

# Medical Educational Center



## 2019 CATALOG

**Contents are subject to change**

Phone: 847-813-6088

Main Office:  
1245 N. Milwaukee Ave., Ste. 100  
Glenview, IL 60025  
[www.mededucenter.us](http://www.mededucenter.us)

*Certificate of Approval to Operate by the Illinois Board of Higher Education  
1 N. Old State Capitol Plaza, Suite 333, Springfield, Illinois 62701-1377  
MEC is not accredited by a US Department of Education recognized accrediting body.*

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## Academic Year 2019

MEC will observe the following holidays\*:

EASTER	April 22, 2019
MEMORIAL DAY WEEKEND	May 27, 2019
INDEPENDENCE DAY	July 4, 2019
LABOR DAY	September 2, 2019
THANKSGIVING BREAK	November 28-29, 2019
CHRISTMAS BREAK	December 23, 2019 – January 1, 2020

\*If a holiday falls on a Friday or Saturday, we will observe a long weekend and will not have classes on Friday, Saturday and Sunday. If a holiday falls on a Monday, we will not have classes on Saturday, Sunday and Monday.

### CLASS SCHEDULE

Topics of Study	Lecture hours (per week)	Lab hours (per week)
Ultrasound Physics & Instrumentation	8	4
Anatomy, Physiology & General Pathology	8	4
Abdominal Ultrasound	8	4
Small Parts Ultrasound	8	4
OB/GYN Ultrasound	8	4
Vascular Ultrasound	8	4
Ultrasound of Soft Tissue	8	4
Ultrasound Guided Procedures	8	4
Preparation of Preliminary Reports	8	4

## **Administration**

Svetlana Dizik	President, Educational Director
Lyudmyla Lyubetska	Vice President
Aneta Szewc	Student Advisor
Roman Liufa	Faculty

## **About us**

Medical (MEC) was founded with the intent of filling the rising demand for Diagnostic Medical Ultrasound Sonographers (DSMs), to produce effective health care providers by training professional, competent sonographic technicians. This is based on the school's philosophy that potential health care providers of diagnostic medical sonography require thorough training from instructors who possess a comprehensive body of knowledge and provide extensive opportunities for advanced clinical experiences using modern equipment. MEC encourages students to strive for excellence in providing quality of care to patients.

Our staff is passionate and professional, and aspires to transfer its passion and enthusiasm to those training as to become a DMS. Our classes are kept small to ensure that each student receives the individualized attention and instruction required of a competent DMS. With a location just north of the city of Chicago, we are easily accessible and an excellent resource for planning to join this quickly growing field.

## **School History**

MEC began operations in 2007 as a program within International Educational Center. The school was founded by Lucy Lyubetska and Svetlana Dizik, eager professionals who aspired to transfer dreams into reality. In 2011, the school was officially separated from International Educational Center, and now stands alone as a single program dedicated to the field of Diagnostic Medical Sonography. The school has proven to offer a highly effective and competitive program, with 1/3 of all course schedules dedicated to clinical practice.

## **Instructors**

Our group of talented instructors goes through a rigorous evaluation and interview process before joining our educational family. Every instructor must possess a post-collegiate degree as well as at least 5 years of professional, clinical experience in ultrasound practice. Before students enroll, his or her ultimate professional goals are taken into consideration. Advisors, administrators, and instructors alike provide exceptional guidance and possibilities for attaining those goals. At the same time, our experienced instructors have already had years of experience and understand the challenges associated with the field and obtaining a position therein.

## **Mission Statement**

The mission of the Medical Educational Center (MEC) is to provide innovative sonographic career training based on current technology and best practices, within a supportive and collaborative environment.

## **Philosophy**

The goal of the school is to produce effective health care providers by training professional, competent sonographic technicians. This is based on the school's philosophy that potential health care providers of diagnostic medical sonography require thorough training from instructors who possess a comprehensive body of knowledge and provide extensive opportunities for advanced clinical experiences using modern equipment. MEC encourages students to strive for excellence in providing quality of care to patients.

