Medicine & Dentistry

Associate in Arts & Sciences – Direct Transfer (DTA)
Associate of Science

GENERAL INFORMATION

Dentists work to prevent dental problems, fill and repair teeth, treat gum disease, preform surgical operations on the teeth, jaws and gums, and make devices such as dentures, partials and implants. Dentists may have a general practice, or may specialize as orthodontists, surgeons, periodontists, or endodontists, for example. Typically, dentists set up their own practice, or join small independent clinics as associates or partners. In May 2012, the median income of salaried dentists was $149,310. Income can vary widely due to location, size of practice, and specialization.

Physicians take medical histories, determine and administer treatment or refer patients to other health care professionals. They coordinate work with nurses, social workers, rehabilitation therapists, pharmicists and psychologists. They may specialize in fields such as pediatrics or orthopedics, or may enter general practice.

Three types of physicians are most well known: The M.D. (Doctor of Medicine), the D.O. (Doctor of Osteopathic Medicine), and the N.D.(Naturopathic Doctor). M.D.s are also known as allopathic physicians. While both M.D.s and D.O.s may use all accepted methods of treatment, including drugs and surgery, D.O.s place special emphasis on the body's musculoskeletal system, preventive medicine, and holistic patient care. About a third of M.D.s—and more than half of D.O.s—are primary care physicians. They practice general and family medicine, general internal medicine, or general pediatrics and are usually the first health professionals patients consult. Primary care physicians tend to see the same patients on a regular basis for preventive care and to treat a variety of ailments. General and family practitioners emphasize comprehensive health care for patients of all ages and for the family as a group. Those in general internal medicine provide care mainly for adults who may have problems associated with the body's organs. General pediatricians focus on the whole range of children's health issues. When appropriate, primary care physicians refer patients to specialists, who are experts in medical fields such as obstetrics and gynecology, cardiology, psychiatry, or surgery.

Naturopathic Doctors (N.D.) practice a unique and comprehensive approach to improving health and treating illness. It is based on the healing power of nature, which supports and stimulates the body's ability to heal itself. It uses a combination of natural medicines and gentle hands-on techniques. Naturopathic doctors are trained in acupuncture, botanical medicine, clinical nutrition, homeopathy, physical treatments and coaching for healthy living choices. Therapies are often combined for their synergistic effects.

The information above, and more, can be found in theDepartment of Labor Occupational Outlook Handbook at the following site:

(http://stats.bls.gov/oco)

Approved by Instructional Council March 2017. DTA checklist effective January 2017.

Pre-medicine and Pre-dentistry are <u>not</u> majors at colleges or universities. Students planning to enter professional schools after earning a baccalaureate degree may major in any field of study they desire, providing they complete minimum course requirements in math and sciences. Many pre-medical or dental students major in some area of the biological sciences (Biology, Zoology, Microbiology, Genetics or Biochemistry), but majors in the social sciences or humanities, for example, may be just as valid as long as the basic science/math sequences are included.

Admission committees for medical and dental schools prefer individuals with high academic achievement and test scores, who have completed the essential science and math courses, who have demonstrated interest and experience in their intended field, who have strong communication skills, and who have a well-rounded background – which may include a major in the liberal arts and/or other avocational interests.

Everett Community College offers two pathways as options toward transfer to a university. Each transfer institution prefers a different degree option, so it is important to talk with an advisor during your first year at community college!

<u>The Associate in Arts and Sciences – DTA</u> meets guidelines for direct transfer to most colleges and universities in Washington, as well as to the major public universities in Oregon. The degree enables the student to complete basic distribution requirements in Math, English, Humanities, Social Sciences and Natural Sciences, and to begin the major course of study. Depending upon the student's intended major, this option may or may not meet all of the prerequisites for the major. It is very important to discuss this with an advisor. This degree is recommended for pre-medicine and pre-dentistry students only if they are transferring into a social science baccalaureate program (such as Psychology) or if their transfer institution prefers it.

