

PROGRAM GUIDE APPLIED AND MEDICAL SCIENCES

FACULTY OF HEALTH SCIENCES (FHS)

2024-2025



Table of Contents

Table of Contents	1
Welcome from Vice President, Academic	2
Welcome from the Executive Dean, Faculty of Health Sciences	3
Welcome from the Associate Dean, Applied and Medical Sciences, Faculty of Health Science	ces 4
Contact Information	5
Faculty of Health Sciences	5
Administrative Staff	5
Office Staff	5
Student Advisor / Field Placement Officer	6
Program Coordinators	6
Student Services & Resources	7
Quick Links	7
Important Dates	7
Student Advisors Role	8
Applied & Medical Sciences Programs	9
Clinical Bioinformatics Graduate Certificate	9
Emergency Services Fundamentals Certificate	13
Fitness and Health Promotion Diploma	17
Paramedic – Advanced Care Graduate Certificate	23
Pre-Health Sciences Pathway to Advanced Diplomas & Degrees Certificate	27
Pre-Health Sciences Pathway to Certificates & Diplomas Certificate	30
Primary Care Paramedic Diploma	33
Additional Important Information	39

Please note the following important information:

Durham College (DC) strives to ensure the accuracy of the information in this publication. Please note that the academic curriculum is continually reviewed and revised to ensure program quality and relevancy. As such, the college reserves the right to modify or cancel any course, program, fee, procedure, and timetable or campus location at any time. Please consult the DC website for the most current information. May 2024

Welcome from Vice President, Academic

Dear Students,

Welcome to Durham College (DC)! You've made an excellent choice with DC. We offer an extensive range of industry-informed and community-orientated academic programs and extraordinary student services. Our students develop the professional and durable skills needed to build meaningful careers and make a positive impact in the world.

DC continues to lead the way by supporting students, delivering exceptional teaching and learning that is enhanced with opportunities for experiential learning and technology-enabled education. Our goal is to inspire students to create success for themselves and their communities through innovative and transformative education.

As this new semester begins, it's essential to recognize that our world is evolving rapidly. By choosing to study at DC this year, you've demonstrated a commitment to growth and adaptability, which will serve you well in your chosen field. Embrace new ways of learning and connect with your fellow students, faculty members, program coordinators, student advisor, and associate deans. They are all valuable resources to support your academic journey and career planning.

We eagerly anticipate supporting your success and believe you'll soon discover why DC ranks among Canada's top colleges.

Have a successful academic year!

Dr. Jean Choi

Vice President, Academic

Welcome from the Executive Dean, Faculty of Health Sciences

Dear Students,

On behalf of Faculty of Health Sciences (FHS), I am delighted to extend a warm welcome to all our new and returning students. You are about to embark on a new academic year, one filled with possibilities and opportunities.

To our new students, I want to congratulate you on taking this important step towards your future. You have chosen a path that will provide you with knowledge and skills that will stay with you for a lifetime. We are excited to have you join our FHS, and we look forward to supporting you throughout your journey.

To our returning students, welcome back! We hope that your academic journey has been enriching thus far, and that you are excited to dive back into your studies. We are proud of all that you have achieved so far, and we are eager to see you continue to grow and succeed in the year ahead.

As we start a new academic year, I want to remind you of our mission to offer our learners the means to excel in their chosen fields by providing industry-relevant professional, technical, theoretical, and hands-on experience. We strive to develop work-ready learners upon graduation through a collaborative partnership between students and the programs. Our state-of-the-art laboratories, facilities, learning spaces, and digital platforms provide student-centered learning environments and offer ample opportunities to integrate theoretical learning into real industry hands-on experience. Our goal is to empower students with the essential skills and confidence necessary to be successful in their field. It is our hope that upon graduation students will effectively and confidently transition to the workforce, related to their field of study. Our dedicated faculty and staff are committed to providing you with a supportive and enriching learning environment. We have a range of resources available to help you with your academic and personal goals, and we encourage you to take advantage of them. We are committed to supporting you throughout your academic journey.

Finally, I would like to wish you all the best for the upcoming academic year. Whether you are starting a new program or continuing with your studies, I am confident that you will find this year to be both rewarding and filled with a wealth of exciting opportunities for growth and discovery.

We look very much forward to having you with us!

Dr. Mojgan Rezvani

Executive Dean

Welcome from the Associate Dean, Applied and Medical Sciences, Faculty of Health Sciences

Dear Students,

We are excited to welcome you to the Faculty of Health Sciences at DC!
Whether you're starting a one-year preparatory certificate, a two-year
diploma, or a graduate certificate, you are now part of a diverse and inclusive group dedicated
to advancing healthcare education, practice, and research.

As you begin this exciting academic journey, we encourage you to embrace the opportunities that lie ahead. Our programs are designed to equip you with the skills and experiences necessary to excel in your chosen field. From state-of-the-art facilities to hands-on learning experiences, you will find numerous opportunities to grow and thrive.

Our dedicated staff and faculty are here to support you every step of the way. Their passion, expertise, and commitment to fostering a universal and inclusive learning environment will support you to become an exceptional professional. We believe that collaboration and active participation are key to your success, so we encourage you to engage fully with your peers and instructors.

In this guide, you will find comprehensive information about the academic, community, and personal resources available to you. This includes student advisors, field placement officers, and access to a range of support services encompassing personal, health and wellness, and academic needs. Additionally, you'll find important resources and policies to help you navigate your educational, personal, and social journeys. Be sure to review the guide thoroughly to familiarize yourself with all the support and opportunities available to enhance your educational experience.

Remember, this is your journey, and we are here to walk alongside you, offering support and guidance whenever you need it. Embrace the challenges, celebrate your achievements, and make the most of the incredible opportunities that await you.

Once again, the Faculty of Health Sciences is so proud to welcome you. Together, we are leading the way to a bright and successful future.

Have a fantastic academic year!

