

CAREER EXPLORATION WITH PLAN[®]



Counselor/Instructor Directions: The following materials are designed to help stimulate career exploration and postsecondary planning. These materials presume that students have completed the three steps in the “Your Career Possibilities” section on the PLAN Student Score Report. Before beginning this exercise, be sure your students have completed those steps.

Suggestion

A brief discussion of the motivations that your students have toward their future careers may be a good way to engage students in the “Your Career Possibilities” exercise. Consider asking questions like: What kinds of jobs have you thought about doing after high school? Have you thought about which colleges you might like to go to or what you might like to major in? How do you think your high school coursework may affect your future? These are good ways to get a sense of your students’ goals and plans.

Your Career Possibilities: Student Exercise

- A.** Steps 1–3 of “Your Career Possibilities” appear on side one of your PLAN Student Score Report. If you have not already done so, complete those steps.
- B.** Look over the Career Areas you circled in Step 3. Select at least two Career Areas that look interesting to you. Write them here.

You have had a chance to think about things that interest you since you took PLAN. List here any Career Areas you would like to learn more about.

- C.** Look at the Career Area Charts on pages 4 to 15. They list over 500 job titles by Career Area. Using the Career Areas listed above, check the charts for jobs that interest you. Write them down in the table on page 3. You can choose other Career Areas to explore later.
- D.** Write down the Career Area letter, job description page number, educational preparation level, and related high school courses to consider for each job you selected in Step C. All the information is in the Career Area Charts on pages 4 to 15.
- E.** Go to “Your Educational Plans for After High School” and “Your High School Course Plans Compared to Core” on side one of your PLAN Student Score Report. Now look at the level of preparation and related courses of the jobs you are exploring. Do your education plans put you on track to meet your goals? Besides core courses, what other courses should you consider?

Your PLAN test scores show you what skills you have now. You have time to decide what kind of job you would like to have and what kind of educational preparation is required. Make sure you ask for help when you need it.

Jobs to Explore	Career Area Letter	Job Descriptions A	Job Descriptions B	Educational Preparation Level (Prep Level)	Related High School Courses
Example: Broadcast Technician	N	page 337	page 324	2–3*	Math and Computers, Physical Sciences, Trade & Industrial

Job Description numbers refer to pages in (A) 2010–2011 or (B) 2008–2009 edition of the *Occupational Outlook Handbook* (OOH), a book that describes jobs. Ask your teacher, counselor, or librarian for a copy of this book, or go to www.bls.gov/oco/.

Education Preparation Level shows the amount of education and training workers typically have.

- 1 High school and on-the-job training
- 2 High school and up to two more years of education/training
- 3 Four or more years of education/training beyond high school

*Apprenticeship may be required

What is the “World-of-Work Map”? How does it work?

Exploring careers is easier if you have a good map. The World-of-Work Map can give you a sense of direction. The map shows how Career Areas differ in their involvement with four basic work tasks:

- People: people you help, serve, care for, or sell things to
- Data: facts, numbers, files, business procedures
- Things: machines, tools, living things, and materials such as food, wood, or metal
- Ideas: knowledge, insights, and new ways of expressing something (with words, equations, music, etc.)

These four work tasks are the four “compass points” of the Map. For example, occupations in Career Area C (Management) mostly involve working with people and data, so it is located in the upper left part of the Map. On the other side of the Map, Career Area P (Natural Science & Technologies) mostly involves working with ideas and things.

My interest inventory results are in Region 99. What does this mean?

Your pattern of interest scores does not suggest a clear direction at this time. As you complete Step 3 on your Score Report, think about your preferences for the four basic work tasks (People, Data, Things, Ideas). This can help you select Career Areas to explore.

My interest inventory results don’t agree with the Career Area I chose. Is this a problem?

No. Each is important, and only you can decide how much attention each deserves. Talk to your counselor or teacher if you need to sort things out.

Career Area Charts

The charts below group similar occupations (“jobs”) into career areas. Within each career area, jobs are arranged by the level of formal preparation (education and training) people in the jobs typically have. More than 500 jobs are listed. Information about each job listed can be found at the PLAN website: www.actstudent.org/wwm/plan_world.html.

KEY	Job Descriptions: The <i>Occupational Outlook Handbook</i> (OOH) describes jobs and the outlook for job openings. Ask your counselor which source to use. A = 2010–2011 OOH; B = 2008–2009 OOH. When a specific job is not covered, but related jobs are, a ■ appears. The online OOH can be found at www.bls.gov/oco/ .
	Preparation (Prep) Level: Typical amount of education/training: 1 = High school and on-the-job training; 2 = Up to two years beyond high school; 3 = Four or more years beyond high school. Many jobs have a wide range of typical education/training: 1–2 = 1 or 2; 1–3 = 1, 2, or 3; 2–3 = 2 or 3. * = Apprenticeship may be required.
	Related High School Courses: General categories of high school courses that are most related to the occupation. Keep in mind that many of the courses that are required for high school graduation (e.g., English) are related to a wide range of occupations.