<u>The Associate of Science</u> is another degree option for science majors and requires that the student complete all freshman and sophomore math and science courses and a limited number of courses in English, Humanities and Social Science. Upon transfer, the student will be eligible for junior level science courses, but will need to complete the remaining general education requirements before graduation with a baccalaureate degree.

CAREER OPTIONS

Both dentists and physicians frequently set up their own private practices. Some choose to work in hospital or clinic settings, to work for public health offices, in research facilities, or as teachers or hospital administrators.

There are a number of careers closely related to dentistry and medicine. Please see an advisor, as prerequisites are quite different than those for medicine and dentistry. Please refer to our guides for chiropractic, nursing and dental hygiene for examples. Also, the fields of nurse practitioner and physician assistant may be of interest to those who have had a<u>t least 2 years of full-time experience in the medical field and a bachelor's degree;</u> more information can be obtained by contacting:

Univ of Washington, MEDEX Northwest, Physician Assistant Program
4245 Roosevelt Way NE, Seattle, WA, 98105, Phone: 206-598-2600

SUGGESTED PREPARATION

High school study in math, biology and chemistry is very helpful, so that college level courses in these subjects can be immediately pursued. Additionally, writing and communication skills are important.

Students interested in health fields should be prepared to work with a diversity of clients. Their written, verbal and personal communication skills should be strong.

Although medical schools do not specify that students applying for admission have a science degree, UW Medical School requires that a student complete 12 quarter credits of biology, 18 quarter credits of chemistry, 6 quarter credits of physics and 12 additional science quarter credits before applying. In addition to these credit requirements, students are required to have an understanding of basic concepts of molecular biology, proteins and enzymes, and metabolism. It is also expected that students have a broad background in the humanities and liberal arts. Students accepted into UW Medical School in Fall 2003 scored high on the MCAT (Medical College Admission Test) and had a mean GPA of 3.73.

Dental schools require applicants to have at least 2 years of pre-dental coursework, fairly similar to that outlined above. Most dental school students possess a baccalaureate degree. Dental school applicants must present scores from the DAT (Dental Admissions Test), transcripts, and letters of recommendation, as well as other convincing evidence.

Any baccalaureate degree in the biological sciences requires a solid background in English (2 quarters), Math (calculus and statistics) and Chemistry (one year inorganic and one year organic), as well as a year of introductory Biology (see suggested courses below). Most transfer institutions may also require for admission two to three quarters of college level foreign language or two years of high school foreign language. For specific requirements in your area of interest or for the school to which you wish to transfer, it is strongly recommended that you contact an EvCC biology advisor and contact the transfer institution.

Websites of biology departments at common transfer institutions

Bastyr University: www.bastyr.edu (Natural Health Sciences)	The Evergreen State College: www.evergreen.edu
Central Washington University: http://www.cwu.edu/biology/	UW Dental School: www.dental.washington.edu/
Eastern Washington University: http://www.ewu.edu/cstem/departments/biology	UW Medical School: www.uwmedicine.washington.edu
University of Washington: www.washington.edu or www.biology.washington.edu/	Medical College Admissions Test: www.aamc.org/students/mcat/
Washington State University: www.wsu.edu or http://sbs.wsu.edu/	Dental Admission Test https://www.ada.org/en/education-careers/dental-admission-test
Western Washington University: www.wwu.edu or https://cse.wwu.edu/biology	

GETTING STARTED AT EVCC

Our Enrollment Services Office provides information about application, advising, orientation and registration for new and continuing students. New degree-seeking students must complete entry advising prior to registering for first quarter classes. Contact:

- Enrollment Services, Parks 201, 425-388-9219, admissions@everettcc.edu
- Advising Center, Rainier 108, 425-388-9339, www.everettcc.edu/advising

PROGRAM ADVISORS

It is helpful to consult with university advisors, as well as EvCC advisors about pre-medical and pre-dental studies. Please contact one of these EvCC advisors to help you select which degree pathway to follow, and to map out your program of study.