Warm regards,

Dr. Aimee Karagiorgakis

Associate Dean

Contact Information

Faculty of Health Sciences

Office: SW106 (8:30 am to 4:30 pm) Main Website: Faculty of Health Science (FHS)

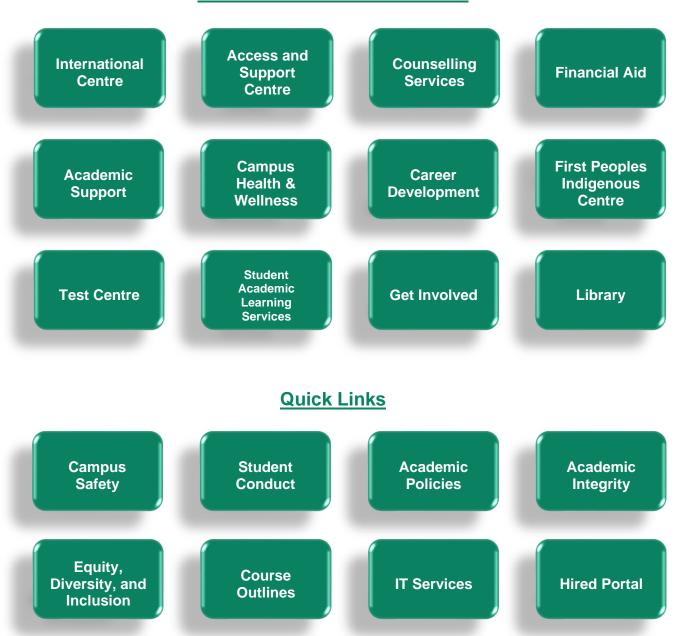
Phone Line: 905 721 2000 Chat Line: Chat Line

Faculty Office: 905 721 3080

Administrative Staff	Contact Information
	Executive Dean
Dr. Mojgan Rezvani	Email: Mojgan.Rezvani@durhamcollege.ca Office: SW106C Extension: 2249
	Associate Dean
Dr. Aimee Karagiorgakis	Email: Aimee.Karagiorgakis@durhamcollege.ca Office: SW106G Extension: 2078
	Manager
Hamid Kalhor	Email: Hamid.Kalhor@durhamcollege.ca Office: SW106D Extension: 2270
Office Staff	Contact Information
	Administrative Coordinator
Shari Kinney	Email: Shari.Kinney@durhamcollege.ca Office: SW106F Extension: 2375
	Administrative Assistant
Victoria DiNorcia	Email: Victoria.DiNorcia@durhamcollege.ca Office: SW106 Extension: 2944

Student Advisor / Field Placement Officer	Programs & Contact Information
Hayden McIntosh	Emergency Services Fundamentals Fitness and Health Promotion Primary Care Paramedic Advanced Care Paramedic Pre Health-Sciences-College Pre Health-Sciences-University Personal Support Worker Email: Hayden.McIntosh@durhamcollege.ca Office: SW106l Extension: 6629
Program Coordinators	Programs & Contact information
Dale Button	Primary Care Paramedic Advanced Care Paramedic Email: Dale.Button@durhamcollege.ca Office: JW201 Extension: 7381
Jennifer Walker	Emergency Service Fundamentals Email: Jennifer.Walker@durhamcollege.ca Office: JW201 Extension: 7381
Jesse Parsons	Pre-Health Sciences Email: Jesse.Parsons@durhamcollege.ca Office: C151 Extension: 2572
Michael Williams-Bell	Fitness and Health Promotions Email: Michael.Williams-Bell@durhamcollege.ca Office: C209B Extension: 6533
Sean Crowley	Pre-Health Sciences Email: Sean.Crowley@durhamcollege.ca Office: C151 Extension: 6474

Student Services & Resources



Important Dates

Please refer to the following <u>website</u> regarding the important dates for 2024-2025 academic year.

Student Advisors Role

Student Advisors are available all year to support, encourage, plan and advocate for students needing academic assistance.

Our student advisors can assist students with the following:

- Assist with individual academic plans
- Identify future career goals
- Discuss pathways to university or post graduate programs
- Program Transfer to other college programs or interest in additional courses (i.e., Professional and Parttime Learning)
- Assist with decisions regarding full time or part time studies
- Working with ASC (Access and Support Centre) to devise and map out reduced course load
- Map out courses and upcoming semesters for off stream students
- Find equivalent credits
- Help with timetable changes
- Discuss short- and long-term academic goals
- Assist and discuss re-entry into a program
- Support, advise and provide access to the many students services DC offers (i.e., Student Academic Learning Services (SALS), the Access and Support Centre (ASC) and Campus Health Centre

Applied & Medical Sciences Programs

Clinical Bioinformatics | Graduate Certificate

Program Information

Program Description

The Clinical Bioinformatics Ontario College Graduate Certificate provides advanced level education to develop the knowledge and skills to work in the medical informatics, computational biology and medical technology fields. This interdisciplinary program is firmly grounded in theory, hands-on skills, and application of tools, methods and techniques that emphasize inferring meaning from scientific "Big Data". Students explore the rapidly evolving fields of genomics and proteomics to support the use of analytical approaches. Emphasis is placed on examining data mining tools and analytical methods to assess scientific data to develop treatment plans and monitor trends in genetic data.

Graduates are equipped to use industry-based software for biological data analysis, including identification and evaluation of disease/disorder associated biomarkers and determine therapeutic efficacy of drugs. They are able to develop methodologies and hypotheses, utilize current bioinformatics software to manage large genetic databases, and research the pathology of diseases to develop treatment hypotheses to enter the field of bioinformatics.

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

- 1. Identify relevant evidence-based research, trends, technologies, and standards within the field of bioinformatics to maintain currency in the industry.
- 2. Apply bioinformatics and computational methods to the design, execution and interpretation of scientific research.
- 3. Employ programming language and scripting versatility to automate processes at the application level.
- 4. Examine bioinformatics data to discover patterns, draw conclusions and generate predictions for subsequent experiments.
- 5. Comply with legal obligations, as well as with the professional and ethical standards, to ensure privacy, security and confidentiality in the access, retention, storage and disposal of personal genetic data and related health information.
- 6. Use statistics in the analysis, collation and interpretation of data to draw conclusions and support informed decision-making.
- 7. Perform laboratory duties in compliance with pertinent health and safety legislation and regulations.
- 8. Complete complex genomic and proteomics applications using advanced principles of cell and molecular biology, pharmacology and toxicology, pathophysiology, endocrinology, and biochemistry.
- 9. Collaborate and communicate with inter-professional health care teams to optimize the health and well-being of individuals.
- 10. Develop and implement effective strategies for ongoing personal and professional development that support currency, competence and ethics in clinical bioinformatics.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

Employment Opportunities

Where you could work:

- Pharmaceutical Companies
- Research Hospitals
- Research Industry
- Research and Development
- Universities and Colleges

What you could be:

- Bioinformatics Analyst
- Bioinformatics Scientist
- Bioinformatics Technician
- Bioinformatics Engineer
- Scientific Data Analyst
- Biostatistician
- Computational Genomicist
- Computational Molecular Scientist
- Data Scientist
- Drug Discovery Researcher
- Research Scientist in Applied Genomics
- Genetic Counselor
- Research Scientist in Applied Proteomics

Courses

Click Here for Course Outlines Access Portal

Semester 1

- Fundamentals of Data Science (CLSC 1100)
- ➤ Introduction to Omics (CLSC 1101)
- Computational Tools and Methods (CLSC 1102)
- Data Mining, Modelling, and Biostatistics (CLSC 1103)
- ➤ Knowledge Translation and Mobilization Strategies (COMM 1116)
- ➤ Ethics and Professional Development (MGMT 1108)
- Leadership and Project Management (MGMT 1109)

Semester 2

- Capstone Research Project (CBIO 1200)
- Field Placement (CBIO 1201)
- Biosequence Pattern Analysis (CLSC 1200)
- ➤ Bioinformatics and Precision Medicine (CLSC 1201)
- Data Analytics and Storytelling (CLSC 1202)

Program of Study

Program Of Study 2024-25 Clinical Bioinformatics (CBIO)

Faculty of Health Sciences

13-JUN-2024

Weekly Breakdown

Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs	Lab Hrs	FP/Alt Hrs
CBIO-SEM1							
Fundamentals of Data Science		CLSC 1100			0	0	3
Introduction to Omics		CLSC 1101			0	0	3
Computational Tools and Methods		CLSC 1102			0	0	3
Data Mining, Modelling, and Biostatistics		CLSC 1103			0	0	3
Knowledge Translation and Mobilization Strategies		COMM 1116			0	0	3
Ethics and Professional Development		MGMT 1108			0	0	3
Leadership and Project Management		MGMT 1109			0	0	4
					0	0	22
CBIO-SEM2							
Capstone Research Project		CBIO 1200	SPEC 0000		0	0	6
Field Placement		CBIO 1201	SPEC 0000		0	0	210
Biosequence Pattern Analysis		CLSC 1200	SPEC 0000		0	0	4
Bioinformatics and Precision Medicine		CLSC 1201	SPEC 0000		0	0	4
Data Analytics and Storytelling		CLSC 1202	SPEC 0000		0	0	3
					0	0	227

Emergency Services Fundamentals | Certificate

Program Information

Program Description

Emergency Services Fundamentals (EMSF) is a two-semester program unique to Durham College, which will provide you with the fundamental and essential skills required in many emergency service or health science careers. This pathway program will prepare you for further studies in a related field such as Paramedic; Pre-Service Firefighter Education and Training; Police Foundations; Protection, Security, and Investigation; 911 Emergency and Call Centre Communications; or Practical Nursing. The program concentrates on communications, mathematics, science, and other relevant topics that will prepare you for a post-secondary certificate or diploma program in your destination program. EMSF will also help familiarize you with college life, and the workload required for success.

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

- 1. Explain the impact of a changing society on personal, social, and cultural responsibility for first responders.
- 2. Apply computer skills and knowledge of information technology to support academic and career opportunities in emergency and allied services.
- 3. Apply basic mathematical calculations to perform emergency services functions.
- 4. Apply strategies to effectively communicate and collaborate as a first responder with colleagues, and allied service providers and users.
- 5. Develop strategies to identify personal, academic, career and professional development goals that support pathway opportunities in emergency and allied services.
- 6. Explain relevant legislation for first responders when working with colleagues, and allied service providers and users.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance

Employment Opportunities

As a graduate, you will be prepared to pursue further studies in other emergency service programs. Pathway options are illustrated in the linked chart.

Courses

Click Here for Course Outlines Access Portal

Semester 1 Core courses

- Mental Health for Emergency Responders (ADMH 1301)
- Communication Foundations (COMM 1100)
- APCO Public Safe Telecommunicator (EMCC 1100)
- Pre-Health Math I (MATH 1702)
- Diversity and Inclusion for First Responders (SOCI 1103)

Optional Courses

(Students choose two of the following)

- Pre-Health Biology I (BIOL 1700)
- Pre-Health Chemistry I (CHEM 1701)
- Canadian Criminal Justice System (LAWW 1108)
- Psychology (PSYC 1108)

Semester 2 Core Courses

- Computers for Health Care Professionals (COMP 1703)
- Professional Certifications (EMSF 1200)
- **Ethics (ETHC 1307)**
- Health and Fitness Preparation for Emergency Services (HLTH 1206)
- Introduction to Law and Civics (LAWC 1301)
- Leadership (LEAD 1400)

Optional Courses

(Students choose two of the following)

- > Pre-Health Biology II (BIOL 2700)
- > Pre-Health Chemistry II (CHEM 2701)
- Security Guard (LAWW 1110)

Program of Study

Program Of Study 2024-25

Faculty of Health Sciences

Emergency Services Fundamental (EMSF)