Job	Job Descriptions			Prep Level	Related High School Courses														
	A	B			English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	ADMINISTRATION & SALES CAREER CLUSTER																		
Career Area A: Employment-Related Services																			
Employment Interviewer	61	59	2-3		✓								✓				✓		
Compensation Manager	61	59	3		✓												✓		
Director (Industrial Relations)	61	59	3	✓	✓	✓											✓		
Employee Benefits Manager	61	59	3		✓	✓											✓		
Human Resources Manager	61	59	3		✓												✓		
Human Resources Recruiter	61	59	3		✓								✓				✓		
Job Analyst	61	59	3		✓												✓		
Labor Relations Specialist	61	59	3		✓								✓				✓		
Mediator	61	59	3		✓								✓				✓		
Training/Education Manager	61	59	3		✓												✓		
Career Area B: Marketing & Sales																			
Driver (Sales Route)	797	818	1*			✓											✓		
Product Demonstrator	532	516	1										✓				✓		
Sales Worker (Retail)	543	527	1-2*			✓											✓		
Auctioneer	547 ■	516 ■	2*			✓							✓				✓		
Telemarketer	827	848	1-3	✓									✓				✓		
Antiques/Art Dealer	79 ■	76 ■	2-3		✓						✓						✓		
Energy Broker	547 ■	532 ■	2-3			✓											✓		
Fund-Raiser	32 ■	30 ■	2-3										✓				✓		
Importer/Exporter	572 ■	—	2-3*			✓											✓		
Insurance Agent	534	520	2-3*			✓											✓		
Real Estate Agent	540	523	2-3			✓											✓		
Sales Engineer	545	529	2-3				✓	✓					✓				✓		
Sales Representative	547	532	2-3*														✓		
Securities Sales Agent	553	538	2-3			✓											✓		
Services Sales Representative	547 ■	532 ■	2-3			✓											✓		
Travel Agent	557	543	2-3*			✓							✓				✓		
Wedding Consultant	115 ■	114 ■	2-3		✓												✓		
Account Executive (Advertising)	527	509	3	✓													✓		
Advertising Manager	32	30	3	✓													✓		
Buyer	79	76	3			✓											✓		

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Financial Services Sales Rep	553	538	3			✓										✓		
Sales/Marketing Manager	32	30	3			✓										✓		
Career Area C: Management																		
Cleaning Service Operator	495 ■	476 ■	2*			✓										✓		
Auto Service Station Manager	690 ■	704	2-3*			✓										✓		✓
Caterer	55 ■	53 ■	2-3*													✓	✓	
Contract Administrator	29	27	2-3			✓										✓		
Event Planner	115 ■	114 ■	2-3													✓		
Executive Housekeeper	70	67	2-3			✓										✓	✓	✓
Food Service Manager	55	53	2-3													✓	✓	
Funeral Director	58	56	2-3*					✓								✓		
Hotel/Motel Manager	70	67	2-3*			✓										✓	✓	
Insurance Risk Manager	52	106	2-3													✓		
Office Manager	594	608	2-3													✓		
Postmaster	824	844	2-3													✓		
Project Manager	35 ■	114 ■	2-3			✓										✓		✓
Public Administrator	223 ■	27 ■	2-3	✓	✓								✓			✓		
Restaurant/Bar Manager	55	53	2-3			✓										✓	✓	
Retail Store Manager	551	535	2-3*			✓										✓		
Supermarket Manager	55 ■	532 ■	2-3			✓										✓		
Airport Manager	784 ■	844 ■	3			✓										✓		
Association Executive	83 ■	80 ■	3	✓	✓								✓			✓		
Bank Branch Manager	52	50	3			✓										✓		
Business Agent	32 ■	843 ■	3	✓						✓	✓					✓		
City Manager	83 ■	80 ■	3	✓									✓					
Club/Resort Manager	70	67	3			✓										✓	✓	
Contractor/Construction Manager	38	36	3			✓										✓		✓
Emergency Manager	823	843	3													✓		
Financial Manager	52	50	3			✓										✓		
Foreign Service Officer	223 ■	222 ■	3		✓								✓					
General Manager/Top Executive	83	80	3										✓			✓		
Health Services Administrator	73	70	3					✓								✓		
Legislator	823	843	3		✓								✓			✓		
Loan Officer/Counselor	109	109	3			✓										✓		
Logistics Manager	823	844	3				✓									✓		
Management Consultant	111	111	3													✓		
Production Manager (Industry)	67	65	3													✓		✓
Property/Real Estate Manager	76	73	3													✓		
Purchaser	79	76	3			✓										✓		
Sports/Athletics Manager	321	313	3													✓		
Career Area D: Regulation & Protection																		
Transportation Security Officer	481 ■	464 ■	1*		✓													
Bill Collector	561	546	1-2			✓										✓		
Correction Officer	467	450	1-2*		✓													
Security Guard	481	464	1-2*		✓													
Umpire/Referee	321	313	1-2*						✓									
Hazardous Materials Technician	650	662	2				✓											
Police Officer	473	456	2*		✓													
Private Detective/Investigator	477	460	2*		✓											✓		
Detective (Police)	473	456	2-3		✓													
Food And Drug Inspector	428 ■	416 ■	2-3*						✓									

