: Optics, Modern Physics (2)

Algebra-based introduction to optical instruments, interference and diffraction of light, special relativity, wave nature of matter, quantum mechanics, nuclear energy, and radioactive decay. For students that have credit for 112 but need credit equivalent for 1201. A 1-hour exam. Prerequisite: Physics 112; prerequisite or concur: 1210. Not open to students with credit for 1201 (113).

1240 Bridging from 131 to equivalent of Physics 1250: Thermo, Waves, Fluids (2)

Calculus-based introduction to classical physics: simple harmonic motion, fluids, thermodynamics, and special relativity. For students that have credit for 131 but need credit equivalent for 1250. Prerequisite: Physics 131. Not open to students with credit for 1250 (133).

1241 Bridging from 132 to equivalent of Physics 1251: Optics, Modern Physics (2)

Calculus-based introduction to waves, simple geometric optics, diffraction, interference, and photons and the quantum mechanics of particles and atoms. For students that have credit for 132 but need credit equivalent for 1251. Prerequisite: Physics 132; prerequisite or concur: 1240. Not open to students with credit for 1251 (133).

1250 Mechanics, Thermal Physics, Waves (5)

Calculus-based introduction to classical physics: Newton's Laws, simple harmonic motion, fluids, thermodynamics, and special relativity. For students in physical sciences, mathematics, and engineering. It is advised to have a level of knowledge or experience comparable to students who have successfully completed 1250. A 1-hour 45-minute exam. Proof of eligibility to enter Math 1151 or higher required. Not open to students with credit for 1250. Recommended text: Serway & Jewett. *Physics for Scientists and Engineers*. 8th or 9th Edition. (Ch. 1-12, 13, 14-15, 19-22, 39)

1251 E&M, Optics, Modern Physics (5)

Calculus-based introduction to electricity and magnetism, waves, simple geometric optics, diffraction, interference, and photons and the quantum mechanics of particles and atoms. For students in physical sciences, mathematics, and engineering. It is advised to have a level of knowledge and experience comparable to students who have successfully completed 1251. A 1-hour 45-minute exam. Students must show that 1250 or equivalent (131 and 1240) was completed with passing grade. Recommended text: Serway & Jewett. *Physics for Scientists and Engineers*. 8th or 9th Edition. (Ch. 16-18, 23-32, 34-35, 37-38, 40-42)

PSYCHOLOGY

1100 Introduction to Psychology (3)

Introduction to psychology, a prerequisite for advanced courses; the application of the scientific method to the study of behavior. Topics include: research methods, biological psychology, sensation and perception, consciousness, learning, memory, language, intelligence, development, emotion and motivation, stress and health, social psychology, personality, and psychological disorders. A 2-hour objective exam. Recommended text: Schacter, Gilbert & Wegner, *Psychology*. Worth Publishing, 2013. 2nd Edition.

2220 Data Analysis in Psychology (3)

Foundational course and a prerequisite to advanced classes in psychology. Topics include: visual displays of data; interpretation of graphical representations; calculation and interpretation of descriptive statistics; null-hypothesis significance testing for z-tests, t-tests, correlation, and regression; effect sizes and confidence intervals; interpretation of computer output; understanding of what statistical test to use; and reading of research articles and presentations of analyses. A 2-hour 15-minute exam. Recommended text: Nolan, S.A., and Heinzen, T.E., *Statistics for the Behavioral Sciences*. Worth Publishers, 2012. 2nd Edition (Ch.1-11, 15-16)

Departmental Exams

This section describes examinations administered by individual departments of instruction. Details on the special arrangements necessary to take these exams can be obtained by calling the numbers listed for each department. The number or email appearing in the parentheses after each course indicates the number of semester credit hours awarded for that exam. Check other sections of this brochure to determine if DSST, CLEP, IB or AP Tests are accepted for credit for the courses listed below.

ACCOUNTING – Kaylin Ward (ward.789@osu.edu)

ACCTMIS 2200 – Introduction to Accounting I (3)

Preparation and use of accounting reports for business entities; focus on uses of accounting for external reporting, emphasizing accounting as a provider of financial information. A 2 hour exam. Prereq: Econ 2001.01 (200), or equiv. Not open to students with credit for 2000 (310), 211, or equiv.

ACCTMIS 2300 – Introduction to Accounting II (3)

The uses of accounting reports by managers to make business decisions and to control business operations; focus is on the internal use of accounting information. A 2 hour exam. Prereq: 2200 (211) and Econ 2001.01 (200) or equiv. Not open to students with credit for 2000 (310), 212, or equiv.

AGRICULTURAL, ENVIRONMENTAL & DEVELOPMENTAL ECONOMICS (614) 292-6432

2001 Principles of Food and Resource Economics (3)

Covers the strengths of a market-economy; production, consumption, and price determination; government regulations of markets; and human resources and land-policy problems. A 3-hour multiple-choice and calculation-type problems exam. Not open to students with credit for ECON 2001. Recommended text: Mankiw, N. Gregory. *Principles of Microeconomics*. Thomson Southwest, 2008. 6th Edition.