## ADMISSION

To be admitted to MEC's Sonography program, applicants must:

1. Be at least 18 years of age
2. Have a high school diploma or its equivalent (GED). Applicants with diplomas from outside the US must provide a certified, translated version.
3. Display command of the English language

In addition, students must satisfy one of the following:

- ✿ Interview and obtain a favorable recommendation from the program director, or director of education
- ✿ (or) be a graduate of a two year Allied Health education program that is patient care related (Allied Health occupations include, but are not limited to, Diagnostic Medical Sonographer, Radiologic Technologist, Respiratory Therapist, Registered Nurse and Surgical Technologist);
- ✿ (or) foreign graduates with a minimum of an Associate Degree or equivalent in a medical field or a Bachelor Degree in any other field (all transcripts and documents must be in English and evaluated by a foreign education transcript evaluation organization);
- ✿ (or) an Associate Degree or equivalent from an accredited college

## REGISTRATION, TUITION & FEES

- ✿ Pay a registration fee of \$25
- ✿ Choose a payment plan option:
  - Pay the annual tuition fee of \$4,200.00 in full
  - Pay 12 installments of \$350.00 each (per month). A late fee of \$5 per day will be charged when payments are more than 5 days late. For example, if your payment day is on the first day of each month and you have not paid by the fifth day of that month, beginning on the sixth day you will be charged a late fee of \$5 per day).
  - Pay 7 installments of \$600.00 each (per month). Late fees, as described above, will apply.
  - Other monthly payment options may be arranged. Please see a student advisor.

\*Textbooks will be distributed to students before each class.

## PLACEMENT

All new students will be placed into the next available program start date.

### **Academic Expectations**

As a student at MEC you are required to:

- ✿ Engage actively in the learning process
- ✿ Ensure that you are familiar with, understand and pursue the requirements of your course
- ✿ Complete assigned tasks diligently and honestly and produce evidence of learning achievement
- ✿ Take achievement tests at during the study of each topic
- ✿ Submit all assignments by the due dates
- ✿ Raise any concerns you have regarding your grades as early as possible and discuss them with your teacher (Academic Advisor) or the Educational Director
- ✿ Consult with the Educational Director as early as possible if some circumstances are affecting your participation or performance on assessments
- ✿ Demonstrate satisfactory proficiency:  
*Proficiency* means the degree to which you meet the stated Student Learning Outcomes of each topic of study. Even if you excel in attitude, effort, motivation, performance and participation in a given course, your proficiency needs to meet the expectations required of the next level.
- ✿ Maintain a cumulative grade point average above 60%

### **Attendance**

- ✿ Students must attend class according to the assigned academic schedule
- ✿ Students will qualify for receipt of certification only when a passing grade has been achieved for the entire program of study.

### **Lack of Progress**

If a student **does not** have a passing grade of 60% or higher he/she must:

- ✿ Meet with the instructor (Academic Advisor) to discuss strategies of improvement
- ✿ Re-take the program/final exam at the next available opportunity

### **Academic Probation**

Students will be placed on academic probation, which may lead to dismissal from MEC, when they:

- ✿ show a consistent lack of progress
- ✿ fail to pass an exam after two attempts
- ✿ have disruptive behavior



Students who are placed on academic probation are informed of their status in writing. They must show progress during each subsequent month and comply with all of the MEC Academic and Social Rules of Conduct, as described in the Student Handbook, in order to continue as an MEC student.

## Appeal

Students may appeal their dismissal by writing to the Educational Director. The appeal must include an explanation of:

- 1) Why he/she could not make satisfactory progress in the past
- 2) Why he/she will now be able to do so if given the opportunity

The Educational Director will provide a written reply to the Appeal within 7 business days. If the appeal is granted, and if the student has otherwise maintained status, the student may be reinstated.

## Exams

Except in rare circumstances, students cannot take exams earlier or later than the date/time scheduled. Students who have a compelling reason to be absent during the designated exam date may request permission from MEC administration to take the exam on an alternate date. To request permission for an alternate exam date,

- ✿ students must complete and submit a form entitled, **Exam date Change Request**, available upon request in the MEC office
- ✿ pay a **late Exam Fee of \$25**
- ✿ the Educational Director will inform the student of the decision in writing within 2 business days

Students who receive permission from the Educational Director for an alternate exam date will receive a temporary grade of "Incomplete" for the class. These students must then take their missed exam(s) on the date scheduled by the Administration. The student's exam will then be scored, the Incomplete removed, and a new grade calculated. If the student is absent on the rescheduled date, for any reason, the original grade will be applied.