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Park Ranger	473 ■	456 ■	2-3		✓												✓	
Customs Inspector	473	456	3		✓													
Environmental Health Inspector	428	416	3					✓	✓	✓								
FBI/CIA Agent	473	456	3		✓													
Fish And Game Warden	473 ■	456 ■	3						✓						✓			
Insurance Claim Representative	96	95	3			✓											✓	
Occupational Health/Safety Spec	428	416	3					✓	✓	✓								
Security Manager	481 ■	464 ■	3				✓										✓	✓
BUSINESS OPERATIONS CAREER CLUSTER																		
Career Area E: Communications & Records																		
Counter/Rental Clerk	560	514	1			✓											✓	
Credit Clerk/Authorizer	589	561	1*														✓	
Receptionist/Information Clerk	570	578	1*														✓	
Telephone Operator	588	598	1*										✓				✓	
Hotel Clerk	592	568	1-2*			✓											✓	
Municipal Clerk	827	848	1-2*	✓		✓											✓	
Office Clerk	581	610	1-2*														✓	
Billing Clerk	587	548	2*														✓	
Foreign Trade Clerk	572	582	2*			✓								✓			✓	
Human Resources Clerk	592	570	2*														✓	
Interviewing/New Accounts Clerk	827	572	2*														✓	
Medical Record Technician	423	411	2*						✓								✓	
Medical Secretary	583	612	2*														✓	
Medical Transcriptionist	457	438	2*	✓					✓								✓	
Order Clerk	595	576	2*														✓	
Secretary	583	612	2*														✓	
Statistical Clerk	827	849	2*			✓											✓	
Word Process/Data Entry Keyer	590	603	2*														✓	
Administrative Asst/Exec Sec	583	612	1-3*	✓		✓											✓	
Customer Svc Representative	567	563	1-3*										✓				✓	
Abstractor	825	845	2-3	✓					✓									
Career Technician	244 ■	240 ■	2-3*	✓														
Court Reporter	250	246	2-3*														✓	
Legal Secretary	583	612	2-3*														✓	
Title Examiner/Searcher	825	849	2-3*														✓	
Archivist/Curator	265	261	3		✓													
Medical Record Administrator	423 ■	411 ■	3						✓								✓	
Career Area F: Financial Transactions																		
Cashier	530	512	1*			✓											✓	
Accounting Clerk	563	550	1-2*			✓											✓	
Airline Reservations Agent	598	579	2*														✓	
Bank Teller	599	557	2*			✓											✓	
Payroll Clerk	595	553	2*			✓											✓	
Tax Preparer	824	844	2*			✓											✓	
Ticket Agent	598	579	2*			✓											✓	
Bookkeeper	563	550	2-3			✓											✓	
Brokerage Clerk	588	560	2-3*														✓	
Cost Estimator	100	99	2-3*			✓	✓											
Credit Analyst	823	843	2-3*			✓											✓	
Real Estate Appraiser	90	88	2-3														✓	
Accountant/Auditor	86	83	3			✓											✓	

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Budget Analyst	93	92	3													✓		
Insurance Underwriter	106	106	3			✓										✓		
Investment Analyst	103	102	3		✓	✓										✓		
Tax Accountant	86 ■	83 ■	3			✓										✓		
Career Area G: Distribution & Dispatching																		
Dispatcher	595	585	1*													✓		
Mail Carrier	575	589	1	✓														
Mail Clerk (Except Post Office)	827	848	1													✓		
Messenger/Courier	573	583	1													✓		
Meter Reader	594	587	1			✓												
Order Filler	598	595	1													✓		
Postal Clerk	596	589	1*			✓										✓		
Stock Clerk	598	595	1*															✓
Warehouse Worker	809	830	1															✓
Shipping/Receiving Clerk	577	593	2*			✓										✓		
Warehouse Supervisor	809 ■	854 ■	2*													✓		
Air Traffic Controller	784	807	3			✓							✓					
Flight Dispatcher	784 ■	807 ■	3													✓		
TECHNICAL CAREER CLUSTER																		
Career Area H: Transport Operation & Related																		
Bus Driver	791	811	1*															✓
Chauffeur	794	815	1															✓
Delivery Driver	797	818	1*			✓										✓		✓
Parking Lot Attendant	833	856	1			✓												
Sailor	805	826	1*															✓
Taxicab Driver	794	815	1															✓
Train Operator	801	822	1*															✓
Truck Driver (Tractor Trailer)	797	830	1*															✓
Aircraft Pilot	787	804	2-3*				✓	✓										✓
Flight Instructor	787 ■	804	2-3*				✓	✓										✓
Astronaut	787 ■	804 ■	3				✓	✓	✓									
Ship Captain	805	826	3				✓	✓										✓
Career Area I: Agriculture, Forestry & Related																		
Farm Worker (General)	609	616	1												✓			
Fisher	601	619	1*															✓
Groundskeeper (Gardener)	498	479	1*					✓										
Logger	606	622	1*															✓
Animal Caretaker	504	485	1-2					✓										
Nursery/Greenhouse Worker	609	616	1-2*					✓							✓			
Pest Controller	501	482	1-2*															✓
Tree Surgeon (Arborist)	498	479	2*												✓			✓
Farm Manager	48	46	2-3					✓							✓	✓		
Farmer (Owner)	48	46	2-3*					✓							✓	✓		
Forestry Technician	604	622	2-3*					✓							✓			
Nursery/Greenhouse Manager	48 ■	46 ■	2-3*												✓	✓		
Aquaculturist	48 ■	46 ■	3					✓							✓	✓		
Forester	185	185	3					✓							✓			
Range Manager	185	185	3					✓							✓			
Soil Conservationist	185	185	3					✓							✓			
Career Area J: Computer & Information Specialties																		
Computer Service Technician	672	686	2*				✓	✓										✓