BIOCHEMISTRY (614) 292-6009

2210 Elements of Biochemistry (4)

A survey of biochemistry stressing the qualitative rather than the quantitative approach. Credit does not count toward a major in biochemistry. Prerequisite: CHEM 1110 (102), or 1210 (122), or equivalent. Not open to students with credit for 211 and 212. Recommended text: Bettelheim, Fredrick A., et al., *Introduction to Organic and Biochemistry*. Harcourt.

4511 Introduction to Biological Chemistry (4)

An introductory course in biochemistry dealing with: the molecular basis of structure; metabolism; genetic replication; transcription; and translation in plants, animals, and microorganisms. Prerequisite: CHEM 1220 (123) or 1250 (125); and 2510 (252) or 2310 (231); and one semester of Biological Sciences; or permission of instructor. Not open to students with credit for 511.

COMPUTER SCIENCE & ENGINEERING (614) 292-7946

1111 Introduction to Computer-Assisted Problem Solving (3)

The CSE 1101 exam is given in two parts: First, a 2-hour written exam proctored by the department coordinator. If successfully passed with an 80%, the second part is a lab exam. The written exam consists of: general computer knowledge and internet topics (10%), word processing (5%), presentation graphics (5%), spreadsheets (40%), and databases (40%). It is recommended to obtain a copy of the course notes to study, available at the OSU bookstore. This contains both the lecture notes and problems that you will find in the Excel and Access portions of the exam. Additional materials are available online: to access those materials, contact Lori Rice at rice.134@osu.edu More information can be found online at: <http://www.cse.ohio-state.edu/cse1111/>.

ENVIRONMENT & NATURAL RESOURCES (614) 292-2265

3000 Soil Science (3)

Knowledge of soil science is assessed by a 2-hour comprehensive objective exam, with topics including: the processes and factors important in the formation, differentiation, and distribution of soils; the physical conditions and chemical constituents of soil minerals and organic matter; and the essential roles of biological activity, nutrient cycling, water retention, and water movement on ecosystem services provided by the soil resource. Students should have knowledge and experience comparable to students who have successfully completed CHEM 1101 or 1121. Recommended text: Singer, Michael J., and Munns, Donald N., *Soils: An Introduction*. Prentice Hall, 2005. 6th Edition.

HUMAN NUTRITION (614) 292-7969

2310 Fundamentals of Human Nutrition (3)

Nutrient and food energy needs of the human biological system throughout the life cycle including energy balance with consideration of social-psychological factors. It is advised to have a level of knowledge or experience comparable to students who have successfully completed 3 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, requiring an 80% to pass. Recommended text: Byrd-Bredbenner, C., et al., *Perspectives in Nutrition*. McGraw-Hill, 2012. 9th Edition.

MATHEMATICS (614) 292-6994

Students who feel that their math placement into 1050 or 1075 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 Math Advising Office, 250 Math Building, 231 W. 18th Avenue or mathadvisors@math.osu.edu

MUSIC (614) 292-6571

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

Courses available for examination credit:

- 2201 Applied Music (2)
- 2202 Sight-Reading for Pianists (1)
- 2220 Introduction to Music Technology (1)
- 2221 Music Theory I (2)
- 2222 Music Theory II (2)
- 2224 Aural Training I (2)
- 2225 Aural Training II (2)
- 2261.01 Keyboard Skills I (1)
- 2262.01 Keyboard Skills II (1)
- 2263.01 Keyboard Skills III (1)
- 2264.01 Keyboard Skills IV (1)
- 3421 Music Theory III (2)
- 3422 Music Theory IV (2)
- 3424 Aural Training III (2)
- 3425 Aural Training IV (2)

Foreign Language Examinations

Please read all instructions clearly, as this section details information regarding taking examinations for placement and credit. All students who have had 2 or more years of the same foreign language in high school must take the language placement test in the language used for unconditional admission to The Ohio State University, whether or not they plan to continue language study. Requirements for continuing a foreign language are dependent on your academic program or major. It is advised to check other sections of this brochure to see if EM, CLEP, IB, or AP Tests are accepted for credit for courses listed in this section.

The Center for Languages, Literatures, and Cultures coordinates and administers the computerized placement tests in French, German, Italian, and Spanish, while also serving as a clearinghouse for placement tests in other languages. When preliminary results indicate eligibility for EM credit above the 1103 level, the student may be asked to take a supplementary proficiency exam. To schedule a supplementary proficiency exam, students must contact the corresponding department.

French, German, Italian, Latin, and Spanish placement tests are regularly scheduled as part of new student orientation programs. Transfer students without language transfer credit take their placement test during these orientations. Details for these tests are provided in orientation literature. Students who did not take a placement test during orientation should contact the Center for Languages, Literatures, and Cultures at (614) 292-4361 for information regarding taking the test during their first term. Students of Latin may schedule the Placement exam with the Testing Center or contact the Department of Classics at (614) 292-2744 for more information.

