Early College Credit Curriculum Guide

2018-2019

Dual Credit and Credit by Exam

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Dual Credit Courses

The following courses are offered through the Harper College Dual Credit program. Students participating in the Dual Credit program earn both high school and college credit simultaneously. When the class is complete, the student will earn a letter grade on both their high school and Harper College transcripts.

Accounting/Bookkeeping

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
ACC100 Introductory Accounting (3 Credit Hours) D211 #B68602 "Accounting 1-Financial" Provides students with a foundation in fundamental accounting procedures using the accounting cycle for both service and merchandising businesses, including adjustments, preparation of financial statements and closing procedures. Also included are reconciliation of bank statements, pretty cash and examination of fraud and internal controls. This non-transfer course is intended for those students planning to take only one semester of accounting, or for those who need preparation before enrolling in ACC101.	None	High Schools	D211: Hoffman Estates, Fremd, Conant	Heintz. College Accounting. 22nd Edition. Cengage, 2017 ISBN: 9781337053822	
ACC112 QuickBooks (2 Credit Hours) D211 #B69603 "QuickBooks" Provides students with applications of QuickBooks. Students apply accounting principles and manage accounting records like those used in small businesses.	Prior or concurrent enrollment in ACC100 or ACC101 (District 211- # B68602 or #B488) or B38602	High Schools	D211: Hoffman Estates, Fremd, Conant	Conlon. Quickbooks Desktop 2018: Comprehensive. Labyrinth, 2018 ISBN: 9781640610040	(New QuickBooks course replaces ACC155 fall 2016.)

CAS160 Introduction to Business Software Packages	None	High Schools	D211: Conant, Hoffman Estates,	Shaffer. <u>New</u> <u>Perspective on</u>	Year-long course at high school-First
(3 Credit Hours)			Schaumburg, Fremd	Microsoft Office 2007 First CRS	implementation Spring 2015 (D211),
D211 #B66402 "Technology Applications I & II"				Windows Vista ED.	Spring 2017 (D220).
D220- #3140732/314073 "Tech Certifications II"			D220:Barrington	Course Technology,	
				2008	
Provides an opportunity to become proficient in the use of currently popular software packages or suites. Includes word processing, spreadsheets, databases, presentation software and the integration of these applications.					
mogration of those applications.					

Art

Course Description	Prerequisites	Campus	Participating	Textbook	Notes
		Location	High Schools		
ART105 Introduction to Visual Art	None	Hoffman	Hoffman Estates	Sayre, Henry M A	
(3 Credit Hours)		Estates		World of Art. 8th	
			D214	Edition. Pearson,	
D211 #A65603 "Art in Contemporary Society"		D214		2016	
D214 #62990 "College Introduction to Visual Art"				Fichner-Rathus, L.	
				Understanding Art.	
Introduces the visual arts with an emphasis on creating awareness				10th Edition.	
of aesthetics, artistic concepts, media, theory and criticism. In				Cengage Learning,	
addition, students will develop a critical understanding of art and				2012	
build visual literacy. IAI F2 900					

Biology

Course Description	Prerequisites	Campus	Participating	Textbook	Notes
		Location	High Schools		
BIO101-Biology Survey (3 credit hours) D211 #S64702 "Biology 2"	None	D211 High Schools	All D211 Schools	Simon, Dickey and Reece. <u>Campbell:</u> <u>Essential Biology</u> with Physiology. 4th	Starting Spring 2017 at all D211 Schools (one semester course)
Surveys the science of biology, emphasizing the human organism. Includes chemical and physical properties, physiological systems of control, growth, differentiation, reproduction, genetics, ecology, evolution and ethical considerations. Also includes a broader overview of the plant and animal kingdoms and humans' place in, and interactions with, those kingdoms.(NOTE: Not Lab science				With Physiology. 4th Edition. Pearson, 2013 ISBN: 9780321772602	Common Assessment
credit.) IAI L1 900 BIO103- Man and Environment	None	Dorrington	Dorrington	Instructor Onen	Starting Caring 2015
(3 credit hours)	None	Barrington	Barrington	Instructor Open Source Text	Starting Spring 2015 at Barrington High School
D220 #804304 "Environmental Science Honors"					
Surveys and analyzes man's role as an environmental modifier. Ecological, social cultural, economic and political influences on environment are considered. The historical and current pollution problems and other environmental disruptions are analyzed and evaluated. Possible remedial courses of action are discussed and evaluated. (NOTE: Not Lab science credit.) IAI L1 905					
BIO135-Introduction to Human Anatomy and Physiology (4 credit hours)	None	D 211 High Schools	All D211 Schools	Hole. Essentials of Human Anatomy and Physiology 10th	Starting Spring 2017 at all D211 Schools
D211 #S63702 "Anatomy and Physiology" D214 TBD				Edition. McGraw Hill, 2010 ISBN: 0072965630	(one semester course) Common Assessment
Surveys the human body, with emphasis on basic physical and chemical concepts, anatomy, physiology and embryology. Designed to meet the needs of students in certain allied health career programs. Knowledge of high school biology is assumed. (NOTE: Not Lab science credit)				00/200000	
BIO136- Introduction to Human Disease (3 credit hours)	Knowledge of high school biology	D211 High Schools	All D211 Schools	Human Diseases – A Systematic	Taught at Palatine HS by Harper instructor.
D211-TBD	assumed.			Approach (with CD). Zelman, Raymond, Holdaway, Dafnis &	Starting Summer 2018.
Surveys the nature of human disease with emphasis on the functional disturbances within the body systems. Designed to meet the needs of students in certain allied health career programs. Knowledge of high school biology assumed. (NOTE: Not Lab science credit.				Mulvihil. 8th Edition. Pearson, 2014 ISBN: 9780133424744	

Education

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
ECE101 Introduction to Early Childhood Education	Program's health	High Schools	All D211 Schools	Casper. Early	
(3 Credit Hours)	requirements			Childhood Education.	Common Assessment
			All D214 Schools	1st Edition. McGraw-	
D211 #H65702 "Advanced Early Childhood Education"				Hill, 2010 ISBN:	
D214 #60500 "College Intro to Childhood Education/ 05920				9780073378480	
"Practicum in Early Education" (All levels with assessments)					
				Harms. <u>Early</u>	
Provides an overview of early childhood care and education,				Childhood	
including the basic values, structure, organization and				Environment Rating	
programming. Examination of the student's personal qualities in				Scale. Teacher	
relationship to expectations of the field. Directed observation in a				College Press, 2005	
variety of programs and settings. Fifteen (15) hours of observation				ISBN:	
required. (NOTE: The program's health requirements must be				9780807745496	
completed prior to observation.)					

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
EDU201 Introduction to Education	12th grade	Harper	Barrington	Hall, Quinn &	Course can be
(3 Credit Hours)	standing			Gollnick. Introduction to	canceled with little notice if there are less
D220 #493303 "Introduction to Education"				Teaching: Making a Difference in	than 10 enrolled students.
Provides an introduction to teaching as a profession in the American education system. Offers a variety of perspectives on education including historical, philosophical, social, legal, and ethical issues in a diverse society. Includes organizational structure and school governance. There is a mandatory 15 hour clinical component in this course; therefore, the student must pass a criminal background check for successful completion of this course.				Student Learning. 2nd Edition. Sage, 2017 ISBN: 9781483365015	otadorito.