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Library Assistant	273	574	2*	✓	✓													
Database Programmer	128	129	2-3				✓									✓		
Desktop Publisher	579	605	2-3*								✓							✓
Library Technician	273	269	2-3	✓	✓													
Website Developer	128	129	2-3			✓										✓		
Actuary	125	123	3			✓	✓									✓		
Computer Network Specialist	128	163	3				✓									✓		
Computer Programmer	134	126	3				✓									✓		
Computer Security Analyst	128	136	3			✓	✓									✓		
Computer Software Engineer	134	133	3				✓									✓		
Computer Support Specialist	138	136	3				✓						✓			✓		
Computer Systems Analyst	140	140	3			✓	✓									✓		
Database Administrator	128	129	3				✓									✓		
Game Designer	134	133	3			✓				✓								
Information Systems Manager	35	33	3			✓	✓									✓		
Internet/Intranet Programmer	134	140	3				✓									✓		
Career Area K: Construction & Maintenance																		
Bricklayer/Stonemason	615	629	1*															✓
Concrete Mason	625	639	1*															✓
Construction Laborer	635	649	1*															✓
Custodian	495	476	1*															✓
Drywall Installer	638	651	1*															✓
Floor Covering Installer	621	635	1*															✓
Glazier	647	660	1*															✓
Heavy Equipment Operator	632	646	1*															✓
Highway Maintenance Worker	829	850	1															✓
Housekeeper (Hotel)	495	476	1*														✓	
Insulation Worker	653	666	1*															✓
Painter (Construction)	656	668	1*															✓
Paper Hanger	656	668	1*															✓
Plasterer	638	675	1*															✓
Roofer	662	677	1*															✓
Structural Metal Worker	668	682	1*															✓
Tile Setter	621	635	1*															✓
Track Worker (Railroad)	829	851	1															✓
Diver	—	—	1-2*					✓										✓
Boat Builder/Repairer	618	632	2*				✓											✓
Carpenter	618	632	2*			✓												✓
Electrician (Construction)	641	654	2*															✓
Electrician (Maintenance)	641	654	2*															✓
Firefighter	470	453	2*															✓
Pipefitter	659	671	2*															✓
Plumber	659	671	2*															✓
Security System Installer	675	853	2*															✓
Building/Construction Inspector	628	642	2-3*				✓											✓
Career Area L: Crafts & Related																		
Butcher/Meatcutter	726	744	1*															✓
Hand Crafter	301	789	1*							✓						✓		✓
Musical Instrument Repairer	721	735	1*								✓							✓
Patternmaker	753	771	1*				✓											✓
Shoe Repairer	753	771	1*															✓