Weekly Breakdown

13-JUN-2024

amenta	II (EIVISE)			В	Breakdown		
Mod	Code	Prerequisites	Corequisites	Lec Hrs	Lab Hrs	FP/AI Hrs	
	ADMH 1301			3	0		
	COMM 1100			2	0	1	
	EMCC 1100			3	0		
	MATH 1702			4	0		
	SOCI 1103			3	0		
OPT1	BIOL 1700			0	2	2	
OPT2	CHEM 1701			0	1	3	
OPT3	LAWW 1108			3	0		
OPT4	PSYC 1108			3	0		
				21	3	6	
	COMP 1703			0	2	1	
	EMSF 1200			3	0		
	ETHC 1307			3	0		
	HLTH 1206			0	2	1	
	LAWC 1301			3	0		
	LEAD 1400			3	0		
OPT1	BIOL 2700	BIOL 1700		0	2	2	
OPT2	CHEM 2701	CHEM 1701		0	1	2	
OPT3	LAWW 1110			0	0	3	
	Mod OPT1 OPT2 OPT3 OPT4 OPT1 OPT2	COMM 1100 EMCC 1100 MATH 1702 SOCI 1103 OPT1 BIOL 1700 OPT2 CHEM 1701 OPT3 LAWW 1108 OPT4 PSYC 1108 COMP 1703 EMSF 1200 ETHC 1307 HLTH 1206 LAWC 1301 LEAD 1400 OPT1 BIOL 2700 OPT2 CHEM 2701	Mod Code Prerequisites ADMH 1301 COMM 1100 EMCC 1100 MATH 1702 SOCI 1103 OPT1 BIOL 1700 OPT2 CHEM 1701 OPT3 LAWW 1108 OPT4 PSYC 1108 COMP 1703 EMSF 1200 ETHC 1307 HLTH 1206 LAWC 1301 LEAD 1400 OPT1 BIOL 2700 BIOL 1700 OPT2 CHEM 2701 CHEM 1701	Mod Code Prerequisites Corequisites ADMH 1301 COMM 1100 EMCC 1100 MATH 1702 SOCI 1103 OPT1 BIOL 1700 OPT2 CHEM 1701 OPT3 LAWW 1108 OPT4 PSYC 1108 COMP 1703 EMSF 1200 ETHC 1307 HLTH 1206 LAWC 1301 LEAD 1400 OPT1 BIOL 2700 BIOL 1700 OPT2 CHEM 2701 CHEM 1701	Mod Code Prerequisites Corequisites Hrs	ADMH 1301 3 0	

Fitness and Health Promotion | Diploma

Fitness and Health Promotion Student Handbook

Program Information

Program Description

The Durham College Fitness and Health Promotion (FHP) program prepares students to plan, promote, and deliver a wide range of services including physical activity, exercise, active living, and lifestyle programs to enhance the health, fitness, and wellness of clients in diverse settings and facilities. Students will develop skills in areas such as the physiological responses to acute and chronic exercise, designing individual and group physical exercise programs, conducting fitness assessment procedures, developing and promoting programs and services, identifying and managing safety and injury issues, and providing leadership integral to the ethical management of fitness facilities.

This program is based in theory and layers in practical experience that will make textbook concepts come alive. Classroom lectures and learning activities prepare students for hands-on labs. Independent and collaborative projects prepare graduates to work with a variety of health-care professionals and wellness practitioners. To enable graduates to be successful when writing certification exams, students will develop core competencies in:

- Functional anatomy
- Exercise physiology
- Exercise assessment and prescription
- Entrepreneurial skills
- Behaviour modification
- Health Promotion
- Nutrition

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

Upon successful completion of the Fitness and Health Promotion program, the graduate will have reliably demonstrated the ability to:

- 1. Conduct an assessment of the physical fitness, activity level and lifestyle of the client using standardized protocols, to build an individualized exercise program.
- 2. Develop, implement and evaluate safe training programs grounded in fundamentals of anatomy, biomechanics, cardiorespiratory physiology, the muscoskeletal system and nutrition to support the fitness and wellness goals of clients.
- 3. Instruct individual clients and groups in the correct techniques for executing fitness and training programs to achieve results that meet their goals for fitness, active living, and wellness.
- 4. Select and apply interview tools and coaching strategies that will enable clients and groups to improve their fitness and wellness in sustainable ways.
- 5. Develop business plans for a fitness and/or training business organization to ensure sustainability and viability while mitigating risks.
- 6. Support community health promotion strategies for active healthy living in the general population.

- 7. Establish and maintain positive working relationships with clients, staff, allied health professionals, and volunteers in the delivery of programs, activities, and use of facilities.
- 8. Provide positive reinforcement to empower clients and help them sustain their efforts.
- 9. Develop plans and Implement strategies* for ongoing professional growth and development.
- 10. Communicate information persuasively and accurately in oral, written, and other media formats.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance

Employment Opportunities

Where you could work:

- Corporate wellness centres
- Hospitals and clinics
- Entrepreneurial opportunities
- Municipal and community recreation services
- Senior centres, long-term care facilities
- Specialized training studios
- Spas, resorts, cruise ships
- Sporting organizations

What you could be:

- Wellness coach
- Fitness facility supervisor
- Fitness and wellness writer
- Strength and conditioning coach
- Physical fitness coordinator
- Fitness class manager
- Health and wellness programmer
- Active aging coordinator
- Tactical health and wellness professional
- Personal trainer
- Youth activity programmer
- Bridge to Kinesiology degree

Courses

Click Here for Course Outlines Access Portal

Semester 1

- Functional Anatomy (BIOL 1100)
- Exercise Physiology 1 (BIOL 1302)
- Communications for Fitness and Health Promotion (COMM 1338)
- > FNMI Elective (FNMI 0000)
- Fitness Assessment 1 (HLTH 1100)
- Introduction to Wellness and Health Promotion (HLTH 1310)

Semester 2

- Exercise Physiology 2 (BIOL 2302)
- Professional Practice and Standards (EDUC 1200)
- Fitness Class Leadership (HLTH 1200)
- Fitness Assessment 2 (HLTH 1201)
- Exercise Prescription 1 (HLTH 1202)
- Nutrition (NUTR 1200)
- Research Techniques and Application (RSCH 1200)

Semester 3

- Business Practices (BUSI 2100)
- Field Placement Preparation (FDPL 2101)
- Injury Management (FITS 2302)
- General Education Elective (GNED 0000)

- Fitness Assessment 3 (HLTH 2100)
- Exercise Prescription 2 (HLTH 2102)
- ➤ Health Promotion and Behaviour Change (PSYC 3300)

Semester 4

- Exercise Physiology 3: Diverse Populations (BIOL 2201)
- Field Placement (FITP 2200)
- ➤ General Education Elective (GNED 0000)
- ➤ Health Promotion and Community Development (HLTH 2200)

Program of Study

Program Of Study 2024-25

Faculty of Health Sciences

Fitness and Health Promotion (FIT)