- René Kratz, SHK 121, 425-388-9503, rkratz@everettcc.edu
- Jason Ripper, GWH 333, 425-388-9171, jripper@everettcc.edu
- Heather Marrs, SHK 142, 425-388-9971, hmarrs@everettcc.edu

SUGGESTED COURSE SEQUENCE

This plan assumes the student is academically ready for college level Math, English and Chemistry courses. Most students take 3 years to complete all of these courses, due to any lower level English or Math courses they may have to take as prerequisites.

Note that the two degrees require basically the same courses, with the difference being the amount of math and the number of Humanities and Social Science courses required. ENGL& 102 is not required for the AS degree, but it is strongly recommended before transfer to a university.

Fall	Winter	Spring	Summer
CHEM& 161 BIOL& 221 MATH& 141	CHEM& 162 BIOL& 222 MATH& 142	CHEM& 163 BIOL& 223 MATH& 151	ENGL& 101 or 101D HUMANITIES or SOCIAL SCIENCE
Fall	Winter	Spring	Summer
MATH& 152 CHEM& 261 PHYS& 114	MATH& 146 CHEM& 262 PHYS& 115	BIOL& 260 optional CHEM& 263 ENGL& 102 or 102D	HUMANITIES SOCIAL SCIENCE

Associate in Arts and Sciences - DTA

This checklist is targeted at transfer students with an interest transferring to a four-year institution to complete a bachelor's degree and then continuing on for a graduate school degree in **medicine or dentistry**. Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. This checklist refers to requirements listed in the curriculum guide titled "Associate in Arts and Sciences – DTA", which lists all the courses which are approved for the various categories of requirements. Note: Though courses in a foreign language are not required in the DTA degree, some universities may require 2 or 3 quarters of foreign language for admission or for graduation.

Student Name: _____ Date: _____

☐ **COMPLETION** of College Success Course _____ (Where completed/Course Title) _____ (Year Completed) _____ (Grade)

☐ **COMPLETION** of Diversity Course _____ (Where completed/Course Title) _____ (Year Completed) _____ (Grade)

Course Number	Course Title	Credits	Quarter Completed	Grade
BASIC COMMUNICATIONS SKILLS (10 credits, with at least 5 in English composition)				
ENGL& 101 or 101D	English Composition I	5		
ENGL& 102 or 102D	Composition II	5		
BASIC QUANTITATIVE SKILLS (5 credits)				
MATH& 141	Precalculus: College Algebra	5		
HUMANITIES (15 credits from the DTA approved Humanities List. See Note 1.)				
English Literature Course				
SOCIAL SCIENCE (15 credits from the DTA approved Social Science List. See Notes 1 and 2.)				
SCIENCE AND MATH (See Notes 3 and 4)				
BIOL& 221	Majors Ecology/Evolution	5		
BIOL& 222	Majors Cell/Molecular	5		
BIOL& 223	Majors Organismal Physiology	5		
BIOL& 260 (dentistry)	Microbiology	5		
CHEM& 161	General Chemistry with Lab I	5.5		
CHEM& 162	General Chemistry with Lab II	5.5		
CHEM& 163	General Chemistry with Lab III	5.5		
CHEM& 261	Organic Chemistry with Lab I	6		
CHEM& 262	Organic Chemistry with Lab II	6		
CHEM& 263	Organic Chemistry with Lab III	6		
MATH& 142 or 144	Pre-Calculus II or Pre-Calculus I &	5		
MATH& 151	Calculus I	5		
MATH& 152	Calculus II	5		
MATH& 153 or 146	Calculus III or Intro to Statistics	5		
PHYS& 114 *	General Physics I	5		
PHYS& 115 *	General Physics II	5		
PHYS& 116 *	General Physics III	5		

Minimum 90 credits required, with minimum 2.0 GPA. See Note 4.

Note 1: Courses must be from three different disciplines. No more than 10 credits in any one discipline may be used in Humanities, Social Science and Science.