## Student Progress

Your Instructor/Academic Advisor is going to:

- ✿ inform you and make it clear what is required to progress
- ✿ provide you with test and quiz results as well as inform you of how the results were calculated
- ✿ distribute your Permanent Student Record, showing your current grades, 10-14 days after each exam
- ✿ schedule a conference with you and provide guidance if you fail to maintain an overall grade percentage average of 70%
- ✿ provide your certificate of successful completion of the program if all classes are passed

**Tuition and Fees:**

Students are required to pay tuition for at least once month at a time:

\$ 4,200.00 can be paid in 12 or fewer payments

Registration Fee: \$25

Textbooks: the price of course textbooks is included in the cost of tuition

**Text Books**

Students must pick up textbooks in the main office, at the start of each new topic of study. Students who do not bring their textbooks with them by the 3<sup>rd</sup> day of their classes will not be allowed to return to the class until they have the textbooks.

**Methods of Payment:**

The school accepts all major methods of payment: cash, personal check, cashier's check, credit or debit card.

**Student ID cards**

All students can purchase an MEC photo identification card which is created and printed out by our office staff. The student ID card includes the following information: first name, last name, date of birth, student's ID #, and an expiration date. The fee for this service is \$25.00.

## Certification Requirements

MEC certifies students who have completed our program by passing all nine topics of study with a grade of D or above. Students are evaluated according to the achievement standards outlined below:

### Proficiency Scale

<b>Grade</b>	<b>Percent achieved</b>	<b>Scale</b>	<b>Proficiency Level</b>
<b>A</b>	<b>90 - 100</b>	<b>4.0</b>	<b>Excellent</b>
<b>B</b>	<b>80 - 89</b>	<b>3.0</b>	<b>Very Good</b>
<b>C</b>	<b>70 - 79</b>	<b>2.0</b>	<b>Satisfactory</b>
<b>D</b>	<b>60 - 69</b>	<b>1.0</b>	<b>Passing grade, minimal understanding, may repeat</b>
<b>F</b>	<b>59 or below</b>	<b>0.0</b>	<b>Failure, must repeat or be dismissed</b>

Other "grades" possible: UW – unauthorized Withdrawal, AW – Authorized Withdrawal, I – Incomplete

A grade F in any single topic of study may prevent students from receiving a certificate of completion. Certificate of completion will be issued upon satisfactory completion of the program and full payment of tuition.

### Placement Assistance Services

MEC does not provide employment Placement Assistance Services. During the course of study students will be prepared for specific tests related to the course of study which may be beneficial to entering the job market. MEC will provide students with resume assistance and preparation for a professional interview, free of charge, upon request. Students who intend to take a licensing exam such as the ARDMS will need to complete additional clinical hours.

## **Complaint Policy**

A student has the right to express a complaint at any time and address it to the instructor orally. If the complaints are not satisfied or measures have not been taken by the instructor to rectify the cause of the complaint, the student has the right to submit a written complaint to the attention of the Educational Director within 5 days after the original complaint was made.

MEC's Educational Director will resolve student complaints promptly and fairly and will not subject the student to any punitive action because the student has filed a written grievance with the school and the Director.

MEC makes available to students, the opportunity to record any complaints. These are stored within the student's file, registered by the office worker and resolved. A description of the agreed upon resolution is also placed in the student's folder.

Student files are maintained at the school's location Glenview, and are accessible to authorized personnel only.

Any student or employee of a school approved by this Act who believes he has been aggrieved by a violation of this Act shall have the right to file a written complaint within one year of the alleged violation. The Educational Director will acknowledge within 20 days receipt of such written complaint. The Educational Director will issue a written finding as to whether there is good cause to initiate disciplinary proceedings in accordance with the provisions of this Act. The Educational Director will furnish such findings to the person who filed the complaint and to the chief operating officer of the school cited in the complaint.