Weekly Breakdown

13-JUN-2024

		,			_	Dioditaonii	
Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs		FP/Alt Hrs
Γ-SEM1							
Functional Anatomy		BIOL 1100			3	0	
Exercise Physiology 1		BIOL 1302			3	0	
Communications for Fitness and Health Promotion		COMM 1338			3	0	
Fitness Assessment 1		HLTH 1100			1	3	
Introduction to Wellness and Health Promotion		HLTH 1310			3	0	
FNMI Elective	OPT1	FNMI 0000			3	0	
					16	3	
Γ-SEM2							
Exercise Physiology 2		BIOL 2302	BIOL 1100, BIOL 1302		3	0	
Professional Practice and Standards		EDUC 1200	COMM 1338		3	0	
Fitness Class Leadership		HLTH 1200	HLTH 1100		1	2	
Fitness Assessment 2		HLTH 1201	BIOL 1100, BIOL 1302, HLTH 1100		2	2	
Exercise Prescription 1		HLTH 1202	BIOL 1100, BIOL 1302, HLTH 1100		2	2	
Nutrition		NUTR 1200			3	0	
Research Techniques and Application		RSCH 1200	COMM 1338		2	0	1
					16	6	1

Program Of Study 2024-25 Fitness and Health Promotion (FIT)

Faculty of Health Sciences

13-JUN-2024

Weekly Breakdown

Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs	Lab Hrs	FP/Alt Hrs
FIT-SEM3							
Business Practices		BUSI 2100	EDUC 1200		3	0	
Field Placement Preparation		FDPL 2101	SPEC 0000		2	0	
Injury Management		FITS 2302	BIOL 1100, HLTH 1201, HLTH 1202		3	0	
General Elective Credit		GNED 0000			3	0	
Fitness Assessment 3		HLTH 2100	BIOL 2302, HLTH 1201		2	2	
Exercise Prescription 2		HLTH 2102	BIOL 2302, HLTH 1202		2	2	
Health Promotion and Behaviour Change		PSYC 3300	HLTH 1202, HLTH 1310		3	0	
					18	4	
FIT-SEM4							
Exercise Physiology 3: Diverse Populations		BIOL 2201	BIOL 2302, HLTH 2100, HLTH 2102, PSYC 3300		3	3	
Field Placement		FITP 2200	SPEC 0000		0	0	224
General Elective Credit		GNED 0000			3	0	
Health Promotion and Community Development		HLTH 2200	BUSI 2100, NUTR 1200, PSYC 3300		3	0	
					9	3	224

Paramedic - Advanced Care | Graduate Certificate

Paramedic - Advanced Care Student Handbook

Program Information

Program Description

Welcome to the Durham College Advanced Care Paramedic program. The curriculum of this program was developed around two main themes, clinical excellence, and professional leadership. The delivery of this program will take a team-based integrated approach that relies on the active and enthusiastic participation of both the faculty and you, the learner. In this manner, we will create graduates that:

- 1. Meet or exceed the requirements of both the National Occupational Profile for Paramedic (Advanced Care) and the Paramedic Program Standard for Ontario Colleges of Applied Arts and Technology.
- 2. Are accountable to the public and practice within accepted professional and ethical standards.
- 3. Are able to think critically and reflectively.
- 4. Demonstrate leadership in the field of paramedicine.
- 5. Are committed to lifelong learning.
- 6. Influence the advancement of the profession through excellence in practice, education and research.

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

Graduates will reliably demonstrate the ability to:

- 1. Interact professionally by adhering to provincial and federal legislation, and codes of conduct.
- 2. Collaborate with a broad range of health and emergency services professionals to deliver high quality patient-centered care.
- 3. Ensure optimal patient care by using effective communication, collaboration, and leadership strategies to direct an interdisciplinary team.
- 4. Provide reports in compliance with legislation, regulations, standards, policies, and procedures to maintain complete and accurate records of patient care/intervention/treatment.
- 5. Critically analyze patient assessment findings by using theory and practice, while complying with legislation, regulations, standards, best practices and policies and procedures to produce a provisional diagnosis.
- 6. Adapt paramedic intervention and provide safe and optimal care through a continuous evaluation of patient condition and anticipation of responsiveness to interventions.
- 7. Justify an intervention plan by adhering to Advanced Care Planning (ACP) Medical Directives, best practices, evidence-based medicine, and clinical findings.
- 8. Perform basic and advanced life support skills and controlled medical acts in accordance with established standards and Medical Directives.
- 9. Employ preventative and therapeutic interventions safely and in compliance with legislation, regulations, standards, policies, and procedures to promote optimal well-being of the patient.

- 10. Employ strategies for self-evaluation and improving proficiency in the practice of paramedicine.
- 11. Contribute to the local and global community by practicing social responsibility, economic awareness, and environmental stewardship, and engaging with others with cultural humility.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance

Employment Opportunities

Where you could work:

- Hospital emergency rooms
- Municipal paramedic services
- Private and event paramedic services
- Rural and remote paramedic services

What you could be:

Advanced care paramedic

Courses

Click Here for Course Outlines Access Portal

Semester 1

- Advanced Clinical Techniques (PARA 1100)
- Practicum 1 (PARA 1102)
- Advanced Patient Management (PARA 1101)
- Clinical Presentations (PATH 1100)
- Pharmacology (PHRM 1105)

Semester 2

- Practicum 2 (PADV 1200)
- Clinical (PARA 1200)
- Roles and Responsibilities (PARA 1201)
- Research Appraisal (RSCH 1202)

Semester 3

Practicum 3 (PADV 1300)

Program of Study

Program Of Study 2024-25

Faculty of Health Sciences

Paramedic - Advanced Care (PADV)

Weekly Breakdown

13-JUN-2024

	\ /			_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Course Name	Mod Code	Prerequisites	Corequisites	Lec Hrs		FP/Alt Hrs
ADV-SEM1						
Advanced Clinical Techniques	PARA 1100		PARA 1101, PARA 1102	1	0	2
Advanced Patient Management	PARA 1101		PARA 1102	3	0	1
Practicum 1	PARA 1102		PARA 1101	0	6	
Clinical Presentations	PATH 1100		PARA 1101, PARA 1102	1	0	2
Pharmacology	PHRM 1105		PARA 1101, PARA 1102	1	0	1
				-6	6	6
ADV-SEM2						
Practicum 2	PADV 1200	SPEC 0000	PARA 1200	0	0	85
Clinical	PARA 1200		PADV 1200	0	0	210
Roles and Responsibilities	PARA 1201		PADV 1200, PARA 1200	0	0	3
Research Appraisal	RSCH 1202	SPEC 0000		0	0	2
				0	0	300
ADV-SEM3 Practicum 3	PADV 1300	SPEC 0000		0	0	365
Fracticulii 3	PADV 1300	3FEC 0000				
				0	0	365

Pre-Health Sciences Pathway to Advanced Diplomas & Degrees | Certificate

Program Information

Program Description

The Pre-Health Sciences Pathway to Advanced Diplomas and Degrees (PHSU) program is designed to provide students with the core knowledge, skills and abilities fundamental to academic success in health sciences programs such as the collaborative Bachelor of Science in Nursing (BScN) program delivered by Durham College and the University of Ontario Institute of Technology (UOIT), as well as other science-related programs at the advanced diploma or degree level. This two-semester program is specifically designed for individuals who would like to develop their knowledge and skills in communications, mathematics, biology, physics, general and organic chemistry, and physics or critical thinking so they are well-prepared for the rigours of their next academic program.