Note: It is advised to have a level of knowledge or experience comparable to students who have successfully completed the course you are attempting to test out of. *The number appearing in parentheses after each course indicates semester credit hours awarded.*

AMERICAN SIGN LANGUAGE

Placement or EM Tests are normally offered only during the third and fourth weeks of each term. The test format contains both signed and written components. No EM credit is awarded to native signers. In order to schedule a test, or for more information, contact: American Sign Language Program, 455 Hagerty Hall, (614) 292-5392. Recommended text: Ohio State course packet available from Ohio State Foreign Language Publications.

- 1101 Elementary American Sign Language I (4)
- 1102 Elementary American Sign Language II (4)
- 1103 Intermediate American Sign Language (4)

DEPARTMENT OF CLASSICS

The Department of Classics administers the Greek and Modern Greek exams. For more information or to schedule an appointment: (614) 292-2744, 414 University Hall, 230 N. Oval Mall, These exams should not be taken more than one term prior to continuing study for these languages.

GREEK

The following courses cover all basic forms of syntax and require the acquisition of a basic reading vocabulary. Greek 1103 and beyond assume the ability to read and comprehend the simpler prose of Xenophon, Plato, and the New Testament. To earn credit higher than 1103, contact the Department of Classics for more information. Recommended text for following courses: Hansen & Quinn. *Greek: An Intensive Course*. Fordham University Press.

- 1101 Elementary Ancient Greek (5)
- 1102 Intermediate Ancient Greek I (5)
- 1103 Intermediate Ancient Greek II (3)

LATIN

The Latin placement test is an objective, multiple-choice exam. Extensive reading in Latin and review of grammar is suggested to prepare. Credit will be awarded for 1101-1103 on the basis of linguistic competence shown on the test. Credit for higher-level courses is granted after an individual interview and/or further examination, performed by the Department of Classics.

1101.01 Elementary Latin I (5)

Not open to students with credit for Latin 100. Recommended text: *Reading Latin: Texts*. Cambridge. *Reading Latin: Grammar, Vocabulary, and Exercises*. Cambridge.

1102.01 Intermediate Latin I (5)

Intermediate readings with emphasis on authors of the 1st Century, B.C. Recommended text: *Reading Latin: Texts*. Cambridge. *Reading Latin: Grammar, Vocabulary, and Exercises*. Cambridge.

1103 Intermediate Latin II (3)

Intermediate readings in Latin poetry and prose.

MODERN GREEK

1101 Elementary Modern Greek (5)

Recommended text: Simopoulos, Pathiaki, et al., *Ellinika A*. (Ch. 1-10)

1102 Intermediate Modern Greek I (5)

Recommended text: Simopoulos, Pathiaki, et al., *Ellinika A*. (Ch. 11-20)

1103 Intermediate Modern Greek II (3)

Recommended text: Simopoulos, Pathiaki, et al., *Ellinika B*. (Ch. 1-10)

DEPARTMENT OF EAST ASIAN LANGUAGES & LITERATURES

Examinations are administered by the department of instruction only. Students with previous knowledge of Chinese, Japanese, or Korean who do not seek EM credit for this experience but who wish to enroll in a course above the 1101 level are required to take a placement test before permission to enroll is granted. Students who desire EM credit for previous language study or experience must pass relevant exams with an acceptable score. For more information about the tests and to schedule an appointment, contact: Department of East Asian Languages and Literatures, 398 Hagerty Hall, (614) 292-5816.

CHINESE

A native speaker of Chinese may not receive EM credit for Chinese language courses. A native speaker of Chinese is anyone who graduated from a high school in which the principle language of instruction was Chinese.

Courses available for examination:

- 1101.01/51 Level One Chinese I (4)
- 1102.01/51 Level One Chinese II (4)
- 1103.01/51 Level Two Chinese I (4)
- 2102 Level Two Chinese II (5)
- 2141.01 Intensive Level Two Chinese: Oral (4)
- 2151.01/51 Intensive Level Two Chinese: Written (5)
- 4101 Level Three Chinese I (5)
- 4102 Level Three Chinese II (5)
- 4142.01 Intensive Level Three Chinese: Oral (5)
- 4152.01/51 Intensive Level Three Chinese: Written (5)

JAPANESE

All exams are 30 minutes in length.

- 1101.01/02/51 Level One Japanese I (4)
- 1102.01/02/51 Level One Japanese II (4)
- 1103.01/02/51 Level Two Japanese I (4)
- 2102.01/02 Level Two Japanese II (5)
- 4101 Level Three Japanese I (5)
- 4102 Level Three Japanese II (5)

KOREAN

Native speakers or anyone leaving Korea after high school graduation are not eligible for EM credit.