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Tailor/Dressmaker	753	771	1*														✓	
Upholsterer	753	771	1*														✓	✓
Cabinetmaker	757	775	1-2*			✓	✓	✓										✓
Baker	726	744	1-3*														✓	✓
Chef	484	467	2-3*														✓	✓
Cook	484	467	2-3*														✓	✓
Jeweler	770	789	2-3*								✓							✓
Winemaker	726 ■	744 ■	3				✓	✓	✓							✓		✓
Career Area M: Manufacturing & Processing																		
Assembler	723	740	1*															✓
Blaster/Explosive Worker	828	849	1*															✓
Boilermaker	613	627	1*															✓
Dock Worker	809 ■	830 ■	1*															✓
Drycleaner	753	771	1*															✓
Hand Packer/Packager	809	830	1															✓
Inspector (Industrial)	768	786	1*															✓
Kitchen Helper	487	467	1														✓	
Machine Operator (Industrial)	734	754	1*															✓
Material Handler	809	830	1*															✓
Miner	829	851	1*															✓
Molder	832	854	1*															✓
Power Plant Operator	760	778	1*															✓
Prepress Worker	748	765	1*								✓							✓
Refuse Collector	809	830	1															✓
Roustabout	829	851	1															✓
Sheet Metal Worker	665	679	1*															✓
Textile Machine Operator	753	771	1*															✓
Water Plant Operator	765	783	1*															✓
Automotive Painter	778	796	2*															✓
Bookbinder	746	763	2*															✓
Cheesemaker	726 ■	744 ■	2				✓	✓							✓			✓
Machinist/Tool Programmer	737	751	2*															✓
Printing Press Operator	750	768	2*															✓
Stationary Engineer	763	780	2*															✓
Tool And Die Maker	740	758	2*															✓
Welder	743	760	2*															✓
Woodworker	757	775	2*															✓
Blue-Collar Worker Supervisor	67 ■	65 ■	2-3*															✓
Brewer	726 ■	744 ■	2-3				✓	✓	✓									✓
Nuclear Reactor Operator	760	778	2-3*															✓
Career Area N: Mechanical & Electrical Specialties																		
Auto Service Station Attendant	833	856	1															✓
Locksmith	830	852	1*															✓
Millwright	709	733	1*															✓
Mobile Heavy Equip Mechanic	697	710	1*															✓
Motion Picture Projectionist	826	847	1*															✓
Motorcycle Technician	700	714	1*															✓
Solar Energy System Installer	703 ■	718 ■	1*															✓
Maintenance Mechanic (General)	716	731	1-2*															✓
Air-Cond/Refrig/Heat Technician	703	718	2*				✓											✓
Aircraft Technician	684	697	2*				✓	✓										✓

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Appliance Servicer (Home)	707	722	2*															✓
Automotive Body Repairer	687	701	2*															✓
Automotive Technician	690	704	2*															✓
Avionics Technician	684	697	2*				✓	✓										✓
Boat/Small Engine Mechanic	700	714	2*				✓											✓
Diesel Technician	694	707	2*					✓										✓
Electronic Equip Repairer (Indus)	675	725	2*				✓											✓
Elevator Mechanic	644	657	2*															✓
Farm Equipment Mechanic	697	710	2*															✓
Home-Entertainment Equip Repairer	678	692	2*															✓
Industrial Mechanic	709	725	2*															✓
Medical Equipment Technician	718	735 ■	2*					✓	✓									✓
Office Machine Servicer	672	686	2*															✓
Power House Mechanic	675	688	2*															✓
Precision Instrument Repairer	720 ■	735 ■	2*															✓
Telecomm Equip Installer/Repairer	680	693	2*															✓
Vending Machine Mechanic	720	716	2*															✓
Wind Turbine Technician	675 ■	688 ■	2*				✓	✓										✓
Broadcast Technician	337	324	2-3*				✓	✓										✓
Garage Supervisor	690 ■	704 ■	2-3*			✓										✓		✓
Sound Technician	337	324	2-3*			✓	✓	✓										✓
Telecommunications Technician	680	693	2-3*			✓												✓
SCIENCE & TECHNOLOGY CAREER CLUSTER																		
Career Area O: Engineering & Technologies																		
Aerospace Engineering Technician	173	173	2				✓	✓										✓
Civil Engineering Technician	173	173	2*				✓	✓										✓
Drafter	170	170	2*				✓	✓										✓
Electrical/Electronics Technician	173	173	2*				✓	✓										✓
Industrial Engineering Technician	173	173	2*				✓	✓										✓
Laser Technician	230 ■	226 ■	2*				✓	✓										✓
Mechanical Engineering Technician	173	173	2*				✓	✓										✓
Metallurgical Technician	173 ■	160 ■	2*				✓	✓										✓
Quality Control Technician	768	786	2*				✓											✓
Robot Technician	675 ■	688 ■	2*				✓	✓										✓
Stage Technician	337	324	2*				✓											✓
Survey Technician	157	156	2*				✓											✓
Cartographer	157	156	2-3*		✓		✓											✓
Energy Auditor	173 ■	173 ■	2-3*				✓	✓										✓
Tool Designer	740	758	2-3*				✓	✓										✓
Traffic Engineering Technician	833	856	2-3				✓	✓										✓
Aerospace Engineer	161	160	3				✓	✓										✓
Agricultural Engineer	161	160	3				✓	✓							✓			✓
Architect	151	150	3				✓				✓							✓
Automotive Engineer	161 ■	160 ■	3				✓	✓										✓
Biomedical Engineer	161	160	3				✓		✓	✓								✓
Ceramic Engineer	161	160	3				✓	✓										✓
Chemical Engineer	161	160	3				✓	✓										✓
Civil Engineer	161	160	3				✓	✓										✓
Computer Engineer	161	160	3				✓	✓										✓
Electrical/Electronics Engineer	161	160	3				✓	✓										✓
Environmental Engineer	161	160	3					✓										✓