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

The Pre-Health Sciences Pathway to Advanced Diplomas and Degrees provides the student with the opportunity to:

- 1. Examine biological concepts, processes and systems of the human body, including genetics and epigenetics, as well as the structure, function and properties of the molecules of life, cells, tissues and organ systems in relation to homeostasis, physical development and health.
- 2. Examine concepts, processes and systems of chemistry, including atomic and molecular structure; quantities in chemical reactions; solutions and solubility; acids and bases; as well as organic chemistry and biochemistry in relation to health and the human body.
- 3. Solve numeric problems and interpret data related to health sciences and other sciencerelated fields using mathematical concepts, including algebra and probability, along with descriptive and inferential statistics.
- 4. Use health sciences and other science-related language and terminology appropriately to communicate clearly, concisely, and correctly in written, spoken, and visual forms.
- 5. Prepare a personal strategy and plan for academic, career and professional development in the health sciences or other science-related fields.
- 6. Investigate health sciences and science-related questions, problems and evidence using the scientific method.
- 7. Physics (Optional): Examine fundamental physics laws and concepts and their application to health sciences and other science-related fields.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance

Employment Opportunities

The program provides students with the opportunity to learn about potential careers in the health sciences and identify other programs focusing on the biological or chemical sciences that will enable them to achieve their career objectives.

Courses

Click Here for Course Outlines Access Portal

Semester 1

- Pre-Health Biology I (BIOL 1700)
- Pre-Health Chemistry I (CHEM 1701)
- Academic Communication Essentials (COMM 1715)
- Computers For Health Care Professionals (COMP 1703)
- Pre-Health Math I (MATH 1702)
- Preparing For Academic Success (PREP 1300)

Semester 2

- Pre-Health Biology II Advanced (BIOL 2703)
- Pre-Health Chem II Advanced (CHEM 2703)
- Academic Writing For Success Strategies (COMM 2715)
- Pre-Health Statistics (MATH 2705)
- Option 1: Critical Thinking Skills (CRIT 1700)
- Option 2: Pre-Health Physics (PHYS 1700)

Program of Study

Program Of Study 2024-25

Faculty of Health Sciences

Weekly Breakdown

13-JUN-2024

Pre-Health Science - Univ (PHSU)

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs		FP/Alt Hrs
HSU-SEM1							
Pre-Health Biology I		BIOL 1700			0	2	2
Pre-Health Chemistry I		CHEM 1701			0	1	3
ACADEMIC COMMUNICATION ESSENTIALS		COMM 1715			3	0	
COMPUTERS FOR HEALTH CARE PROFESSIONALS		COMP 1703			0	2	1
Pre-Health Math I		MATH 1702			4	0	
PREPARING FOR ACADEMIC SUCCESS		PREP 1300			2	0	1
					9	5	7
HSU-SEM2							
PRE-HEALTH BIOLOGY II ADVANCED		BIOL 2703	BIOL 1700		0	2	2
PRE-HEALTH CHEM II ADVANCED		CHEM 2703	CHEM 1701		0	1	3
ACADEMIC WRITING FOR SUCCESS STRATEGIES		COMM 2715	COMM 1100		2	0	1
PRE-HEALTH STATISTICS		MATH 2705	MATH 1702		4	0	
CRITICAL THINKING SKILLS	OPT1	CRIT 1700			2	0	1
PRE-HEALTH PHYSICS	OPT2	PHYS 1700			2	0	1
					10	3	8

Pre-Health Sciences Pathway to Certificates & Diplomas | Certificate

Program Information

Program Description

The Pre-Health Sciences Pathway to Certificates and Diplomas (PHSC) program is designed for individuals interested in pursuing a health sciences career. This two- semester program provides the foundation necessary for success in a college health sciences program such as Paramedic, Practical Nursing, Dental Assistant, Dental Hygiene, Occupational Therapist Assistant and Physiotherapist Assistant. It is also designed for individuals who would like to strengthen their communication, mathematics, biology, chemistry and critical thinking or physics skills as well as familiarize themselves with college life and college workload.

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

The Pre-Health Sciences Pathway to Certificates and Diplomas provides the student with the opportunity to:

- 1. Examine fundamental biological concepts, processes and systems of the human body, including the structure, function and properties of the molecules of life, cells, tissues and organ systems in relation to homeostasis and health.
- 2. Examine fundamental concepts, processes and systems of chemistry, including matter and chemical bonding; quantities in chemical reactions; solutions and solubility; acids and bases; as well as nomenclature, structure and properties of organic compounds in relation to health and the human body.
- 3. Solve basic numeric problems and interpret data related to health sciences and other science-related fields using mathematical concepts, including algebra, basic probability and descriptive statistics.
- 4. Use health sciences and other science-related language and terminology appropriately to communicate clearly, concisely, and correctly in written, spoken, and visual forms.
- 5. Prepare a personal strategy and plan for academic, career and professional development in the health sciences or other science-related fields.
- 6. Investigate health sciences and science-related questions, problems and evidence using the scientific method.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance

Employment Opportunities

The program provides students with the opportunity to learn about potential careers in the health sciences while earning postsecondary credits that could be transferred to other health sciences or science-related programs.