Economics

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
ECO115 Consumer Economics (3 Credit Hours)	None	Harper	D214 schools	Garman, Forgue. Personal Finance. 12th Edition.	Offered to D214 students as Credit by Exam.
D214 #66210 "Personal Finance"				Cengage, 2012 ISBN:	Exam.
Introduces the concepts of personal financial planning within the current economic environment. Emphasizes topics such as basic macroeconomic theory, obtaining credit, purchasing insurance, investment alternatives, basic real estate finance and tax planning.				9781305778405	

Electronics

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
ELT110 Introductory Electronics (4 Credit Hours) D211 #T67402 "Electronics Technology I" D214 #60060 "Introductory Electronics" D220 #497403 "Introductory Electronics"	Completion of High school Algebra I and 10 th grade reading level.	Harper	All high schools in districts 211, 214, and 220	Course materials are distributed in class	
electrical laws and principles. Presents electrical quantities, units, symbols and notation. Examines foundational electronic materials and components. Presents elementary DC (direct current) and AC (alternating current) network analysis, key semiconductor devices, and simple analog and digital circuits. Also covers electrical safety considerations, laboratory instrumentation and test and measurement techniques.					
ELT203 Digital Electronics (4 Credit Hours) D211 #T60802 "PLTW Digital Electronics" D214 #66911/66912 "PLTW Digital Electronics" D220 #316125 "PLTW Digital Electronics" Examines digital logic circuitry from the underlying structure of Field Effect Transistors (FETs) through how these devices are built into complex integrated circuits (ICs). Includes combinational and sequential logic circuits, binary and hexadecimal number systems, error detection and correction, Boolean algebra, Karnaugh maps, counters, state machines, semiconductor memories, and programmable devices with special emphasis on microcontrollers	ELT110 with a grade of C or better or completion of equivalent High School PLTW coursework. (T302-PLTW Principles of Engineering) or D214 PLTW Introduction to Engineering design #06882	High School	All high schools in districts 214, and 220 D211 Palatine, Fremd, Conant, Hoffman Estates	Floyd. <u>Digital</u> <u>Fundamentals</u> . 11th Edition. Pearson, 2014 ISBN: 9780132737968	
ELT215 Industrial Control Systems (4 Credit Hours) D214 #60070 "College Industrial Control Systems" D220 #497413 "Electronics I" Introduces students to industrial control systems. Covers fluid power fundamentals, and pneumatic and hydraulic circuit theory. Examines the integration of optics, sensors, and various electronic control systems including programmable logic controller (PLC) and personal computer (PC) controllers. Infrared (IR) emitters and detectors, and laser systems are also examined. Introduces the application and control of automated robotic systems. The course	ELT 110 and ELT 140 with grades of C or better, or consent of instructor.	Harper	All high schools in districts 214, and 220	Course materials are distributed in class	
culminates with a capstone team project involving the development, design, construction, presentation and ultimate demonstration of a fully operational automated industrial control system.					

English

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
ENG101 Composition (3 Credit Hours) D211 #E60503 "Expository Composition" D220 #204704 "English 101" Emphasizes the writing of expository prose. Introduction to the critical reading of nonfiction prose. IAI C1 900	ACT English score of 19 or more and an ACT reading score of 20 or more; or SAT Reading/Writing score of 510; or Testing Center essay of 4 or 5	D211 D220: Barrington	D211: All campuses D220: Barrington	No particular textbook is required.	

Fashion Design

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
FAS100 Industrial Sewing Methods (3 Credit Hours)	None	D220: Barrington D214:	D220: Barrington D214:	Czachor and Cole. Professional Sewing Techniques for Designers (w/Sample	
D211 #H67702 "Fashion Construction Independent Study 2" D214 #65870 "College Fashion Construction" D220 #403313 "Fashion III"		Buffalo Grove Rolling Meadows D211:	Buffalo Grove Rolling Meadows	Workbook) Package. Fairchild, 2014 ISBN: 9781563679445	
Introduces students to the use and care of industrial sewing equipment, notions and supplies. Presents instruction in basic sewing techniques and their application to garment construction. (NOTE: This course is intended for students with little or no sewing experience.)		Conant Fremd Hoffman Estates Palatine Schaumburg	Conant Fremd Hoffman Estates Palatine Schaumburg	Czachor and Cole. Professional Sewing Techniques for Designers. 2nd Edition. Fairchild, 2014 ISBN: 9781609019259	
FAS110 Costume History (3 Credit Hours) D220 #491103 "Costume History" Introduces the elements of design and color in historical perspective. Surveys historical periods of time focusing on costumes. Examines the influences of social, political and economic forces on fashion in these periods	None	Harper	Barrington	Survey Of Historic Costume Tortora ISBN: 978-1-56367-806- 6	
FAS112 Fashion Basics (3 Credit Hours) D211 #H68303 "Design Independent Study 2" D214 #65860 "College Fashion Merchandising" D220 #403013 "Fashion Design and Merchandising"	None	D220: Barrington D214: Buffalo Grove Rolling Meadows	D220: Barrington D214: Buffalo Grove Rolling Meadows	Kemp-Gatterson. Apparel: Concepts & Practical Application. Fairchild, 2008 ISBN:	Final exam project
Presents fashion merchandise through evaluation of fashion products. Develops awareness of construction, as well as workmanship and design elements, such as fabric, color silhouette and taste.		D211: Conant Fremd Hoffman Estates Palatine Schaumburg	D211: Conant Fremd Hoffman Estates Palatine Schaumburg	9781563674815	

Fashion, continued

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
FAS116 Fashion Industries Career Practicum and Seminar (3 Credit Hours) D211 – Not currently being offered. D214 #60260 College Fashion Industry Career Practicum & Seminar D220 #491303 Fashion Career Practicum Studies an overview of career and employment possibilities in the fashion businesses and industries. Places emphasis on individual career path selections through interest testing and career counseling.	Concurrent employment of ten hours or more in a fashion related field is required. Students must have a fashion related job before the first day of class.	Harper	All high schools in districts 214, and 220	Granger. Fashion Industry and Its Careers. 3rd Edition. Fairchild, 2015 ISBN: 9781628923414	Employment opportunities can include working in a clothing retail store, a department store selling fabric such as Jo-Ann Fabrics or Hancock Fabrics, a bridal store, a company that produces textiles, or a resale shop selling clothing.

Fire Science

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
FIS100 Fundamentals of Fire and Emergency Services (3 Credit Hours) D211 #W66303 "Introduction to Fire Science" D214 #60130 "College Introduction to Fire Science" D220 #498303 "Fire Science" Provides an overview of fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local governmental; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; fire protection systems; introduction to fire strategy and tactics.	"B" high school grade average recommended	Harper	All high schools in districts 211, 214, and 220	International Fire Service Training Association. Fire & Emergency Services Orientation & Terminology. 6th Edition. Fire Protection Publications, 2016 ISBN: 9780879395926 Kirschman. I Love a Fire Fighter. 1st Edition. Guilford Publications, 2004 ISBN: 9781593850630	
FIS 121 Fire Behavior and Combustion (3 Credit Hours) D211 # W66403 "Fire Behavior and Combustion" D214 #60140 "College Fire Behavior & Combustion" D220 #498303 "Fire Science" Explores the theories and principles of how and why fires start, spread, and are brought under control. Students will be able to relate the principles by which fires spread with the appropriate methods of control.	None	Harper	All high schools in districts 211, 214, and 220	Gann. Principles of Fire Behavior and Combustion. 4th Edition. Jones & Bartlett, 2015 ISBN: 9780763757175 Chikerotis. Firefighters from the Heart. 1st Edition. Cengage Learning, 2006 ISBN: 9781418014230	

Geography

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
GEG101 World Regional Geography (3 Credit Hours)	No Prerequisite.	High Schools	D211: Palatine, Fremd, Conant,	DeBlij. World Today. 7th Edition. Wiley, 2016 ISBN:	One semester. Common Assessment
D211- TBD			Schaumburg, Hoffman	9781119236481	
Surveys the major world regions emphasizing their physical, cultural, economic and historical geographies; provides a geographic interpretation of major current events. IAI S4 900N			Estates		
GEG150 GIS and Mapping Principles (3 Credit Hours)	No Prerequisite.	High Schools	D214: Buffalo Grove	Shellito. Introduction to Geospatial Technologies. 3rd	One semester, first offered Fall 2017.
D214- #67920				Edition. W. H. Freeman, 2016	Common Assessment
Provides an introduction to geospatial technologies, such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and Remote Sensing through hands-on computer based				ISBN: 9781464188725	
exercises. The essential principles of map use and design, and spatial analysis are also included in this course. Fundamental				Gorr and Kurland. GIS Tutorial 1: Basic	
desktop computer skills assumed. IAI S4 905				Workbook. 10.3x Edition. ESRI Press, 2016 ISBN: 9781589484566	

Graphic Arts

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
GRA103 Digital Imaging I (3 Credit Hours) D214 #66301/66302 "College Advanced Graphic Design"	No Prerequisite. Students who wish to continue their studies in GRA at Harper,	High Schools	D214: Elk Grove ,Hersey, Rolling Meadows.	Weinmann. Photoshop CC: Visual QuickStart Guide (2015	Common Assessment
Covers fundamentals of professional image-editing software (Adobe Photoshop). Emphasizes skills to manipulate photos using current software tools and special effects filters. Explores program tools, color correction, channels, layers and masks. Computer skills are required for success in this course.	will be required to take GRA101 in their first semester.		Prospect	Release). 1st Edition. Peachpit Press, 2015 ISBN: 9780134308890	