1101.01 Level One Korean I (4)

A 1-hour spoken and written exam containing: "Han'gul," basic sentence structure, and simple conventional expression. Familiarity of polite informal speech style is expected. Recommended text: *Integrated Korean Beginning 1*; and *Workbook Beginning 1*. University of Hawaii Press.

1102.01 Level One Korean II (4)

Continuation of 1101.01. Knowledge of simple functions (expression desire, providing reason, making an apology); and familiarity of present and past-tense forms, and polite formal and informal speech styles is expected. Recommended text: *Integrated Korean Beginning 2*; and *Workbook Beginning 2*. University of Hawaii Press.

1103.01 Level Two Korean I (4)

Continuation of 1102.01. Familiarity with both polite formal and informal speech styles; and knowledge of complex sentences and the plain and intimate speech styles is expected. Recommended text: *Integrated Korean Beginning 2*; and *Integrated Beginning 2 Workbook*. University of Hawaii Press.

2102.01 Level Two Korean II (5)

Continuation of 1103.01. Knowledge of different levels of speech styles, and using them without difficulty in speaking, listening, reading, and writing; and complex clause conjugations is expected. Recommended text: *Integrated Korean Intermediate 1*; and *Intermediate Korean 1 Workbook*. University of Hawaii Press.

4101.01 Level Three Korean I (5)

A 1-hour exam. Recommended text: *Modern Korean: An Intermediate Reader*. University of Hawaii Press. *Integrated Korean Intermediate 2*; and *Intermediate 2 Workbook*. University of Hawaii Press.

4102.01 Level Three Korean II (5)

A 1-hour exam. Recommended text: *Modern Korean: An Intermediate Reader*. University of Hawaii Press.

DEPARTMENT OF FRENCH & ITALIAN

Students who do not plan to register for a language course, but desire EM credit for previous language study, or experience are required to take a placement test. The placement tests are computerized and objective. No EM credit is awarded to native speakers for 1101-1103. For more information contact: Department of French and Italian, 200 Hagerty Hall, (614) 292-4938.

FRENCH

1101.01 Beginning French I (4)

Recommended text: Wong, et al., *Liaisons*. Heinle-Cengage, 2012. 1st Edition.

1102.01 Beginning French II (4)

Recommended text: Wong, et al., *Liaisons*. Heinle-Cengage, 2012. 1st Edition.

1103.01 Beginning French III (4)

Recommended text: *Bravo*. 5th Edition.

ITALIAN

1101 Italian I (4)

Recommended text: *Avanti! Beginning Italian*.

1102 Italian II (4)

Recommended text: *Avanti! Beginning Italian*.

1103 Italian III (4)

Recommended text: *Avanti! Beginning Italian*.

DEPARTMENT OF GERMANIC LANGUAGES & LITERATURES

Placement tests should be taken no more than one term prior to continuing study. For additional information contact: Department of Germanic Languages and Literatures, 498 Hagerty Hall, (614) 292-6985.

GERMAN

Native speakers of German who have completed the equivalent of a high school diploma in a German speaking country are not eligible for EM credit.

1101.01 German I (4)

1102.01 German II (4)

1103 German III (4)

YIDDISH

Students interested in learning more information about Yiddish, including earning EM credit, recommended texts, or suggested chapters to study, should contact Professor David Miller at miller.3@osu.edu, or (614) 292-7140. Only the department of instruction administers these tests.

1101 Yiddish I (4)

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

1102 Yiddish II (4)

Requires the ability to carry out simple dialogue in present, future, or past-tense. Recommended text: Weinreich, Uriel. *College Yiddish*. (Ch. 4-7)

1103 Yiddish III (4)

Requires the ability to use complex sentence structures, and to read and understand short texts in the original with aid of a dictionary. Recommended text: Weinreich, Uriel. *College Yiddish*. (Ch. 8-10)

DEPARTMENT OF NEAR EASTERN LANGUAGES & CULTURES

The Department of Near Eastern Languages & Cultures administers language proficiency exams in Arabic, Hebrew, Hindi, Persian, Turkish, Urdu, and Uzbek. Students wishing to complete the proficiency exams can do so by appointment through nelc@osu.edu - most business days between 9:30 am and 3:30 pm in 300 Hagerty Hall.

Proficiency exams are written (on paper - though oral follow-ups are sometimes requested) and take up to approximately one hour.

Language exams can be used to place students in language coursework, to evaluate transfer language coursework, and to verify language competency for graduate students in other departments.

All other exams are administered by the department of instruction. For more information contact: Department of Near Eastern Languages and Cultures, 300 Hagerty Hall, (614) 292-9255.

ARABIC

Proficiency exams are curriculum free, however knowledge of textbooks listed below might help shape expectations for the exams. All exams include oral and written components.