Courses

Click Here for Course Outlines Access Portal

Semester 1

- Pre-Health Biology I (BIOL 1700)
- Pre-Health Chemistry I (CHEM 1701)
- Academic Communication Essentials (COMM 1715)
- Computers For Health Care Professionals (COMP 1703)
- Pre-Health Math I (MATH 1702)
- Preparing For Academic Success (PREP 1300)

Semester 2

- Pre-Health Biology II (BIOL 2700)
- Pre-Health Chemistry II (CHEM 2701)
- Academic Writing For Success Strategies (COMM 2715)
- Pre-Health Math II (MATH 2702)
- Option 1: Critical Thinking Skills (CRIT 1700)
- Option 2: Pre-Health Physics (PHYS 1700)

Program of Study

Program Of Study 2024-25

Faculty of Health Sciences

Pre-Health Science - College (PHSC)

Weekly Breakdown

13-JUN-2024

	- (,			_		
Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs		FP/AI Hrs
SC-SEM1							
Pre-Health Biology I		BIOL 1700			0	2	2
Pre-Health Chemistry I		CHEM 1701			0	1	3
ACADEMIC COMMUNICATION ESSENTIALS		COMM 1715			3	0	
COMPUTERS FOR HEALTH CARE PROFESSIONALS		COMP 1703			0	2	1
Pre-Health Math I		MATH 1702			4	0	
PREPARING FOR ACADEMIC SUCCESS		PREP 1300			2	0	1
					9	5	7
HSC-SEM2							
Pre-Health Biology II		BIOL 2700	BIOL 1700		0	2	2
Pre-Health Chemistry II		CHEM 2701	CHEM 1701		0	1	2
ACADEMIC WRITING FOR SUCCESS STRATEGIES		COMM 2715	COMM 1100		2	0	1
PRE-HEALTH MATH II		MATH 2702	MATH 1702		2	0	2
CRITICAL THINKING SKILLS	OPT1	CRIT 1700			2	0	1
PRE-HEALTH PHYSICS	OPT2	PHYS 1700			2	0	1
					- 8	3	9

Primary Care Paramedic | Diploma

Primary Care Student Handbook

Program Information

Program Description

Welcome to the Durham College Paramedic program. The curriculum of this program was developed around two main themes, clinical excellence and professional leadership. The delivery of this program will take a team-based integrated approach that relies on the active and enthusiastic participation of both the faculty and you, the learner. In this manner, we will create graduates that:

- Meet or exceed the requirements of both the National Occupational Profile for Paramedic (Primary Care) and the Paramedic Program Standard for Ontario Colleges of Applied Arts and Technology.
- 2. Are accountable to the public and practice within accepted professional and ethical standards.
- 3. Are able to think critically and reflectively.
- 4. Demonstrate leadership in the field of paramedicine.
- 5. Are committed to lifelong learning.
- 6. Influence the advancement of the profession through excellence in practice, education and research.

Program Learning Outcomes (Synopsis of the Vocational Learning Outcomes)

- 1. Communicate and interact effectively and appropriately with patients and others.
- 2. Assess patients using relevant theory and practices and in compliance with current legislation, regulations, standards, and best practice guidelines.
- 3. Establish patients' treatment and transport priorities based on assessment findings.
- 4. Implement preventive and therapeutic patient management strategies to maintain and promote patients' well-being in compliance with current legislation, regulations, standards, and best practice guidelines.
- 5. Integrate and perform delegated controlled medical acts in a simulated, clinical, and field setting.
- 6. Evaluate in an ongoing manner the effectiveness of patient management strategies used and adapt or change strategies to provide optimal care for patients.
- 7. Report and document patient information completely, accurately, and in a timely manner, in compliance with current legislation, regulations, standards, and applicable policies and procedures in a simulated, clinical, and/or field setting.
- 8. Ensure personal safety and contribute to the safety of partners, patients, and others.
- 9. Ensure the operational safety and preparedness of an ambulance and its equipment and operate an ambulance-type vehicle in a simulated setting.
- 10. Collaborate with a broad range of personnel such as first responders, paramedics, emergency services personnel, health care professionals, and other allied health care workers.
- 11. Integrate and meet legal, ethical, and professional responsibilities while providing optimal care for patients.

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance

Employment Opportunities

Where you could work:

- Municipal, regional or provincial emergency medical services
- Armed forces
- Hospitals and public health organizations
- Patient transfer service

What you could be:

- Medical attendant
- Military medical technician
- Paramedic
- Primary care paramedic

Courses

Click Here for Course Outlines Access Portal

Semester 1

- Paramedic Anatomy/Physiology (ANTY 1401)
- Paramedic Clinical 1 (CLIN 1400)
- Leadership (LEAD 1400)
- Paramedic Theory 1 (THEO 1401)
- Paramedic Theory Lab-1 (THEO 1402)
- Paramedic Fitness and Wellness (FITS 1401)
- > FNMI Elective (FNMI 0000)
- General Education Elective (GNED 0000)

Semester 2

- Paramedic Anatomy/Physiology 2 (ANTY 2400)
- Paramedic Clinical 2 (CLIN 2400)
- Paramedic Fitness and Wellness 2 (FITS 2401)
- General Education Elective (GNED 0000)
- Paramedic Medical Mathematics (MATH 2400)
- Paramedic Medical Legal Issues (MED 2400)
- Paramedic Theory 2 (THEO 2400)
- Paramedic Theory Lab 2 (THEO 2401)

Semester 3

- Paramedic Anatomy/Physiology 3 (ANTY 3400)
- Paramedic Crisis Mgmt (EMEG 3401)
- Paramedic Practicum I (PRAT 3400)
- Paramedic Theory 3 (THEO 3400)
- Paramedic Theory Lab 3 (THEO 3401)

Semester 4

- Paramedic Ethical Issues (ETH 4400)
- Paramedic Practicum II (PRAT 4400)
- Paramedic Theory 4 (THEO 4400)
- Paramedic Lab Theory 4 (THEO 4401)

Program of Study

Program Of Study 2024-25 Paramedic (PPC)