Health Careers

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
CNA101 Nursing Assistant Training (6 Credit Hours) D211 #R61402, W61403 at Harper "Certified Nursing Assistant" D214 #60200 "College Nursing Assistant Training" at Harper (#68171/68172 at D214) D220 #494403 "Nursing Assistant Program" Provides theory and training in the basic skills essential to the practice of health care workers who will assist the nurse in the care of patients in a variety of health care settings. Includes simulated practice and opportunity for clinical application. The course is approved by the Illinois Department of Public Health, Office of Health Regulations and successful completion is required for application for the Nurse Aide Competency exam. NOTE: Students are required to have a valid Social Security Number, pass a criminal background check, and meet health requirements. Special fees apply.	16 year old Junior or Senior. Must have ability to lift, move, and transfer patients. Students must have health insurance, meet all health requirements, pass a criminal background check, and have eligibility to work in the United States. All above requirements will be reviewed in the mandatory attendance Information Session at the beginning of each semester. Prerequisite: ENG 100 or ENG 101 with a grade of C or better; or ESL 073 with a grade of B or better; or RDG 090 or RDG 099 with a grade of C or better; or an ACT Reading score of 20 or higher, or required placement test scores; SAT 510 or better; English placement Essay-3 or better.	Harper Conant Palatine Wheeling Elk Grove	All students in districts 211, 214, and 220 can take this class at Harper. The course is also offered at Conant, Elk Grove, Palatine, and Wheeling High Schools. Fremd students attend Palatine. Hoffman/ Schaumburg students attend Conant.	Carter, Pamela. <u>Lippincott's</u> Textbook for Nursing Assistants & Student Workbook & Video Series for Nursing Assistant - Student DVD Package. 4th Edition. Lippincott Williams & Wilkins, 2016 ISBN: 9781496323514	Student out-of-pocket cost for the course is approximately \$200.00 - \$400.00. This includes a criminal background check, health requirements, uniform, CPR certification, required supplies and materials, cap and gown for graduation, and state competency exam. Some health requirements may be covered by insurance. Proof of valid health insurance is required for this course. Costs can vary by semester and will be reviewed in class.
HSC105 Introduction to Health Care Today (2 Credit Hours) D211 # W61303 "Health Occupations" D214 #60180 "College Introduction to the Health Care Field" D220 #494103 "Introduction to Health Care" Familiarizes student to the health care delivery system including an introduction to the organization, structure, function and issues related to the health care environment. Emphasis placed on the importance of effective communication skills for health care professionals, team building, professionalism and diversity in the health care center.	None	Harper	All high schools in districts 211, 214, and 220	Mitchell, Joyce, RN, BSN, MBA and Haroun. <u>Introduction</u> to <u>Healthcare</u> . 3rd Edition. Thomson, Delmar Learning, 2012 ISBN: 9781435487550	

Health Careers, continued

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
HSC106 Health Occupations Career Observation (1.5 Credit Hours)	Prior or concurrent enrollment in HSC 105 with a grade of C	Harper	All high schools in districts 211, 214, and 220	None (COMPLIO Account)	Student out-of-pocket cost for health requirements is
D211 #W61503 "Health Occupations Observational Internship" D214 #60190 "College Health Occupations Career Observation" D220 #494303 "Health Career Observation" Provides students an opportunity to observe selected occupations within a hospital health care setting. The student will	or better, or one semester of high school anatomy with lab with a grade of C or better.				approximately \$200.00. Proof of valid health insurance is also required for this course. Costs can vary by semester and will be
attend 13 two-hour sessions under the supervision of the instructor and departmental specific mentors. The first three weeks of the course are devoted to orientation and completion of health requirements for the clinical site. All health requirements must be met by the first day of observation at the student's assigned hospital. The instructor will work with the students in class to ensure these requirements are met. Proof of having met the health requirements and a drug free status, are					reviewed in class. Offering Summer 2018 through D211.
conditions of observing at the hospitals. HSC112 Medical Terminology (2 Credit Hours) D211 #R61302 "Health Career Exploration and Medical Terminology" D214 #66640 "College Medical Terminology" D220 #494203 "Medical Terminology" Emphasizes the origin and the basic structure of medical words, including prefixes, suffixes, word roots, combining forms and plurals. Offers pronunciation, spelling, and definition of medical terms based on the body systems approach. Emphasis on rendering a professional vocabulary required for work in the health care field.	None	Harper Barrington Conant Fremd Hoffman E. Palatine Schaumburg Wheeling	All students in districts 214 & 220 can take this class at Harper. The course is also offered for Dual Credit at D211, D214 & D220 high schools.	Turley, Susan. Medical Language Plus My Medical Terminology Lab with Pearson eText - Access Card Package. 3rd Edition. Prentice Hall, 2014 ISBN: 9780133962048	Starting Spring 2019- D214 campus and D220 campus.

Heating, Ventilation, Air Conditioning (HVAC), and Refrigeration

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
HVA103 Heating Principles (3 Credit Hours) D211 #W64803 "Heating Principles" D214 #60150 "College Heating Principles" D220 #497313 "Heating Principles" Introduction course for Dual Credit students. Introduces vocabulary, concepts and scientific principles used in the heating industry. Studies heat laws, heat transfer, and examines fundamentals of the combustion process. Covers gas, oil, and electric forced-air systems for residential comfort heating. Emphasizes practical application for testing and adjusting system performance, troubleshooting electrical systems and control, working with gas pipe, preventative maintenance, service and repair. (formerly RAC 103)	Prior or concurrent enrollment in ELT 110 (Introductory Electronics) with a grade of C or better, or consent of coordinator. Successful completion of high school Algebra is recommended. To ensure timely completion of all requirements, students must contact the HVA Program Coordinator, Jose Vital, before their first day of class. He can be contacted at 847-925-6823.	Harper	All high schools in districts 211, 214, and 220	Whitman. Refrigeration & Air Conditioning Technology. 7th Edition. Delmar Publishing Co., 2013 ISBN: 9781111644475 Supplemental materials Pair of Safety Goggles Pair of Leather Gloves Scientific Calculator RAC 103 DVD set 2" Binder 12" Ruler	This is the first required course in the sequence. Course is structured to meet once/twice a week for 4-5 hours including lecture and lab. Additional lab time outside of scheduled class time is required for assessment of skills.
HVA101 Refrigeration Fundamentals (3 Credit Hours) D211 #W68303 "Refrigeration Fundamentals" D214 #60080 "College Refrigeration Fundamentals" D220 #497323 "Refrigeration Fundamentals" Introduces vocabulary, concepts and scientific principles used in the refrigeration and air conditioning industry. Studies theories on heat laws, pressures, matter, and energy; examines refrigerant chemistry and the refrigeration cycle. Covers proper refrigerant management techniques and safe practices. Emphasizes practical application, troubleshooting techniques, measuring and testing the operation of the basic refrigeration cycle; including working with ACR copper tubing, tools, and instruments. (formerly RAC 101)	Prior or concurrent enrollment in ELT 110 (Introductory Electronics) and MTH 097 (Basic Technical Mathematics) with grades of C or better, or consent of coordinator. To ensure timely completion of all requirements, students must contact the HVA Program Coordinator, Jose Vital, before their first day of class. He can be contacted at 847-925-6823.	Harper	All high schools in districts 211, 214, and 220	Whitman. Refrigeration & Air Conditioning Technology. 7th Edition. Delmar Publishing Co., 2013 ISBN: 9781111644475 Supplemental materials Pair of Safety Goggles Pair of Leather Gloves Scientific Calculator RAC 101 DVD set 2" Binder 12" Ruler	Course is structured to meet once a week for 4-5 hours including lecture and lab. Additional lab time outside of scheduled class time is required for assessment of skills.