1101.01 Elementary Modern Standard Arabic I (4)

Recommended text: Brustad, et al., *Alif Baa*. Georgetown University Press, 2004. 2nd Edition. Brustad, et al., *Al-Kitaab fii Ta'allum al-'Arabiyya: Part One*. Georgetown University Press, 2004. 2nd Edition. (Ch. 1-5)

1102.01 Elementary Modern Standard Arabic II (4)

Recommended text: Brustad, et al., *Al-Kitaab fii Ta'allum al-'Arabiyya: Part One*. Georgetown University Press, 2004. 2nd Edition. (Ch. 6-13)

1103.01 Intermediate Modern Standard Arabic I (4)

Recommended text: Brustad, et al., *Al-Kitaab fii Ta'allum al-'Arabiyya: Part One*. Georgetown University Press, 2004. 2nd Edition. (Ch. 14-20)

HEBREW

Native speakers of Hebrew are not eligible for EM credit. Each exam is a 1-hour written exam.

1101.01 Elementary Hebrew I (4)

Recommended text: Ringvald, Vardit, et al., *Brandeis Modern Hebrew*. (Units 1-3 or equivalent.)

1102.01 Elementary Hebrew II (4)

Recommended text: Ringvald, Vardit, et al., *Brandeis Modern Hebrew*. (Units 4-7 or equivalent.)

1103.01 Intermediate Hebrew I (4)

Recommended text: Ringvald, Vardit, et al., *Brandeis Modern Hebrew*. (Units 8-11 or equivalent.)

PERSIAN

The Credit by Examination Tests are administered by the Department of Near Eastern Languages and Cultures (NELC). To earn credit higher than 1103, contact NELC at 330 Hagerty Hall and/or the Director of Persian Program, for more information. A native speaker of Persian is anyone who graduated from a high school in which the principle language of instruction was Persian.

1101 Elementary Persian I (4)

Recommended text: Windfuhr. *Modern Persian Elementary Level*. University of Michigan Press, 1982. (Ch. 1-10)

1102 Elementary Persian II (4)

Recommended text: Windfuhr. *Modern Persian Elementary Level*. University of Michigan Press, 1982. (Ch. 11-20)

1103 Intermediate Persian I (4)

Recommended text: Windfuhr. *Modern Persian Elementary Level*. University of Michigan Press, 1982. (Ch. 21-28)

TURKISH

1101 Elementary Turkish I (4)

Recommended text: Oztopcu, Kurtulus. *Elementary Turkish: A Complete Course for Beginners*. (Lessons 1-12)

1102.01 Elementary Turkish II (4)

Recommended text: Oztopcu, Kurtulus. *Elementary Turkish: A Complete Course for Beginners*. (Lessons 13-21)

1103 Intermediate Turkish I (4)

Recommended text: Oztopcu, Kurtulus. *Elementary Turkish: A Complete Course for Beginners*. (Lessons 22-29)

DEPARTMENT OF SLAVIC & EAST EUROPEAN LANGUAGES & CULTURES

All exams are administered only by the department of instruction. Native speakers of these languages who have completed high school in the principal language being tested are not eligible for EM credit. For additional information contact: Department of Slavic and East European Languages and Cultures, 400 Hagerty Hall, (614) 292-6733.

POLISH

1101 Elementary Polish I (4)
1102 Elementary Polish II (4)
1103 Intermediate Polish I (4)

ROMANIAN

Maximum of 12 credit hours awarded for Romanian credit examinations. Exam contains a written (150p.) and oral (50p.) portions. A score of 185 points or higher is required to obtain 12 credit hours.

1101 Elementary Romanian I (4)

A minimum score of 15 on the oral portion is required. Recommended text: Botoman, Rodica. *Discover Romanian*. OSU Press, 1994. (Ch. 1-6)

1102 Elementary Romanian II (4)

A minimum score 25 on the oral portion is required. Recommended text: Botoman, Rodica. *Discover Romanian*. OSU Press, 1994. (Ch. 7-12)

1103 Intermediate Romanian I (4)

A minimum score of 35 on the oral portion is required. Recommended text: Botoman, Rodica. *Discover Romanian*. OSU Press, 1994. (Ch. 13-16)

RUSSIAN

1101.01 1st-Year Russian I (4)

Recommended text: Lubensky, et al., *Nachalo, Book 1*. McGraw-Hill, 2002. 2nd Edition.

1102.01 Elementary Russian II (4)

Recommended text: Lubensky, et al., *Nachalo, Book 1*. McGraw-Hill, 2002. 2nd Edition.

1103.01 Intermediate Russian I (4)

Recommended text: Lubensky, et al., *Nachalo, Book 2*. McGraw-Hill, 2002. 2nd Edition.

DEPARTMENT OF SPANISH & PORTUGUESE

Students who do not plan to register for a language course, but desire EM credit for previous language study or experience, are required to take a placement test. For additional information contact: Department of Spanish and Portuguese, 298 Hagerty Hall, (614) 292-4958, or sppotest@osu.edu.