Complaints against the school may be registered with the Illinois Board of Higher Education, 1 N. Old State Capitol Plaza, Suite 333, Springfield, Illinois 62701-1377. Phone 217-782-2551

<http://complaints.ibhe.org>

## **Suggestion Boxes**

MEC makes available to students, the opportunity to make anonymous complaints, comments, and/or suggestions. Suggestion Boxes are available in the Main Offices at both of the campuses of MEC. Ready-made "Suggestions slips" are nearby.

The administration retrieves any such comments from the boxes on the first day of each month. All suggestions are read and considered. Those which are found to be worthy of consideration are brought to discussion at the appropriate meeting of teachers, staff, and/or administration.

## **Facilities and Equipment**

MEC is located at 1245 N. Milwaukee Ave., Suite 100, Glenview, IL 60025.

There is ample free parking. The facility is well lit, has air-conditioned classrooms and a break area with snacks and drinks available. Classrooms are equipped with Pentium PCs and appropriate sonographic equipment. There is ample computer software to meet the requirements of the curriculum. In addition to scheduled classes students can use computers any time and are provided instructor assistants.

## **Equipment Requirements**

MEC has no minimum equipment requirements that students must supply for participation in any course of instruction.

### **Transcripts**

A student wishing to obtain a transcript must send a written request to:

**Medical Educational Center**  
**1245 N. Milwaukee Ave., Suite 100**  
**Glenview, IL 60025**  
**Attn: Educational Director**

### **Withdrawal from Courses, Dismissal, and Canceled Class**

MEC allows student withdrawal from the program at any time, subject to the requirements and fees described herein). Students must submit a formal written request and present it to the Educational Director. Simply ceasing to attend classes or notifying the course instructor does not constitute an authorized withdrawal.

MEC reserves the rights to dismiss any students whose conduct or attendance does not meet MEC's requirements or the Student Code of Conduct (See Student Handbook). Students will be dismissed if he/she has been involved in conduct disruptive to the education process, to school property, or if he/she has not made tuition payments as agreed. The dismissal procedure is implemented after the second notice from the course instructor or Educational Director, and includes the following procedural steps:

- ✿ An Exit interview will be conducted by the Educational Director;
- ✿ A revised tuition charge or refund based on the student's last date of attendance (excluding the application-registration fee) is calculated according to the schedule noted in the Refund Policy below.

### **Buyer's Right to Cancel**

A student has the right to cancel the initial agreement until midnight of the fifth business day after the student has been admitted. If the right to cancel is not given to any prospective student at the time the agreement is signed, then the student has the right to cancel the agreement at any time and receive a refund on all monies paid to date with 10 days of cancellation. Cancellation should be submitted to the authorized official of the school in writing.

## Refund Policies

Withdrawing from school may have academic consequences. You are encouraged to understand the consequences before you decide to withdraw. Detailed information about the cancellation of registration and withdrawal from the school is available in your student handbook. When a student provides a written notice of cancellation to an advisor at the Main Office, Medical Educational Center will provide a refund in the amount equal to the least the following:

- a) When notice of cancellation is given before midnight of the fifth business day after the date of enrollment but prior to the first day of class, all application- registration fees, tuition, and any other charges will be refunded to the student.
- b) When notice of cancellation is given after midnight of the fifth business day following acceptance but prior to the close of business on the student's first day of class attendance , the school may retain no more than the Registration Fee, which may not exceed \$150.
- c) When notice of cancellation is given after the student's completion of the first day of class attendance, but prior to the student's completion of 5% of the course of instruction, the school will retain the application-registration fee, an amount not to exceed 10% of the tuition and other instructional charges, or \$300, whichever is less. The school will refund any textbook and materials fees when such materials are returned to the school unmarked and the student has provided the school with a notice of cancellation.
- d) When a student has completed in excess of 5% of the course of instruction the school will retain the application- registration fee but shall refund a part of the tuition (described herein) and other instructional charges.
- e) The school may retain an amount computed prorata by number of days in attendance plus 10% of tuition and other instructional charges up to completion of 60% of the course of instruction. When the student has completed in excess of 60% of the course of instruction, the school may retain the application/registration fee and the entire tuition and other charges.
- f) A student, who on personal initiative and without solicitation, enrolls, starts, and completes a course of instruction before midnight of the fifth business day after the enrollment agreement is signed, is not subject to the cancellation provisions of this Section.
- g) Application-registration fees will be chargeable at initial enrollment and shall not exceed \$150 or 50% of the cost of tuition, whichever is less.
- h) Deposits or down payments will become part of the tuition.
- i) The school will mail a written acknowledgement of a student's cancellation or written withdrawal to the student within 15 calendar days of the postmark date of notification. Such written acknowledgement is not necessary if a refund has been mailed to the student within the 15 calendar days.
- j) All student refunds shall be made by the school within 30 calendar days from the date of receipt of the student's cancellation.
- k) A student may give notice of cancellation to the school in writing. The unexplained absence of a student from school for more than 15 class days shall constitute constructive notice of cancellation to the school. For purposes of cancellation the date shall be the last day of attendance.
- l) The school will refund all monies paid to it in any of the following circumstances: the school did not provide the prospective student with a copy of the student's valid enrollment agreement and a current catalog or bulletin; the school cancels or discontinues the course of instruction in which the student has enrolled; the school fails to conduct classes on days or times scheduled, detrimentally affecting the student.