Heating, Ventilation, Air Conditioning (HVAC), and Refrigeration, continued

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
HVA105 Heating and Cooling Controls (3 Credit Hours) D211 #W68505 "Heating Cooling Controls" D214 #60160 "College Heating and Cooling Controls" Introduces electrical principles and concepts, electrical safety, electrical controls and electrical wiring diagrams utilized in residential and light commercial HVAC systems. Covers electrical symbols, Ohms' Law, series and parallel circuits, power distribution, magnetism, transformers, switches, relays, contactors, AC motors, motor starters and capacitors. Emphasizes the practical application for electrical system diagnosing; measuring volts, ohms and amps; troubleshooting, testing and adjusting electrical controls; interpreting wiring schematics, and wiring electrical circuits. (formerly RAC 105)	ELT 110 (Introductory Electronics) and MTH 097 (Basic Technical Mathematics) with grades of C or better. To ensure timely completion of all requirements, students must contact the HVA Program Coordinator, Jose Vital, before their first day of class. He can be contacted at 847-925-6823.	Harper	All high schools in districts 211 and 214	Whitman. Refrigeration & Air Conditioning Technology. 7th Edition. Delmar Publishing Co., 2013 ISBN: 9781111644475 Supplemental materials Pair of Safety Goggles Pair of Leather Gloves Scientific Calculator RAC 105 DVD set 2" Binder 12" Ruler	Course is structured to meet once/twice a week for 4-5 hours including lecture and lab. Additional lab time outside of scheduled class time is required for assessment of skills.
HVA102 Refrigeration Systems (3 Credit Hours) D211 #W68903 "Refrigeration Systems" D214 #60090 "College Refrigeration Systems" Builds on concepts learned in HVA 101. Introduces specialized system controls and accessories found in commercial refrigeration systems. Covers pressure and temperature controls, water cooled condensers, commercial defrosting, and piping practices. Emphasizes practical application to develop diagnostic and troubleshooting techniques, interpret wiring diagrams, service, and repair; including working with zero ODP refrigerants used in commercial systems application. (formerly RAC 102)	To ensure timely completion of all requirements, students must contact the HVA Program Coordinator, Jose Vital, before their first day of class. He can be contacted at 847-925-6823.	Harper	All high schools in districts 211 and 214	Whitman. Refrigeration & Air Conditioning Technology. 7th Edition. Delmar Publishing Co., 2013 ISBN: 9781111644475 Supplemental materials Pair of Safety Goggles Pair of Leather Gloves Scientific Calculator RAC 102 DVD set 2" Binder 12" Ruler	Course is structured to meet once a week for 4-5 hours including lecture and lab. Additional lab time outside of scheduled class time is required for assessment of skills.

Hospitality Management

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
FSM114 Food Standards and Sanitation (2 Credit Hours) D211 #H66502 "Food Standards and Sanitation" D214 #65712 "College Culinary Arts"/ "ProStart 1"(year-long course at HS) Introduces safe food handling practices and discusses the standardized procedures involved in the procurement, storage, preparation, holding, and service of safe food. Prepares students for the State of Illinois-approved Food Service Sanitation Manager's Certification test.	None	D214: Buffalo Grove Elk Grove Rolling Meadows D211: Conant Fremd Hoffman Estates Palatine Schaumburg	D214: Buffalo Grove Elk Grove Rolling Meadows D211: Conant Fremd Hoffman Estates Palatine Schaumburg	National Restaurant Association. ServSafe ManagerBook With Online Exam Voucher (w/ MyServSafeLab etext Acc). 7th Edition. Pearson Education , 2018 ISBN: 0134773098	Harper awards credit in the Fall for Wheeling and Buffalo Grove and in the Spring semester for the completion of #05712 for D214, EG, and RM. and #H66702 for D211.
FSM109 Introduction to Food Prep/Production (4 Credit Hours) D211#H667 "Culinary Arts" D214 #65802 "College Culinary Arts"/ "ProStart 2"(year-long course at HS) Introduces basic cooking skills that can be developed to produce quality food products. Students will learn fundamentals of cooking and baking through daily assignments and production. All aspects of the industry will be covered including proper handling and storage, heating and holding, weights and measures, safety, sanitation, and personal hygiene.	Starting Fall 2017: FSM 114 or Food Handlers certificate.	D214: Buffalo Grove Rolling Meadows D211: Conant Fremd Hoffman Estates Palatine Schaumburg	D214: Buffalo Grove Rolling Meadows D211: Conant Fremd Hoffman Estates Palatine Schaumburg	Gisslen. Professional Cooking. 8th Edition. John Wiley & Sons, Incorporated, 2014 ISBN: 9781118797709	Harper awards credit in the Spring semester for the completion of #05802 for D214.
FSM111 Introduction to the Hospitality Industry (3 Credit Hours) D214 #65802 "College Culinary Arts"/ "ProStart 2" (year-long course at HS) Orients students to the hospitality industry, its organizational structure and integration of the modern industry components. Operational considerations are discussed. Career opportunities are explored.	None	D214: Buffalo Grove Rolling Meadows	D214: Buffalo Grove Rolling Meadows	Walker. Exploring the Hospitality Industry. 3rd Edition. Pearson, 2016 ISBN: 9780133594515	Harper awards credit in the Spring semester for the completion of #05802 for D214.

Hospitality Management, continued

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
FSM213 Seminar and Internship (3 Credit Hours) D214 #69870 Internship Program	Waived for Dual Credit students	D214: Buffalo Grove Elk Grove Rolling Meadows	D214: Buffalo Grove Elk Grove Rolling Meadows	None	
Furnishes participation in a supervised cooperative work experience program in a College-approved hospitality operation. Enrollment is restricted to sophomores in the Hospitality Management program					

Law Enforcement and Justice Administration

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
LEJ101 Introduction to Criminal Justice (3 Credit Hours) D211 #W61603 "Introduction to Criminal Justice" D214 #60100 "College Introduction to Criminal Justice" D220 #498103 "Introduction to Criminal Justice" Studies the history, role, development, and constitutional aspects of law enforcement and public safety. Review of agencies and functions involved in processes of administration of criminal justice. IAI CRJ 901	None	Harper	All high schools in districts 211, 214, and 220	Fagin, James. <u>CJ</u> <u>2015</u> . Pearson, 2016 ISBN: 0134206657	
LEJ104 Corrections (3 Credit Hours) D211 # W61703 "Introduction to Corrections" D214 #60120 "College Introduction to Corrections" Provides the student with an integrated knowledge about the system through which the criminal offender is processed. Emphasis will be placed upon the philosophical bases of punishment and treatment techniques in institutional community-based programs plus parole programs. IAI CRJ 911	None	Harper	All high schools in districts 211 and 214	Alarid & Reichel. Corrections. 2nd Edition. Pearson, 2016 ISBN: 0134206592	
LEJ116 Forensics (3 Credit Hours) D211 #W61903 "Introduction to Forensics" D220 #498203 "Forensics for Criminal Justice" Introduces student to the use of scientific disciplines in crime investigation. Identifies the variety of sources of evidence and the means by which comparative analysis can be made. Introduces student to probability theory. Develops skills in crime scene technology, fingerprinting, photography and recording.	None	Harper	Barrington Conant Fremd Hoffman E. Palatine Schaumburg	Fisher, Barry A.J <u>Techniques of Crime</u> <u>Scene Investigation</u> . 8th Edition. CRC Press, 2012 ISBN: 9781439810057	

Literature

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
LIT206 World Literature to 1800	None			Damrosch, Daved,	
(3 Credit Hours)				et. al The Longman	
				Anthology of World	
D214 #64080, College Western Literature & Thought 1				Literature, Vol 1 (A-	
				C). 2nd Edition.	
Presents selected works of universal significance contributed by people and civilizations from ancient times to 1800.				Longman, 2008	
IAI H3 906				Lawell, Sarah. The	
				Norton Anthology of	
				World Literature,	
				Volumes A-C. W.W.	
				Norton & Company,	
				2001	
LIT207 World Literature Since 1800	None			Damrosch, David, et.	
(3 Credit Hours)				al The Longman	
				Anthology of World	
D214 #64090, College Western Literature & Thought 2				Literture, Vol. 1 (A-	
				C). 2nd Edition.	
Continues LIT 206. Selected works of universal significance				Longman, 2008	
contributed by people and civilizations from 1800 to the present.				Lawell Carab Tha	
IAI H3 907				Lawell, Sarah. The	
				Norton Anthology of	
				World Literature, Volumes A-C. 2nd	
				Edition, W.W. Norton	
				& Company,	
				2001	

Maintenance

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
MNT115 Basic Carpentry (2 Credit Hours) D211 # T64602 "Building Construction" D214 #66191 and #66192 "College Practical Architectural Construction-PAC" (first year students) Covers basic knowledge of wood materials, products for construction, framing and safety. Techniques for using measuring, layout and hand tools are covered. Principles of stationary and portable power tools including pneumatic nailers will be demonstrated.	None	All D214 schools D211: Conant Hoffman Estates Rolling Meadows Palatine Schaumburg Fremd	All District 214 high schools D211: Conant Hoffman Estates Palatine Schaumburg	Carpentry & Building Construction Feirer ISBN: 9780078797842	Only running through 2018-19 school year. (Course being withdrawn by Harper.) D214 does not have a separate course number for MNT115 and MNT215. Students take both 06191 and 06192 their first year. The first year equals our MNT115. Students can repeat both course numbers again their 2 nd year. When they do, they receive credit for our MNT215.
MNT215 Commercial Carpentry (2 Credit Hours) D211# T64702 "Building Construction Independent Study" D214 #66193 and #66194 "College Practical Architectural Construction-PAC" (second year students) Covers advanced framing with floor and roof trusses, structural steel beams and columns BCI-Joists and GlueLam girders. Metal stud framing techniques for commercial codes are developed both field cut and shop fabrication of building walls and roofs.	Prerequisite: MNT115 with a grade of C or better.	All D214 schools D211: Conant Hoffman Estates Rolling Meadows Palatine Schaumburg Fremd	All District 214 high schools D211: Conant Hoffman Estates Palatine Schaumburg	Carpentry & Building Construction Feirer ISBN: 9780078797842	Only running through 2018-19 school year. (Course being withdrawn by Harper.) D214 does not have a separate course number for MNT115 and MNT215. Students take both 06191 and 06192 their first year. The first year equals our MNT115. Students can repeat both course numbers again their 2 nd year. When they do, they receive credit for our MNT215.