Faculty of Health Sciences

13-JUN-2024

Weekly Breakdown

Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs	Lab Hrs	FP/A Hrs
C-SEM1							
PARAMEDIC ANATOMY/PHYSIOLOGY		ANTY 1401			3	3	
PARAMEDIC CLINICAL 1		CLIN 1400		THEO 1401, THEO 1402	0	0	15
PARAMEDIC FITNESS AND WELLNESS		FITS 1401			1	2	
General Elective Credit		GNED 0000			3	0	
LEADERSHIP		LEAD 1400			3	0	
PARAMEDIC THEOR 1		THEO 1401		THEO 1402	6	0	
PARAMEDIC THEORY LAB-1		THEO 1402		THEO 1401	0	6	
FNMI Elective	OPT1	FNMI 0000			3	0	
					19	11	15
PC-SEM2							
PARAMEDIC ANATOMY/PHYSIOLOGY 2		ANTY 2400	ANTY 1401	THEO 2400, THEO 2401	6	0	
PARAMEDIC CLINICAL 2		CLIN 2400	CLIN 1400	THEO 2400, THEO 2401	0	0	15
PARAMEDIC FITNESS AND WELLNESS 2		FITS 2401	FITS 1401	THEO 2400, THEO 2401	1	2	
General Elective Credit		GNED 0000			3	0	
PARAMEDIC MEDICAL MATHEMATICS		MATH 2400		THEO 2400, THEO 2401	2	0	1
PARAMEDIC MEDICAL LEGAL ISSUES		MED 2400		THEO 2400, THEO 2401	2	0	
Paramedic Theory 2		THEO 2400	ANTY 1401, CLIN 1400, FITS 1401, LEAD 1400, THEO 1401, THEO 1402	THEO 2401	6	0	
PARAMEDIC THEORY LAB - 2		THEO 2401	ANTY 1401, CLIN 1400, FITS 1401, LEAD 1400, THEO 1401, THEO 1402	THEO 2400	0	6	
					20	8	16

Program Of Study 2024-25 Paramedic (PPC)

Faculty of Health Sciences

13-JUN-2024

Weekly Breakdown

Course Name	Mod	Code	Prerequisites	Corequisites	Lec Hrs		FP/Alt Hrs
PPC-SEM3							
PARAMEDIC ANATOMY/PHYSIOLOGY		ANTY 3400	ANTY 2400	THEO 3400, THEO 3401	4	0	2
PARAMEDIC CRISIS MGMT		EMEG 3401		THEO 3400, THEO 3401	3	0	
PARAMEDIC PRACTICUM I		PRAT 3400	SPEC 0000	THEO 3400, THEO 3401	0	0	210
Paramedic Theory 3		THEO 3400	SPEC 0000	PRAT 3400, THEO 3401	6	0	
PARAMEDIC THEORY LAB - 3		THEO 3401	SPEC 0000	PRAT 3400, THEO 3400	0	6	
					13	6	212
PPC-SEM4							
PARAMEDIC ETHICAL ISSUES		ETH 4400		PRAT 4400	0	0	3
PARAMEDIC PRACTICUM II		PRAT 4400	PRAT 3400	THEO 4400, THEO 4401	0	0	255
PARAMEDIC THEORY 4		THEO 4400	SPEC 0000	PRAT 4400, THEO 4401	0	0	3
PARAMEDIC LAB THEORY - 4		THEO 4401	SPEC 0000	PRAT 4400, THEO 4400	0	6	
					0	6	261

Additional Important Information

DC Mission, Vision and Values

Used to guide the overall direction of the college, the Strategic Plan outlines DC's mission, vision and values and is based on our four pillars – our students, our people, our work and our community. It is by working together, focusing on these guiding principles, that we are able to deliver quality teaching and learning opportunities that support the success of our students and faculty. Together we're leading the way. The college's strategic plan is available on the college's website.

Academic Advising – Student Advisors

Student advisors are committed to student success and are available to help guide you through your college experience.

They can help you to:

- Identify career goals and make sound academic decisions.
- Develop academic plans to promote success in the event of failed courses or low-grade point average (GPA).
- Make decisions regarding full-time/part-time studies.
- Review graduation requirements.
- Set-up academic plans.
- Find equivalent credits.
- Transfer to another program or pathways to further education; and
- Access other college services to support student success.

To view contact information for your student advisor, visit the **Student Advisor website**.

Academic Integrity

Academic integrity in teaching, learning and research is fundamental to our mission and an expectation of the DC community. Acts that undermine academic integrity contradict our core values, erode educational inquiry and diminish the quality of our scholarship and reputation.

To ensure the highest academic standards, students are accountable for the work they produce, and student work must be the product of their efforts. The <u>Academic Integrity Policy and Procedure</u> provides a comprehensive explanation of DC's expectations regarding academic integrity.

Student Supports

DC offers students a variety of services to help you achieve academic success. From accessibility accommodations, financial aid, health services and wellness coaching to student life, recreation and career development, our knowledgeable staff provide holistic supports to help students reach their greatest potential.

Please visit the Student Services page for more information on each of the student service areas.

Access and Support Centre (ASC)

The Access and Support Centre (ASC) provides services to students who are temporarily at-risk or identified with an exceptionality, to ensure equal access to all aspects of the academic environment. The ASC provides accommodations to meet students' individual needs through assistive technology, counseling and coaching.

The ASC team works in collaboration with faculty and other service areas to provide full opportunities for academic success for all students.

For more information on services available, please visit the ASC website.

Coaching

Wellness coaches will meet with you individually to assist with developing a success plan, explore ways to reduce your stress and support your overall mental health and wellness while at college. Wellness coaches provide a safe, confidential space to explore what is blocking you from being your best possible self. During times when you are feeling overwhelmed or need someone to talk to, the wellness coaches will be there for you. For more information on coaching, please visit the Coaching webpage.

Important Dates

DC strives to keep you informed of important dates throughout the academic year. Please review the 2024-2025 important dates that include fee payment deadlines, web registration, add/drop and grade release dates etc. You can find this information on the <u>Durham College website</u> and on <u>MyDC</u>. Please review <u>MyDC</u>. regularly for updates and reminders on important dates.

Academic Grading and Progression

Please refer to the ACAD 112 – <u>Academic Grading Policy and Procedure</u> documents for a complete overview of grading practices and ACAD 127 – <u>Academic Progression Policy and Procedure</u> to clearly understand the requirements necessary for a student to progress through an academic program.

Student Academic Learning Services (SALS)

SALS helps DC students to achieve their academic goals through free services and resources, including subject specific support (math, accounting, biology, chemistry, physics and statistics), academic reading and writing, learning strategies, and assistance with English language proficiency. Students also have access to peer tutoring, online resources located through the MyDC landing page (under "Learning Resources"), and SALS ONLINE academic resources, videos, and guizzes in DC Connect.

Please email <u>SALS</u>, or visit the <u>SALS website</u>, for information on accessing resources and services, scheduling an appointment, registering for workshops, or signing- up to request or be a peer tutor.