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Industrial Engineer	161	160	3				✓	✓										
Landscape Architect	154	153	3						✓		✓				✓			
Marine Architect	161	160	3				✓	✓			✓							
Materials Engineer	161	160	3				✓	✓										
Mechanical Engineer	161	160	3				✓	✓										
Metallurgical Engineer	161	160	3				✓	✓										
Mining Engineer	161	160	3				✓	✓										
Nondestructive Tester	173 ■	160 ■	3				✓	✓										
Nuclear Engineer	161	160	3				✓	✓										
Petroleum Engineer	161	160	3				✓	✓										
Safety Engineer	161	160	3				✓	✓	✓									
Solar Energy Engineer	161 ■	160 ■	3				✓	✓										✓
Surveyor	157	156	3				✓											✓
Career Area P: Natural Science & Technologies																		
Pollution Control Technician	230	226 ■	2*				✓											✓
Science Technician	230	226	2*				✓	✓	✓									✓
Chemical Technician	230	226	2-3*				✓	✓										✓
Crime Lab Technician	230	226 ■	2-3					✓	✓									
Meteorological Technician	192	193 ■	2-3				✓	✓										
Textile Technician	753	771	2-3*															✓
Animal Scientist	177	177	3				✓		✓						✓			
Astronomer	206	206	3				✓	✓										
Biochemist	181	181	3				✓	✓	✓									
Bioinformatics Scientist	181 ■	181 ■	3				✓	✓	✓	✓								
Biologist	181	181	3				✓		✓									
Botanist	181	181	3						✓									
Chemist	195	196	3				✓	✓										
Ecologist	181	181	3				✓		✓									
Epidemiologist	446	189	3					✓	✓	✓								
Food Technologist	177	177	3				✓	✓	✓						✓			
Forensic Scientist	189 ■	189 ■	3				✓	✓	✓									
Geneticist	181	181	3				✓		✓									
Geologist	202	203	3				✓	✓										
Horticulturist	177	177	3						✓						✓			
Hydrologist	202	203	3				✓	✓										
Marine Biologist	181	181	3				✓		✓									
Mathematician	143	142	3				✓											
Meteorologist	192	193	3				✓	✓										
Molecular Biologist	181	181	3						✓									
Oceanographer	202	203	3				✓	✓	✓									
Operations Research Analyst	145	145	3														✓	
Pharmacologist	189 ■	181 ■	3					✓	✓									
Physicist	206	206	3				✓	✓										
Physiologist	181	181	3						✓									
Plant Scientist	177	177	3						✓						✓			
Statistician	148	147	3				✓											
Toxicologist	199 ■	199 ■	3				✓	✓	✓	✓								
Wildlife Biologist	181	181	3					✓	✓									
Zoologist	181	181	3						✓									
Career Area Q: Medical Technologies																		
Optometric Assistant	371 ■	359 ■	1-2*														✓	✓

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Cardiovascular Technician	408	396	2*						✓	✓								
Dental Laboratory Technician	774	792	2*						✓	✓	✓							✓
Dialysis Technician	408 ■	396 ■	2*						✓	✓								
EEG Technologist	408 ■	396 ■	2*						✓	✓								
Medical Laboratory Technician	411	399	2*				✓	✓	✓	✓								✓
Optician	434	419	2*				✓	✓		✓								✓
Pharmacy Technician	436	421	2*					✓										
Surgical Technologist	441	426	2*				✓		✓	✓								
Veterinary Technician	443	428	2						✓									
Dietetic Technician	824	844	2-3*						✓	✓							✓	
Embalmer	825	846	2-3						✓							✓		
Nuclear Medicine Technologist	426	413	2-3*					✓	✓	✓								
Radiation Therapy Technologist	387	424	2-3*					✓	✓	✓								
Radiologic Technician	438	424	2-3*					✓	✓	✓								✓
Respiratory Therapist	397	385	2-3*					✓	✓	✓								✓
Sonographer	416	404	2-3*				✓	✓	✓	✓								
Blood Bank Technologist	411	399	3				✓		✓	✓								
Coroner	189 ■	189 ■	3						✓									
Cytotechnologist	411	399	3				✓	✓	✓	✓								
Dietitian/Nutritionist	366	354	3						✓	✓							✓	
Medical Technologist	411	399	3					✓	✓	✓								
Perfusionist	441 ■	426 ■	3				✓	✓	✓	✓								
Pharmacist	374	361	3				✓	✓	✓	✓								
Prosthetist/Orthotist	825	845	3						✓	✓								
Career Area R: Medical Diagnosis & Treatment																		
Emergency Medical Technician	419	406	2*						✓	✓								
Allergist	381	369	3						✓	✓								
Anesthesiologist	381	369	3					✓	✓	✓								
Audiologist	358	347	3						✓	✓								
Chiropractor	360	349	3						✓	✓								
Dentist	363	351	3					✓	✓	✓								
Dermatologist	381	369	3						✓	✓								
Internist	381	369	3					✓	✓	✓								
Naturopathic Physician	381 ■	369 ■	3						✓	✓								
Nurse Anesthetist	392	379	3						✓	✓								
Nurse Practitioner	392	379	3						✓	✓								
Nurse-Midwife	392	379	3						✓	✓								
Obstetrician/Gynecologist	381	369	3						✓	✓								
Occupational Therapist	369	357	3		✓					✓								
Optometrist	371	359	3				✓	✓	✓	✓								
Osteopathic Physician	381 ■	369 ■	3						✓	✓								
Pathologist	381	369 ■	3						✓									
Pediatrician	381	369 ■	3						✓	✓								
Physical Therapist	377	364	3						✓	✓								
Physician	381	369	3						✓	✓								
Physician Assistant	379	366	3						✓	✓								
Podiatrist	385	372	3					✓	✓	✓								
Psychiatrist	381	369	3		✓				✓	✓								
Radiologist	381	369	3					✓	✓	✓								
Speech-Language Pathologist	399	387	3	✓					✓	✓			✓					
Sports Physician	381 ■	369 ■	3						✓	✓								