Manufacturing

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
MFT102-Introduction to Manufacturing and Safety (4 Credit Hours) D211 #T64301 "Advanced Manufacturing Level 2" (First semester) D214 #69631 "College Advanced Machine Technology" (First Semester) Provides the student with an introduction to the manufacturing world and provides specific instruction to facilitate safe work practices in industrial environments. Introduces manufacturing specializations such as mechatronics, precision machining and welding. Covers fire safety, pressurized gases, electrical hazards, and safe machine usage. Students will also become acquainted with OSHA policy. Students will have the opportunity to earn the Safety Certification through Manufacturing Skill Standards Council (MSSC).	None	D211: Schaumburg and Palatine D214: Wheeling Rolling Meadows Elk Grove	D211: Schaumburg and Palatine D214: Wheeling Rolling Meadows Elk Grove	Manufacturing Skill Standards Council. High- Performance Manufacturing. Manufacturing Skill Standards Council, 2006 Goetsch, David L. Basics of Occupational Safety. Prentice Hall, 2010 ISBN: 9780135026137	Starting Fall 2014 -1st semester at Schaumburg and Palatine. Starting Fall 2014 -1st semester at Wheeling (block schedule), Rolling Meadows, Elk Grove.
MFT104-Quality and Measurement (2 Credit Hours) D211 # T63402 "Advanced Manufacturing Level 2" (2 nd semester) D214 #69641 "College Advanced CNC Machining" (1 st semester) Provides an introduction to controlling and improving quality in a manufacturing setting. Explores ways that manufacturers use data and analysis to improve quality. Students will have the opportunity to earn the Quality and Measurement Certifications through the Manufacturing Skills Standards Council (MSSC).	Prerequisite: Prior or concurrent enrollment in MFT 102 with a grade of C or better.	D211: Schaumburg and Palatine D214: Wheeling Rolling Meadows Elk Grove	D211: Schaumburg and Palatine D214: Wheeling Rolling Meadows Elk Grove	Warren Hammer. Blueprint Reading Basics. 3rd Edition. Industrial Press, 2001 ISBN: 9780831131258 Manufacturing Skill Standards Council. High- Performance Manufacturing. MSSC, 2006	Starting Spring 2015 at Wheeling (block schedule); Fall 2015 at Rolling Meadows and Elk Grove. Starting Spring 2015 for Schaumburg and Palatine.
MFT105-Machining Processes I (4 Credit Hours) D211 # T64201 "Advanced Manufacturing Level 1" (First Semester) D214 #69632 "College Advanced Machine Technology" Covers fundamentals of machine shop theory and safe practices. Provides familiarization with tools, equipment, and practices of tool, die, and precision metal working industries. Includes introduction to mills, drill press, lathes, and surface grinders. Students are provided classroom and laboratory learning experiences. Students may earn NIMS credentials.	None	D211: Schaumburg and Palatine D214: Wheeling Rolling Meadows Elk Grove	D211: Schaumburg and Palatine D214: Wheeling Rolling Meadows Elk Grove	Hoffman, Peter J., Hopewell, Eric S., Janes, Brian, Sharp, Jr., Kent M Precision Machining Technology. 2nd Edition. Delmar, Cengage Learning, 2014 ISBN: 9781285444543	Starting Fall 2014 -1st semester at Schaumburg and Palatine. Starting Fall 2014 at Wheeling (block schedule); Spring 2015 (Rolling Meadows and Elk Grove)

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
MFT108-Manufacturing Processes (3 Credit Hours) D211 #T64401 "Advanced Manufacturing Level 3" (1st Semester) Provides the basics of how manufacturing transforms materials into products. Students will learn about the varying types of production and will learn about the materials that are used in production and the types of processes used in manufacturing including machining, casting and assembly.	Prerequisite: MFT102 with a grade of C or better.	D211: Schaumburg and Palatine	D211: Schaumburg and Palatine	Manufacturing Skill Standards Council. <u>High-</u> <u>Performance</u> <u>Manufacturing</u> . MSSC, 2006	Starting Fall 2015 -1st semester at Schaumburg and Palatine.
MFT109-Introduction to Manufacturing Maintenance (2 Credit Hours) D211 # T64402 "Advanced Manufacturing Level 3" (2nd Semester) Provides a basic understanding of tools and equipment used in manufacturing and knowledge of how to improve productivity through predictive and preventive maintenance.	Prerequisite: MFT102 with a grade of C or better.	D211: Schaumburg and Palatine	D211: Schaumburg and Palatine	Manufacturing Skill Standards Council. <u>High-</u> <u>Performance</u> <u>Manufacturing</u> . MSSC, 2006	Starting Spring 2016 - 2nd semester at Schaumburg and Palatine.
MFT119-Manufacturing Internship (2 Credit Hours) D214 #69870 (09851 in Summer) -Internship Applies and expands manufacturing skills and knowledge in the workplace environment. Students will have an on-site supervisor who will assign duties in the workplace. Regularly scheduled face-to-face on-campus sessions will be conducted to assess the student's progress, problem areas and to review appropriateness of work involvement. Actual permissible duties and activities will be determined based upon the student's knowledge and skills. The student must complete a minimum of 100 hours at the work site.	MFT 102, MFT104, MFT108 and MFT109 with a C or better. (Or All four MSSC Certifications.) Evidence of 100 hours in a Manufacturing Internship.	D214: Buffalo Grove, Elk Grove, Hersey, Prospect, Rolling Meadows, Wheeling	D214: Buffalo Grove, Elk Grove, Hersey, Prospect, Rolling Meadows, Wheeling	None	Starting Fall 2014 (Also offered Spring or Summer)
MFT120- Machining Processes II (4 Credit Hours) D211 #T64202 "Advanced Manufacturing Level 1" (2nd semester) D214 #69642 "College Manufacturing" (2nd semester) Covers advanced machine shop theory with emphasis on safe practices and applications. Includes lathes, grinders (I.D., O.D. and surface), milling machines and tool grinders. Studies production machining, feed and speed applications and quality control techniques applied to precision machining. Introduces gage blocks, height gages, magnetic sine plate and modern indexable tooling. Students may earn NIMS credentials.	MFT105 with grade of C or better.	D211: Schaumburg and Palatine D214: Wheeling. Rolling Meadows and Elk Grove	D211: Schaumburg and Palatine D214: Wheeling. Rolling Meadows and Elk Grove	Hoffman, Peter J., Hopewell, Eric S., Janes, Brian, Sharp, Jr., Kent M Precision Machining Technology. 2nd Edition. Delmar, Cengage Learning, 2014 ISBN: 9781285444543	Spring 2015 (Wheeling) Spring 2016 (Rolling Meadows and Elk Grove)

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
MFT123- Introduction to CNC Machining	Prior or	D211:	D211:	Smid, Peter.	Starting Spring 2015 at
(4 Credit Hours)	concurrent	Schaumburg and	Schaumburg and	CNC	Schaumburg and
D211 #T64302 "Advanced Manufacturing Level 2" (2nd semester)	enrollment in MFT 120 with a grade of C or	Palatine	Palatine	Programming Handbook. 3rd Edition.	Palatine. (MFT104 and MFT123 earned in same
Introduces setup and operation of CNC machining and turning centers. Teaches CNC machine tool controls through laboratory experiences and the manufacture of pre-programmed parts including part holding techniques, alignment, process planning, tooling for CNC machine	better.			Industrial Press, 2008 ISBN: 9780831133474	semester.)
tools, and inspection of machined products. Students may earn NIMS credentials.					