PORTUGUESE

1101.01 Portuguese I (4)

Recommended text: *Ponto de Encontro*

1102.01 Portuguese II (4)

Recommended text: *Ponto de Encontro*

1103.01 Portuguese III (4)

Recommended text: *Ponto de Encontro*

SPANISH

Native speakers are ineligible to receive EM credit for 1101-2202.

1101.01 Spanish I (4)

Recommended text: *Arriba*

1102.01 Spanish II (4)

Recommended text: *Arriba*

1155 Spanish (4)

Recommended text: *Arriba*

1103.01 Spanish III (4)

Recommended text: *Arriba*

Foreign Language Validation - ACTFL Testing

If you are a native (or near-native) speaker of a language other than English and graduated from high school in the United States, you may request a foreign language validation test through The Ohio State University Testing Center. If you reach the appropriate level on this test, your foreign language requirement will be validated. This means that you will be allowed to substitute 12 hours of approved courses to fulfill the foreign language requirement. You should then meet with your academic adviser to find out which courses can be used in lieu of the foreign language requirement. **You will NOT be awarded EM credit hours for a validation.**

You can only complete a validation test **ONCE**. You may not enroll in any language course for which you received a validation.

The Ohio State University Testing Center offers the Certified ACTFL Oral Proficiency Interview (OPI) and/or the Certified ACTFL Written Proficiency Test (WPT) for this purpose. Haitian Creole, Pashto, Urdu, and Vietnamese require both the OPI and WPT. All other languages require the OPI only.

The languages available for validation are subject to change but can include:

Afrikaans	GA	Pashto (OPI and WPT)
Akan-Twi	Georgian	Punjabi
Albanian	Gujarati	Slovak
Algerian	Haitian Creole (OPI and WPT)	Somali
Amharic	Hausa	Swahili
Armenian	Hiligaynon	Syrian
Azerbaijani	Hmong-Mong	Tagalog
Baluchi	Hungarian	Tajik
Bengali	Igbo	Tamil
Bulgarian	Indonesian	Tausug
Cambodian	Japanese	Telugu
Cantonese	Kikongo	Thai
Cebuano	Krio	Turkmen
Czech	Kurdish-Kumanji	Urdu (OPI and WPT)
Dari	Lao	Vietnamese (OPI and WPT)
Dutch	Malay	Wu
Egyptian	Nepali	Yoruba

To register, please visit www.languagetesting.com and create an account. A complete guide to signing up can be found at testing.osu.edu under [ACTFL-Validation](#).

DSST Exams

Information about DSST Exams can be found at: <http://getcollegecredit.com/>. The Testing Center administers DSST Exam by appointment only. To schedule an appointment, visit: <http://testing.osu.edu/>. There is a \$50 administration fee when you register for an appointment, and an \$80 exam fee paid to DSST on the day of your appointment. Exam fees (not administration fees) are waived for active-duty and reserve military personnel. To have your DSST transcript processed, submit your official transcript to: The Ohio State University, 585 Student Academic Services Building, 281 West Lane Avenue, Columbus, Ohio 43210

<u>Test Subject</u>	<u>Min Score</u>	<u>Course(s)</u>
Ethics in America	400	PHILOS 1300 (3)
Introduction to Religions	400	Comparative World Religions Studies GEN (3)
Astronomy	400	ASTRON 1140 (3)

CLEP Exams

The College Level Examination Program (CLEP) Exams are internet-based, and administered at the Testing Center. General and preparation information about CLEP can be found on their website: <http://clep.collegeboard.org/>. Register online for CLEP exams at the Testing Center at: <http://testing.osu.edu/>. An administration fee of \$30 is paid during the registration process. An \$80 exam fee is paid to CLEP when you arrive for your appointment. Exam fees (not administration fees) are waived for active-duty and reserve military personnel. To receive EM credit for CLEP exams, students must request official score from College Board to be sent to: The Ohio State University, 585 Student Academic Services Building, 281 West Lane Avenue, Columbus, Ohio 43210

Note: Credit is only awarded for students who meet or exceed the minimum score for their CLEP Exam.

<u>Test Subject</u>	<u>Min Score</u>	<u>Course(s)</u>						
American Government	65+	POLITSC 1100 (3)				Microeconomics	50+	ECON 2001.01 (3)
Biology	50+	Biology 1101 (4)	German, Level 2	65+	German 1101 (4) German 1102 (4) German 1103 (4)	Macroeconomics	50+	ECON 2002.01 (3)
College Algebra	63+	Math 1148 (4)				Principles of Marketing	65+	BUSML 3250 (3)
Financial Accounting	65+	ACCTMIS 2200 (3)	History of the US I	56+	History 1151 (3)	Sociology	50+	Sociology 1101 (3)
French, Level 1	60-66	French 1101 (4) French 1102 (4)	History of the US II	57+	History 1152 (3)	Spanish, Level 1	56-65	Spanish 1101 (4) Spanish 1102 (4)
French, Level 2	67+	French 1101 (4) French 1102 (4) French 1103 (4)	Human Growth & Development	58+	Psych 3340 (3)	Spanish, Level 2	66+	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4)
German, Level 1	52-64	German 1101 (4) German 1102 (4)	Introduction to Business Law	60+	BUSFIN 3500 (1.5) BUSFIN 4510 (1.5)	Western Civilization I	55+	History 1211 (3)
			Introductory Psychology	59+	Psychology 1100 (3)	Western Civilization II	54+	History 1212 (3)