Note 2: We strongly recommend courses in Sociology, Anthropology, and Psychology.

Note 3: All science courses require completion of ENGL 98 or placement into ENGL& 101. Chemistry courses require completion of Math 92 or equivalent placement, as well as completion of CHEM& 140 or a year of high school chemistry, completed within the last three years. BIOL& 221may be taken after or concurrently with CHEM& 161. High school biology or BIOL&100 is also required. BIOL& 222 and 223 must be taken after CHEM& 161. CHEM& 261, 262, 263 are offered in a sequence of Fall, Winter, Spring only; students must start in the Fall. * It may be advisable to complete Physics in the junior year.

Note 4: Completion of all the listed courses may result in more than 90 credits being earned for the degree. The advantage is that the completion of these courses will enable you to progress more efficiently in your major at a university. Alternatively, some of the courses may be done at the university instead. Please consult with an advisor to decide the best option for you.

Associate of Science

This checklist is targeted at transfer students with an interest in **pre-medicine and pre-dentistry who are transferring to the University of Washington only**. Other universities in Washington prefer the AAS degree (see above). Students should meet with an advisor and maintain this checklist while at Everett Community College. The quarter before expected completion, this checklist should be submitted with a diploma application to the Enrollment Services Office. Note: Though courses in a foreign language are not required in the Associate of Science degree, some universities may require two or three quarters of foreign language for admission or for graduation.

Student Name: _____ Advisor Signature: _____ Date: _____

☐ **COMPLETION of Diversity Course** _____ _____ _____
Where completed/Course Title | Year Completed | Grade

Course Number	Course Title	Credits	Quarter Completed	Grade
COMMUNICATIONS SKILLS (5 credits)				
ENGL& 101 or 101D	English Composition	5		
MATHEMATICS (15 credits. Select from MATH& 151, 152, 153, 254, 146 including at least one from MATH& 153, 254, 146.)				
HUMANITIES AND SOCIAL SCIENCE (15 credits, in three different disciplines, selected from both the Humanities and Social Science course list for the Associate of Science degree.)				
English Literature course				
SCIENCE (See Note 1.)				
BIOL& 221	Majors Ecology/Evolution	5		
BIOL& 222	Majors Cell/Molecular	5		
BIOL& 223	Majors Organismal Physiology	5		
BIOL& 260 (dentistry)	Microbiology	5		
CHEM& 161	General Chemistry with Lab I	5.5		
CHEM& 162	General Chemistry with Lab II	5.5		
CHEM& 163	General Chemistry with Lab III	5.5		
CHEM& 261	Organic Chemistry with Lab I	6		
CHEM& 262	Organic Chemistry with Lab II	6		
CHEM& 263	Organic Chemistry with Lab III	6		
+PHYS& 114	General Physics I	5		
+PHYS& 115 (See Note 2)	General Physics II	5		
+PHYS& 116 (See Note 2)	General Physics III	5		

Additional Electives may be required for students who opt out of BIOL& 260 and the Physics sequence, in order to accrue the minimum 90 credits. If needed, list here:
ENGL& 102 or 102D _____ _____

Minimum 90 credits required, with minimum 2.0 GPA. (See Note 2.)

Note 1: All science courses require completion of ENGL 098 or placement into ENGL& 101. Chemistry courses require completion of MATH 096 or equivalent placement, as well as completion of CHEM& 140 or a year of high school chemistry, completed within the last three years. BIOL& 221 may be taken after or concurrently with CHEM& 161. High school biology or BIOL&100 is also required. BIOL& 222 and 223 must be taken after CHEM& 161. CHEM& 261, 262, 263 are offered in a sequence of Fall, Winter, Spring only; students must start in the Fall.

Note 2: Completion of all the listed courses may result in more than 90 credits being earned for the degree. The advantage is that the completion of these courses will enable you to progress more efficiently in your major at a university. Alternatively, some of the courses may be done at the university instead, and are marked with a + sign. Please consult with an advisor to decide the best option for you.