Math

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
MTH101 Quantitative Literacy (4 Credit Hours) D211 #M63502 "Quantitative Literacy" D214 #64970 " College Mathematical Applications 101" D220- #204724 "Math 101" Develops conceptual understanding, problem-solving, decision-making and analytic skills dealing with quantities and their	Math ACT score of at least 22; or SAT Math score of at least 530; or ALEKS score of at least 46 or passing threshold (70%) on MTH 080 final/course.	All D211 schools All D214 schools Barrington HS	All D211 schools D214: Wheeling	Blitzer, Robert. Thinking Mathematically. 6th Edition. Pearson, 2014 ISBN: 9780321999061 Pearson. Mymathlab- Standalone Access	One semester course (Power of 15) Common Assessment
magnitudes and interrelationships, using calculators and personal computers as tools. Includes: computing statistical measures such as central tendency and dispersion; computing correlation coefficients and regression equations; using normal distributions to test hypotheses; using logical statements and arguments in a real-world context; solving systems of equations and inequalities and modeling data; solving mathematical finance problems; and selecting and using appropriate approaches and tools in formulating and solving real-world problems. IAI M1 901				Card. 4th Edition. Pearson, 2012 ISBN: 9780321199911 Online textbook through MathXL	
MTH103 College Algebra (3 Credit Hours) D211 #M64802 "Advanced Algebra 2"/ "Pre-Calculus" D214 #64400 "College Algebra" Emphasizes algebraic and graphical approaches to college algebra. Topics include but are not limited to: polynomial, rational, exponential, and logarithmic functions; systems of equations and inequalities; matrices; mathematical modeling. NOTE: This course does not fulfill the math requirement for the AA or AS degree.	Math ACT score of at least 22; or SAT Math score of at least 530; or ALEKS score of at least 46 or passing threshold (70%) on MTH 080 final/course, AND at least C- in both semesters of HS Geometry,	D211: Hoffman Estates All D214 schools	Hoffman Estates	College Algebra with Connect Math hosted by ALEKS 52W Access Card Miller, ISBN: 9781259821714	One semester course (Power of 15) Common Assessment

Math, continued

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
MTH202 Calculus III	MTH201, Calculus II	Wheeling,	All D214	Howard Anton.	
(5 Credit Hours)	(or equivalent) with a	Buffalo Grove	Schools	<u>Multivariable</u>	
	grade of C or better,			Calculus. 11th	
D214 #64981, College Calculus 3	or AP score of 3, 4 or			Edition. John Wiley &	
	5 in AP Calculus			Sons, Inc, 2016	
Studies three-dimensional vectors, solid analytic geometry, vector-	(BC)			ISBN:	
valued functions, partial derivatives, multiple integrals, Green's				9781119487074	
theorem, surface integrals, divergence theorem, and Stoke's					
theorem.					
IAI M1 900-3, IAI MTH 903	MTH202 or D214	Whaaling	All D214	7ill First Course in	
MTH212 Differential Equations (3 Credit Hours)	course #04981,	Wheeling, Buffalo Grove	Schools	Zill. <u>First Course in</u> Differential	
(3 Gredit Flours)	College Calculus 3	Bullalo Glove	3010015	Equations. 5th	
D214 #64982, Differential Equations	with a grade of C or			Edition. Prentice	
D214 #04302, Differential Equations	better			Hall, 2001 ISBN:	
Continues MTH 202. Emphasizes solutions of first order differential				9780534373887	
equations, linear differential equations, special second order					
equations and series solutions. Studies selections from these					
topics: Laplace transforms, Fourier series, numerical methods and					ļ
applications of matrix algebra. IAI MTH 912					

Networking

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
NET105 IT Fundamentals (3 Credit Hours) D211 # - D220 # - Not currently being offered D214#60740, College IT Fundamentals Provides students with a hands-on introduction to operating systems and related concepts. Includes hardware, software, file systems, directory structures, files and attributes, text editors, applications, and maintenance. Compares and contrasts GUI and command line interfaces in a variety of current operating systems.	None	Harper College	All D211 and D220 high schools when taught at Harper D214 is not interested in offering this course at this time.	Carswell, Guide to Parallel Operating systems with Windows 7 and Linux, Course Technology	Offered both as blended and internet only course structure when taught at Harper. Common Assessment
NET111 A+ Hardware (3 Credit Hours) D211#T67301, Computer Repair D214 #66741, College A+ Hardware Provides students with experience installing, configuring, maintaining, upgrading diagnosing, troubleshooting, and networking recent and current personal computer hardware.	NET 105 with a grade of C or better or concurrent enrollment or proficiency	Hersey Rolling Meadows Wheeling Conant Fremd Hoffman Estates Palatine Schaumburg	Hersey Rolling Meadows Wheeling Conant Fremd Hoffman Estates Palatine Schaumburg	Andrews, Jean. A+ Guide to Managing & Maint Your PC Comp. 7th Edition. Course Technology, 2010 ISBN: 9781435497788	1 semester Common Assessment
NET112 A+ Operating Systems Technologies (3 Credit Hours) D211#T67302, Computer Repair D214 #66742, College A+ Operating Systems Technologies Provides students with experience installing, configuring, upgrading, diagnosing, troubleshooting, and networking recent and current personal computer operating systems.	NET 105 with a grade of C or better or concurrent enrollment or proficiency	Hersey Rolling Meadows Wheeling Conant Fremd Hoffman Estates Palatine Schaumburg	Hersey Rolling Meadows Wheeling Conant Fremd Hoffman Estates Palatine Schaumburg	Andrews, Jean. A+ Guide to Managing & Maint Your PC Comp. 7th Edition. Course Technology, 2010 ISBN: 9781435497788	1 semester Common Assessment

Networking, continued

Prerequisites	Campus Location	Participating High	Textbook	Notes
		Schools		
CIS 101, NET 105,	Offered in structured	All D211, D211, and		Common
				Assessment
	Harper College	taught at Harper		
or proficiency				Required
		J		supplemental materials:
				Wireshark
				Protocol
	Trinosining		111002121	Analyzer,
		3		Access to a
				current version
				of Windows
				and Linux or
				MacOS
				operating
CIS 101 NET 105	Offered in structured	All D211 D211 and	Internet Pretocal	systems Common
				Assessment
			Guide	7.000001110111
or proficiency	l iaipoi conege	taag.n at i ia.poi	(https://en.wikipe	
	Offered as a class at:	Also offered on the high	dia.org/wiki/Book	
	Hersey	school campus at	:IT_Fundamental	
		Hersey,	s), Internet	
	Wheeling			
		Wheeling	_	
	CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency CIS 101, NET 105, or WEB 110 with a grade of C or better,	CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered in structured course and online at Harper College Offered in structured course and online at Harper College Offered as a class at:	CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered as a class at: Hersey Rolling Meadows Wheeling CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered as a class at: Hersey Rolling Meadows Wheeling CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered in structured course and online at Harper College Offered in structured course and online at Harper College Offered in structured course and online at Harper College Offered as a class at: Hersey Rolling Meadows All D211, D211, and D220 high schools when taught at Harper All D211, D211, and D220 high schools when taught at Harper All D211, D211, and D220 high schools when taught at Harper Also offered on the high school campus at Hersey, Rolling Meadows	CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered as a class at: Hersey Rolling Meadows Wheeling CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered as a class at: Hersey Rolling Meadows Wheeling CIS 101, NET 105, or WEB 110 with a grade of C or better, or proficiency Offered in structured course and online at Harper College Also offered on the high school campus at Hersey, Rolling Meadows, & Wheeling All D211, D211, and D206. 3rd Edition. Sybex, 2015 ISBN: 978-111902124 All D211, D211, and D206. 3rd Edition. Sybex, 2015 ISBN: 978-111902124 Offered in structured course and online at Harper College Offered as a class at: Hersey, or proficiency Offered as a class at: Hersey, Rolling Meadows, & Wheeling Also offered on the high schools when taught at Harper Also offered on the high schools when taught at Harper Also offered on the high school campus at Harper Also offered on the high school campus at Hersey, Rolling Meadows, & IT Fundamental Sp. Internet Protocol Analysis

Physical Science

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
ESC101 EarthScience Survey (3 credit Hours) D214 #65241/65242 College Physical Science Designed to give the non-science major an understanding and appreciation of basic concepts in geology, atmospheric science and astronomy. IAI P9 900	Math ACT score of at least 22; or SAT Math score of at least 530; or ALEKS score of at least 46; or passing threshold (70%) on MTH 080 final/course.	D214: Buffalo Grove Rolling Meadows	D214:	Tarbuck. <u>Earth</u> <u>Science</u> . 14th Edition. Prentice Hall, 2014	Full year course- credit awarded in spring term. First year 2015-2016. (Power of 15) Common Assessment (Formerly PHS101- Physical Science Survey)
PHS170 Fundamentals of Nanoscience (3 Credit Hours) D214 #66461/66462 Introduction to Nanotechnology Studies the field of nanotechnology, the capability to observe and manipulate systems at the molecular or atomic scale that is affecting all traditional sciences. Provides an introduction to the history, tools, materials, and current and emerging applications of Nanotechnology. IAI P9 900L	Prerequisite: MTH 080 or higher with a grade of C or better, or required MTH 103 placement test score.	D214: Wheeling	D214: Wheeling	Wolf, Edward L. Nanophysics and Nanotechnology: An Introduction to Modern Concepts in Nanoscience.	