Related High School Courses

Job	Job Descriptions		Prep Level	Related High School Courses														
	A	B		English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
Surgeon	381	369	3					✓	✓	✓								
Veterinarian	402	390	3					✓	✓									
Career Area S: Social Science																		
Anthropologist	226	222	3		✓			✓										
Archaeologist	226	222	3		✓			✓										
Criminologist	226 ■	222 ■	3		✓													
Economist	209	210	3		✓													✓
Geographer	226	222	3		✓		✓	✓										
Gerontologist	226 ■	222	3		✓				✓									
Historian	226	222	3	✓	✓													
Market Research Analyst	212	213	3		✓	✓												✓
Political Scientist	223	213	3		✓							✓						
Psychologist, Experimental	215	215	3		✓				✓									
Sociologist	223	222	3		✓													
Urban Planner	220	219	3		✓													✓
ARTS CAREER CLUSTER																		
Career Area T: Applied Arts (Visual)																		
Floral Designer	310	301	2*								✓							
Merchandise Displayer	824	845	2*								✓							
Artist	301	292	1-3								✓							
Animator	301	292	2-3*								✓							
Cinematographer	356	341	2-3*								✓							
Fashion Artist	307	298	2-3*								✓							✓
Fashion Designer	307	298	2-3*								✓							✓
Graphic Artist (Print Materials)	312	303	2-3*								✓							
Interior Designer	314	306	2-3*								✓							✓
Photographer	347	335	2-3*								✓							
Set Designer	825	845	2-3			✓					✓							
Video/Film Editor	356	341	2-3*								✓							
Graphic Artist (Software)	312	303	3				✓				✓							
Illustrator	301	292	3								✓							
Industrial Designer	304	296	3				✓	✓			✓							
Career Area U: Creative & Performing Arts																		
Fashion Model	537	516	1-2*								✓							✓
Actor	318	309	1-3*	✓								✓						
Professional Athlete	321	313	1-3						✓									
Singer	328	319	1-3									✓						
Dancer/Choreographer	325	317	2-3*								✓	✓						
Dramatist (Playwright)	333 ■	343 ■	2-3	✓									✓					
Musician (Instrumental)	328	319	2-3*									✓						
Writer/Author	333	343	2-3*	✓														
Composer (Music)	328	319	3									✓						
Conductor (Music)	328	319	3									✓						
Movie/TV Director	318	309	3	✓								✓	✓					
Radio/TV Program Writer	333	343	3	✓														
Stunt Performer	318 ■	309 ■	3				✓	✓										
Career Area V: Applied Arts (Written & Spoken)																		
Translator	340	327	1-3															✓
Blogger	333 ■	343 ■	2-3	✓	✓													
Interpreter	340	327	2-3		✓								✓	✓				
Proofreader	827	848	2-3	✓														