IB Exams

Please visit the International Baccalaureate website for information on how to transfer an IB diploma: <http://www.ibo.org>. The Ohio State University only awards EM credit for IB scores of 4 or higher that are achieved in the "Higher Level (HL)" programs and approved by the Department. No credit is awarded for "Standard Level (SL)" scores. Credit guidelines appear below.

<u>Exam Subject</u>	<u>Score</u>	<u>Course(s)</u>	<u>Exam Subject</u>	<u>Score</u>	<u>Course(s)</u>	<u>Exam Subject</u>	<u>Score</u>	<u>Course(s)</u>
Arabic A1	4+	Arabic 2702	French A: Language & Literature	6+	French 1102.01 (4) French 1103.01 (4)	Physics	4+	Physics 1200 (5) Physics 1201 (5)
American History	4+	History 1151 (3) History General (3)	French A: Literature	6+	French 1102.01 (4) French 1103.01 (4)	Psychology	4+	Psychology 1100 (3)
Biology	4+	Biology 1113 (4) Biology 1114 (4)	French B	6+	French 1102.01 (4) French 1103.01 (4)	Social & Cultural Anthropology	4+	Anthropology 2202 (3)
Chemistry	4+	Chemistry 1210 (5)	Geography	4+	Geography 2400 (3)	Spanish A: Language & Literature	5	Spanish 1101 (4) Spanish 1102 (4)
Economics	4+	ECON 2001.01 (3) ECON 2002.01 (3)	History: Europe and Middle East	4+	History 2353 (3) History 3253 (3)	Spanish A: Language & Literature	6 or 7	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4)
English A: Language & Literature	4+	English 1110.01 (3) English 1167H (3)	Math	4 or 5 6 or 7	Math 1151 (5) Math 1151 (5) - Math 1152 (5) possible. Contact Math Advising Office	Spanish A: Literature	6 or 7	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4)
English A: Literature	4+	English 1110.01 (3) English 2220 (3)	Philosophy	4+	Philosophy 1100 (3)	Spanish B	6 or 7	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4)
Film	4+	English 2263 (3)				World History	4+	History 2650 (3) History General (3)

AP Exams

The Advanced Placement Program (AP) Tests approved for EM credit are listed in this section. Tests are administered annually in May. The Ohio State University only accepts scores of 3 or higher. To earn credit for AP scores, contact College Board at 1(888) 225-5427 to have your official score report sent to recipient code #1592, The Ohio State University Testing Center, 585 Student Academic Services Building, 281 West Lane Avenue, Columbus, Ohio 43210.

Advanced Placement FAQs

When are scores posted?

We receive and post scores electronically; scores are typically posted the same day as received. Scores sent to OSU on exam day are usually processed by July 10th. Scores sent after exam day are generally processed within 3 weeks from when they were requested.

My orientation program is before AP scores will be processed. How do I register for classes?

All students will register for autumn semester during their orientation program. You can estimate what credits you may be earning by using the credit guidelines below. Your academic advisor will provide you with the best advice on which courses to register for based on your AP experience, your major, and other factors.

Do I need to participate in the online math placement assessment if I took AP Calculus?

Students anticipating earning math credits based on a qualifying score in AP Calculus are not required to participate in the math placement test. However, taking the placement test cannot place you into a lower math course. Therefore, it is advised that all NFYS students take the online assessment prior to orientation so you can register for a math course during orientation.

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 term you were admitted, not the date OSU receives your score report. Contact the Testing Center for prior year's information.

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

First, verify on your AP Student Grade Report that The 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 information. If these items are incomplete or inaccurate, we may need to update your record—call the Testing Center at (614) 292-2241.

If Ohio State is listed as a recipient institution and all demographic information appears correct, bring the original copy of your AP Student Grade Report to the Testing Center for processing.

How can I verify my credits are posted?

Use Buckeye Link (<http://buckeyelink.osu.edu/>) to view your credits, advising report, and degree audit. For further help, please contact your academic advisor.

Note: Do not wait until the term of graduation to investigate missing AP credits.

AP TESTS, SCORES, AND CREDIT AWARDED

The AP Test subjects, the required scores to earn EM credit, and the course titles and semester credit hours are listed below.

Note: Semester credit hours for courses are noted in the parentheses.