Paralegal Studies

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
PLS101 Introduction To Paralegal Studies (3 credit Hours) D214 #TBD College Introduction to Paralegal Studies Surveys the functions of law; courts and lawyers in modern society; analysis of the origin, training and role of the paralegal; professional responsibilities of the lawyer; outline of the fields and specializations within the practice of law; and instruction in legal research and writing upon a review of the sources and works of law. Students must take the Paralegal Studies entrance examination.	Paralegal Studies Exam, resume, statement of purpose	HARPER D214	D214: Buffalo Grove, Elk Grove, Hersey, Prospect, Rolling Meadows, Wheeling	Currier. Introduction to Law for Paralegals. 6th Edition. Aspen Publ/Wolters Kluwer, 2014 ISBN: 9781454838760	Starting Fall 2018 at all D214 Schools (one semester course)
PLS102 Fundamentals of Legal Research (3 Credit Hours) D214 #TBD College Fundamentals of Legal Research Orients students to law library and various legal publications, treatises and other legal writings encountered in day-to-day practice of law. Emphasizes developing student capability to analyze, interpret and communicate facts, ideas and law through comprehension of legal research techniques.	Prerequisite: PLS 101 with a grade of C or better, or consent of program coordinator.	HARPER	D214: Buffalo Grove, Elk Grove, Hersey, Prospect, Rolling Meadows, Wheeling	Statsky. <u>Case</u> <u>Analysis & Fund Of</u> <u>Legal Writing</u> . 4th Edition. Cengage Learning, 1995 ISBN: 9780314040188 Harvard Law Review. <u>Bluebook: Uniform</u> <u>System of Citation</u> . 20th Edition. Harvard Law Review, 2015 ISBN: 9780692400197 Hames. <u>Legal</u> <u>Research, Analysis &</u> <u>Writing</u> . 5th Edition. Pearson, 2014 ISBN: 9780133495034	Starting Spring 2019 at all D214 Schools (one semester course)

Political Science

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
PSC260 Middle Eastern Politics (3 Credit Hours)	No Prerequisite.	High Schools	D214: Buffalo Grove	Sorenson. <u>An</u> <u>Introduction to</u> Modern Middle East:	One semester, first offered Fall 2017.
D214 #67850 "College Middle Eastern Politics"				History, Religion, Political Economy,	
Examines political, social, economic, military, religious and terrorist forces in the Middle East. Investigates the politics of specific countries in the area.				Political Economy, Politics. 2nd Edition. Westview Press, 2014 ISBN: 9780813349220	

Sign Language

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
SGN101 American Sign Language I (4 Credit Hours) D211 #W63503 "American Sign Language" D214 #60271 "College American Sign Language 1" D220 #493103 "Sign Language 1" Introduces the student to American Sign Language with emphasis on comprehension and production of basic language functions, grammatical structures and level-appropriate vocabulary. Presents information about the Deaf community and culturally appropriate behaviors. Designed for students with no previous experience in American Sign Language.	High School Seniors only. Students must have B grade average or better in 3 years of high school English.	Harper	All high schools in districts 211, 214, and 220	Smith, Cheri, Lentz, Mikos. Signing Naturally Student Workbook, Units 1-6 (with DVD). Dawn Sign Press, 2008	Connect code with textbook.
SGN102 American Sign Language II (4 Credit Hours) D211 #W63603 "American Sign Language" D214 #60272 "College American Sign Language 2" D220 #493203 "Sign Language vocabulary, language functions and grammatical structures presented in SGN 101. Integrates material previously presented in SGN 101 and further develops language comprehension and production skills at increasing levels of complexity. Applies increasingly complex grammatical structures to language functions. Presents and integrates additional information about Deaf culture into language usage.	SGN 101 with a grade of C or better.	Harper	All high schools in districts 211, 214, and 220	Smith, C., Lentz E.M., Mikos K Signing Naturally Student Workbook Units 7-12(DVD with workbook). Dawn Sign Press, 2008	Connect code with textbook.

Speech

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
SPE101 Fundamentals of Speech Communication (3 Credit Hours) D211 #E60303 Fundamentals of Speech Communication D214 #63850 College Speech Communication D220 # 206504 "Speech 101" Theory and practice of oral communications. Development of poise, confidence and skill in speech organization and delivery. Emphasis on frequent speaking, development of standards of criticism and selection and organization of material. IAI C2 900	College Ready	D211: All High Schools in District. D214: Buffalo Grove/Prospect. D220: Barrington	All high schools	Lucas, Stephen. Art of Public Speaking Latest Edition. McGraw Hill, 2008	First term offered Summer 2015 at Harper (as part of high school summer school option). Also taught at Buffalo Grove in Fall/ Prospect in Summer. D211 and D220 starting fall 2016. (Power of 15) Common Assessment

World Languages

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
FRN202 Intermediate French (4 Credit Hours) D211 #L66202 "French 4" Provides a crucial bridge between intermediate and advanced language courses. Focuses on a more in-depth study of history, geography, literature, and culture of French-speaking people. Includes analysis of daily life and current events. Students practice more complex structures of French grammar, fine-tune pronunciation, gain more advanced skills in composition, and continue to expand their vocabulary. Attention is given to complexity, accuracy and fluency. All new students who have prior experience with or have taken classes in French should consult with the department for placement before registering for a course. Instructions can be found on the World Languages website. IAI HI 900 NOTE: Three years of high school French are recommended.	FRN201 or D211 course, French 3 with a grade of C or better.	Hoffman Estates	Hoffman Estates Palatine	St. Onge, St. Onge. Interaction Langue et Culture. 9th Edition. Cengage Learning, 2014 Other: Print media, web- based sources, film and other visual media, music and other audio sources.	
FRN205 Intermediate French (4 Credit Hours) D220 #TBD "French V" Provides conversational practice beyond the intermediate level and refines spoken French skills to achieve fluency of expression. Includes the study of the culture of French-speaking people and critical analysis of daily life and current events. Attention is given to complexity, accuracy and fluency. Not available for credit to native speakers of French. All new students who have prior experience with or have taken classes in French should consult with the department for placement before registering for a course. Instructions can be found on the World Languages website.	FRN 202 with a grade of C or better, or required placement exam scores.			None. Since this is a conversation class, the reading material will be taken from news print, articles, and magazines. In addition, students will view films and videos and will listen to audio interviews. Students will also be exposed to music and art.	
Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes

JPN202 Intermediate Japanese II (4 Credit Hours) D211 TBD Continues JPN 201. Accuracy and ease in more complex conversation; advanced study of reading and writing. Study of more complex syntax and composition. IAI H1 900	Testing as placement into course	Harper	D211: All high schools	Banno, E. <u>Genki: An</u> Integrated Course in Elementary Japanese Workbook II. 2nd Edition. The Japan Times, 2011 Banno, E. <u>An Integrated</u> Course in Elementary Japanese, Genki II. 2nd Edition. The Japan Times, 2011 Print media, web-based sources, DVD and other visual media, music and other audio sources.	Starting Fall 2018
JPN205 Japanese Intensive Oral Practice (3 Credit Hours) D211 TBD Continues JPN 102. Emphasis on more complex conversation and advanced grammatical components; continued reading and writing. Emphasis on advanced composition	JPN 202 with a grade of C or better, or Testing as placement into course	Harper	D211: All high schools	Miura, A and McGloin, N. An Integrated Approach to Intermediate Japanese workbook. Revised Edition. Japan Times, 2011 Miura, A and McGloin, N. An Integrated Approach to Intermediate Japanese. Revised Edition. Japan Times, 2010	Starting Spring 2019