Related High School Courses

Job	Job Descriptions		Prep Level	English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.	Trade & Industrial
	A	B																
Radio/TV Announcer/Newscaster	331	322	2-3*	✓									✓					
Advertising Copywriter	333	343	3	✓													✓	
Critic (Book/Theater)	344 ■	343 ■	3	✓									✓					
Editor	333	343	3	✓														
Librarian	270	266	3	✓	✓													
Public Relations Specialist	350	338	3	✓									✓				✓	
Reporter/Journalist	344	332	3	✓	✓													
Technical Writer	353	343	3	✓														
SOCIAL SERVICE CAREER CLUSTER																		
Career Area W: Health Care																		
Geriatric Aide	460 ■	441 ■	1*						✓									
Home Health And Care Aide	449	504	1*							✓								✓
Massage Therapist	452	433	1*						✓	✓								
Nursing/Psychiatric Aide	460	441	1*						✓									
Dental Assistant	447	431	2*						✓	✓								
Medical Assistant	455	436	2*						✓									
Nurse (Licensed Practical)	421	409	2*						✓									
Physical Therapy Assistant	465	448	2						✓									
Psychiatric Technician	825	845	2*						✓	✓								
Dental Hygienist	414	402	2-3				✓	✓	✓	✓								
Fitness Trainer	513	494	2-3						✓	✓								
Weight Reduction Specialist	366	354	2-3						✓	✓								✓
Athletic Trainer	405	393	3						✓	✓								
Nurse (Registered)	392	379	3						✓	✓								
Recreational Therapist	389	377	3		✓				✓	✓								
Career Area X: Education																		
Daycare Operator (Child/Adult)	510	491	2-3															✓
Health Educator	238	235	2-3						✓	✓								
Teacher (Preschool)	286	282	2-3						✓									✓
Teacher Aide	276	272	2-3	✓														
Athletic Coach	321	313	3						✓	✓								
College/University Faculty	282	277	3	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Educational Administrator	41	39	3	✓	✓								✓					
Teacher (Adult Education)	279	274	3		✓													✓
Teacher (Art/Music/Drama/Speech)	288 ■	282 ■	3								✓	✓	✓					
Teacher (Business)	298	282	3	✓														✓
Teacher (Elementary)	288	282	3	✓	✓						✓		✓					
Teacher (Foreign Language)	288	282	3											✓				
Teacher (Kindergarten)	288	282	3		✓													
Teacher (Physical Education)	288	282	3						✓	✓								
Teacher (Secondary)	288	282	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Teacher (Special Education)	294	289	3		✓				✓									
Teacher (Vocational/Technical)	298	277	3															✓
Teacher (Vocational Agriculture)	298	282	3						✓						✓			
Career Area Y: Community Services																		
Credit Counselor	118 ■	103 ■	2-3			✓												✓
Human Services Worker	244	240	2-3		✓													
Legal Assistant/Paralegal	261	257	2-3	✓														✓
Volunteer Coordinator	29 ■	506 ■	2-3		✓								✓					✓
Welfare Eligibility Worker	591	570	2-3		✓													
Counselor (Career)	234	231	3		✓													

Related High School Courses

Job	Job Descriptions		Prep Level	Related High School Courses													
	A	B		English	Social Studies	Math	Math & Computers	Physical Sciences	Life Sciences	Health & Fitness	Art	Music	Communications	Foreign Language	Agriculture	Business	Family/Consumer Sci.
Counselor (Mental Health)	234	231	3		✓					✓							
Counselor (Rehabilitation)	234	231	3		✓				✓								
Counselor (School/College)	234	231	3		✓												
Counselor (Substance Abuse)	234	231	3		✓					✓							
Director (Social Service)	246 ■	243 ■	3		✓											✓	
Director (Social)	522 ■	506 ■	3		✓							✓				✓	
Farm/Home Mgmt Advisor	824	844	3											✓			✓
Financial Planner	118	102	3			✓									✓		
Genetic Counselor	234 ■	231 ■	3		✓				✓	✓							
Home Economist	209	844	3														✓
Judge	253	250	3	✓								✓					
Lawyer	257	253	3	✓	✓							✓					
Lobbyist	350 ■	338 ■	3	✓	✓							✓					
Minister	824	844	3		✓							✓					
Parole Officer	241	238	3		✓												
Priest	824	844	3		✓							✓					
Psychologist, Clinical	215	215	3		✓					✓							
Rabbi	824	844	3		✓							✓					
Recreation Leader	522	506	3		✓												
Residential Counselor	826	231	3		✓												
Social Worker	246	243	3		✓					✓							
Student Services Specialist	234 ■	240 ■	3		✓												
Career Area Z: Personal Services																	
Amusement/Recreation Attendant	825	845	1														✓
Bartender	491	472	1*			✓											
Dining Room Attendant	491	472	1														✓
Fast-Food Worker	487	472	1			✓											
Food Preparer/Server	487	472	1			✓											
Gaming Occupations Worker	520	501	1*			✓											
Host/Hostess	532	472	1													✓	✓
Manicurist	507	489	1*														✓
Porter	825	846	1														✓
Private Household Worker	495 ■	476 ■	1														✓
Recreational Guide	522 ■	847 ■	1*						✓	✓							
Travel Clerk	598	579	1*			✓										✓	
Waiter/Waitress	491	472	1			✓											
Childcare Worker (Domestic)	510	491	1-2*							✓							✓
Barber	507	489	2*														✓
Electrologist	507	489	2*														✓
Hairstylist/Cosmetologist	507	489	2*								✓						✓
Make-Up Artist	526	489	2*								✓						✓
Travel Guide	826	847	2*		✓									✓			
Animal Trainer	504	485	2-3*											✓			
Flight Attendant	517	498	2-3		✓							✓	✓				