AP Test Subject	Score	Course(s)						
Art History	3, 4, or 5	HISTART 2002 (3)	French Language & Culture	5	French 1101 (4) French 1102 (4) French 1103 (4) French 2101.01 (3)	Latin	4	Latin 1101.01 (5) Latin 1102.01 (5) Latin 1103 (3)
Biology	3	Biology 1101 (4)	German Language & Culture	3	German 1101 (4) German 1102 (4)	Latin	5	Latin 1101.01 (5) Latin 1102.01 (5) Latin 1103 (3) Latin 2105 (3)
Biology	4	Biology 1113 (4)	German Language & Culture	4	German 1101 (4) German 1102 (4) German 1103 (4)	Music Theory	3	Music 1121 (2)
Biology	5	Biology 1113 (4) Biology 1114 (4)	German Language & Culture	5	German 1101 (4) German 1102 (4) German 1103 (4) German 2101 (3)	Music Theory	4 or 5	Music 2221 (2) Music 2224 (2)
Calculus AB	3, 4, or 5	Math 1151 (5)	Government & Politics: United States	3, 4, or 5	POLITSC 1100 (3)	Physics 1	3, 4, or 5	Physics 1200 (5)
Calculus BC	3, 4, or 5	Math 1151 (5) Math 1152 (5)	Government & Politics: Comparative	3, 4, or 5	POLITSC 1200 (3)	Physics 2	3, 4, or 5	Physics 1201 (5)
Chemistry	3	CHEM 1110 (5)	History: European	3, 4, or 5	History 1212 (3)	Physics C: Electricity & Magnetism	3, 4, or 5	Physics 1251 (5)
Chemistry	4 or 5	CHEM 1210 (5)	History: United States	3, 4, or 5	History 1151 (3) History 1152 (3)	Physics C: Mechanics	3, 4, or 5	Physics 1250 (5)
Chinese Language & Culture	3	Chinese 1101 (4) Chinese 1102 (4)	History: World	3, 4, or 5	History 1681 (3) History 1682 (3)	Psychology	3, 4, or 5	PSYCH 1100 (3)
Chinese Language & Culture	4	Chinese 1101 (4) Chinese 1102 (4) Chinese 1103 (4) Chinese 1103 (4)	Human Geography	3, 4, or 5	Geography 2400 (3)	Research	Contact your department	
Chinese Language & Culture	5	Chinese 1101 (4) Chinese 1102 (4) Chinese 1103 (4) Chinese 2102 (5)	Italian Language & Culture	3	Italian 1101 (4) Italian 1102 (4)	Seminar	Contact your department	
Computer Science A	3	CSE 1223 (3)	Italian Language & Culture	4	Italian 1101 (4) Italian 1102 (4) Italian 1103 (4)	Spanish Language	3	Spanish 1101 (4) Spanish 1102 (4)
Computer Science A	4 or 5	CSE 1223 (3) CSE 2123 (3)	Japanese Language & Culture	3	Japanese 1101 (4) Japanese 1102 (4)	Spanish Language	4	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4)
Computer Science Principles	3	CSE 1211 (3)	Japanese Language & Culture	4	Japanese 1101 (4) Japanese 1102 (4) Japanese 1103 (4)	Spanish Language	5	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4) Spanish 2202 (3)
Microeconomics	3, 4, or 5	ECON 2001.01 (3)	Japanese Language & Culture	5	Japanese 1101 (4) Japanese 1102 (4) Japanese 1103 (4) Japanese 2102 (5)	Spanish Literature & Culture	3 or 4	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4)
Macroeconomics:	3, 4, or 5	ECON 2002.01 (3)	Japanese Language & Culture	5	Japanese 1101 (4) Japanese 1102 (4) Japanese 1103 (4) Japanese 2102 (5)	Spanish Literature & Culture	5	Spanish 1101 (4) Spanish 1102 (4) Spanish 1103 (4) Spanish 2202 (3)
English Language & Composition*	3, 4, or 5	English 1110.01 (3)	Latin	3	Latin 1101.01 (5) Latin 1102.01 (5)	Statistics	3	Statistics 1450 (3)
English Literature & Composition*	3, 4, or 5	English 1110.02 (3)	Latin	3	Latin 1101.01 (5) Latin 1102.01 (5)	Statistics	4 or 5	Statistics 2450 (3)
Environmental Science	3, 4, or 5	ENR 2100 (3)	Latin	3	Latin 1101.01 (5) Latin 1102.01 (5)	Studio Art: 2-D Design	3, 4, or 5	Art 2300 (3)
French Language & Culture	3	French 1101 (4) French 1102 (4)	Latin	3	Latin 1101.01 (5) Latin 1102.01 (5)	Studio Art: 3-D Design	3, 4, or 5	Art 2400 (3)
French Language & Culture	4	French 1101 (4) French 1102 (4) French 1103 (4)	Latin	3	Latin 1101.01 (5) Latin 1102.01 (5)	Studio Art: Drawing	3, 4, or 5	Art 2100 (3)

*Students who have scores of 3, 4, or 5 for BOTH English Language & Composition AND English Literature & Composition will be awarded credit for English 1110.01 (3) and English 1167H (3).