Course Description	Prerequisites	Campus	Participating	Textbook	Notes
		Location	High Schools		
SPA112 Heritage Spanish I (4 Credit Hours) D220 #5050323/505324 "Spanish for Spanish Speakers III/IIIH"	None	High School	Barrington	Blanco, D <u>Passcode to</u> Access Vistar 4e Supersite. Vista Higher Learning, 2015	Both SPA112 and SPA113 = D220 #50503233 and #5050324
Examines the dialectal and sociolinguistic variation present in Spanish-speaking communities in the United States as well as in Spanish-speaking countries. Students will become cognizant of the linguistic strengths they possess, develop a sense of pride in their heritage by studying their language and culture and expand their ability to use Spanish in new applications and contexts. Examines the concept of standard Spanish and explores the situations in which standard and non-standard Spanish should be employed and how to adjust language usage accordingly. This course emphasizes the orthography, pronunciation and lexical expansion in formal Spanish. This course is intended for Hispanic heritage students who comprehend spoken Spanish and may have varying degrees of speaking and writing ability.				Blanco, D <u>Cuaderno</u> <u>para Hisponohablantes</u> , <u>Vol 1 and 2</u> . Vista Higher Learning, 2015 ISBN: 97816572912 Additional readings, stories (instructor handouts/choice)	
SPA113 Heritage Spanish II (4 Credit Hours) D220 #5050323/505324 "Spanish for Spanish Speakers III/IIIH" Examines the dialectal and sociolinguistic variation present in Spanish-speaking communities in the United States as well as in Spanish-speaking countries. This course is a continuation of SPA 112. Students will become cognizant of the linguistic strengths they possess, develop a sense of pride in their heritage by studying their language and culture and expand their ability to use Spanish in new applications and contexts. Examines the concept of standard Spanish and explores the social situations in which standard and non-standard Spanish should be employed and how to adjust language usage accordingly. This course emphasizes the study of formal grammatical aspects of Spanish. This course is intended for Hispanic heritage students who comprehend spoken Spanish and may have varying degrees of speaking and writing ability.	SPA 112 with a grade of C or better or equivalent, or consent of instructor.	High School	Barrington	Blanco, D <u>Cuaderno</u> <u>para Hisponohablantes</u> , Vol 2. Vista Higher Learning, 2015 ISBN: 9781618572912 Blanco, D Passcode to Access Vistar 4e Supersite. Vista Higher Learning, 2015 Additional readings, stories (instructor's choice/handouts)	Both SPA112 and SPA113 = D220 #50503233 and #5050324

Course Description	Prerequisites	Campus Location	Participating High Schools	Textbook	Notes
SPA202 Intermediate Spanish II (4 Credit Hours) D211 #L66602 "Spanish 4"	SPA 201 with a grade of C or better, or required placement exam scores.	Fremd Palatine Schaumburg	Fremd Palatine Schaumburg	Zayas-Bazan, Bacon, García. <u>Conexiones:</u> <u>Comunicacion Y</u> <u>Cultura</u> . 5th Edition. Prentice Hall, 2014	
Provides a crucial bridge between intermediate and advanced language courses. Focuses on a more in-depth study of history, geography, literature, and culture of Spanish-speaking people. Includes analysis of daily life and current events. Students practice more complex structures of Spanish grammar, fine-tune pronunciation, gain more advanced skills in composition, and continue to expand their vocabulary. Attention is given to complexity, accuracy, and fluency. All new students who have prior experience with or have taken classes in Spanish should consult with the department for placement before registering for a course. Instructions can be found on the World Languages website. IAI H1 900	Scores.			Trentice riali, 2014	
SPA205 Spanish Conversation (3 Credit Hours) D211 #L67602 "Advanced Topics in Spanish" Provides conversational practice beyond the intermediate level and refines spoken Spanish skills to achieve fluency of expression. Includes the study of the culture of Spanish-speaking people and critical analysis of daily life and current events. Attention is given to complexity, accuracy, and fluency. Not available for credit to native speakers of Spanish. All new students who have prior experience with or have taken classes in Spanish should consult with the department for placement before registering for a course. Instructions can be found on the World Languages website.	SPA 202 with a grade of C or better or D211 course #L466, Spanish 4 with a C or better.	High School	Schaumburg, Hoffman Estates, Palatine, Fremd	Since this is a conversation class, the reading material will be taken from news print, articles and magazines, In addition, students will view short films, documentaries, and mini-series. The class will also listen to audio interviews and be involved in synchronous discussions with students from Spain and Latin America.	Students will be exposed to protest music and art.
SPA210 Introduction to Spanish Literature (3 Credit Hours) D220 #505425 "AP Spanish Lit and Culture" Provides an introduction to literature from the Spanish-speaking world and exposes students to a variety of literary genres and eras. Focuses on the development of more complex use of the language and addresses speaking, listening, writing, and reading. Attention is given to complexity, accuracy, and fluency.	SPA 202 with a grade of C or better, or required placement exam scores	High School	Barrington	Galería Hispánica, McGraw Hill ISBN: 978-0-07-338537-2	
All new students who have prior experience with of have taken classes in Spanish should consult with the department for placement before registering for a course. Instructions can be found on the World Languages website. IAI H3 917					

Credit by Exam Courses

The courses below are offered under the Credit by Exam program. Students participating in the Credit by Exam program take an exam at the end of the semester either in their high school class or at Harper College. The instructor will notify students of the exam results. Upon passing the exam and completing the Harper College High School Partnership Application, students will receive a letter grade on their high school transcript, and credit only (CRD) on their Harper Transcript. Semester hours of credit are awarded through this program, but a letter grade is not assigned on the Harper transcript. Please note that many institutions will not accept Credit by Exam credit. Students should check with the college that they plan to attend.

Accounting

Course Description	Prerequisite s	Min Qualifyin g Score	Campus Location	Participating High Schools	Notes
ACC101 Introduction to Financial Accounting (4 Credit Hours) D211 #B488 "Accounting II Managerial" D214 #65551/65552 "College Accounting" D220 #303104 "Advanced Accounting Honors" Presents accounting as an information system that produces summary financial statements primarily for users external to a business. Emphasizes the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. Topics include: basic accounting concepts, financial statements, accrual and cash basis, the accounting cycle, monetary assets, inventories, fixed assets, current and long-term liabilities and owner's equity. The course assumes a corporate form of organization. IAI BUS 903	High school algebra is recommende d.	73%	High School	Barrington Buffalo Grove Elk Grove Hersey Prospect Rolling Meadows Wheeling	Offered only as Credit by Exam

Computer Information Systems

Course Description	Prerequisites	Min Qualifying	Campus Location	Participating High Schools	Notes
		Score	Location	Thigh Schools	
CIS100 Computer And Digital Literacy	None	See Harper	High School	Any High School	Offered only as Credit
(3 Credit Hours)		Dept. Chair		offering IC3	by Exam
All Districts –Student must earn IC3 Certification				Certiport Examinations	Student must show
Provides students with an introduction to computers in society and digital					proof of IC3 certification to the
literacy. Includes computer hardware and operating systems, word processing,					
spreadsheets, presentation software, networking, Internet usage,					Harper Information
communication and collaboration, computer safety and ethics. This course is					Technology
not intended for computer information system majors					Coordinator

Medical Terminology

Course Description	Prerequisites	Min Qualifying Score	Campus Location	Participating High Schools	Notes
HSC112 Medical Terminology (2 Credit Hours) D214 #66640 "Medical Terminology"	None	80%	High School	Wheeling, Elk Grove	Also offered as a Dual Credit course
Emphasizes the origin and the basic structure of medical words, including prefixes, suffixes, word roots, combining forms and plurals. Offers pronunciation, spelling, and definition of medical terms based on the body systems approach. Emphasis on rendering a professional vocabulary required for work in the health care field.					

Management

Course Description	Prerequisites	Min Qualifying Score	Campus Location	Participating High Schools	Notes
MGT111 Introduction to Business Organization (3 Credit Hours)	None	70%	High School	Barrington Elk Grove Hersev	Offered only as Credit by Exam
D214 #65641/65642 "College Business" D220 #304104 "Advanced Business Management"				Wheeling	
Introduces the nature of business and the environment in which it operates. Forms of business ownership, introduction to operative and facilitating facets of business operation, management, marketing, accounting, statistics, business law, finance, investments, insurance and labor-management relations.					