- m) Applicants not accepted by the school will receive a refund of all tuition and fees paid within 30 calendar days after the determination of non-acceptance is made.

**Refund policy for Students receiving GI Bill benefits**

All tuition is subject to the following pro-rata refund policy and will be paid no later than 40 days from date of cancellation:

<b>Percentage of days in class completed</b>	<b>Percentage of tuition and instructional charges that school may retain</b>
<b>At notice of cancellation</b>	
In excess to 5% to 10%	15%
In excess to 10% to 15%	20%
In excess to 15% to 20%	25%
In excess to 20% to 25%	30%
In excess to 25% to 30%	35%
In excess to 30% to 35%	40%
In excess to 35% to 40%	45%
In excess to 40% to 45%	50%
In excess to 45% to 50%	55%
In excess to 50% to 55%	60%
In excess to 55% to 60%	65%
In excess to 60% to 65%	70%
In excess to 65% to 70%	75%
In excess to 70% to 75%	80%
In excess to 75% to 80%	85%
In excess to 80% to 85%	90%
In excess to 85% to 90%	95%
In excess to 90%	100%

**A student who has been dismissed can re-apply for enrollment.**

\*See page 16 for those receiving GI Bill Benefits

A student has the right to cancel or terminate the **Registration/Enrollment Agreement** at any time. Upon a student's written notice of cancellation, MEC will provide a refund based on the schedule herein.

A refund will be made within 30 days of the date of cancellation.

MEC reserves rights to cancel or postpone any course of study because of low or insufficient enrollment. When this occurs, MEC will attempt to notify students before the first class meeting, and a complete refund will be mailed or given personally if any payments were made.



## **Policies for Students Receiving GI Bill Benefits (for Veterans)**

### **Evaluation Time Frames:**

MEC will evaluate veterans for attendance and grades at the end of each month of the program.

### **Attendance Progress:**

Students must maintain a minimum of 75% attendance average each month in order to be considered making satisfactory progress. Any student absent for 14 consecutive days will be terminated from the program.

### **Academic Progress:**

The minimum grade average required, for theory and practical combined, is 70%.

### **Probation and Dismissal:**

MEC will place students failing to meet either the attendance or the academic progress requirements on probation for a period of one month.

MEC will reevaluate a student's progress at the conclusion of the probationary period. If MEC determines at this evaluation that the student is meeting both the attendance and academic progress requirements the student will no longer be on probation. Contrarily, if MEC determines at this evaluation that the student is failing to meet either the attendance or academic progress requirements, MEC will terminate the student from the GI Bill program.

MEC, however, may grant a second probationary period of one month if extenuating circumstances warrant such action. MEC will reevaluate a student's progress at the conclusion of this second probationary period. If MEC determines at this evaluation that the student is meeting both the attendance and academic progress requirements the student will no longer be on probation. Contrarily, if MEC determines at this evaluation that the student is failing to meet either the attendance or academic progress requirements, MEC will terminate the student from the GI Bill program.

### **Reinstatement of Students Dismissed for Unsatisfactory Progress:**

Students dismissed for failing to meet standards of academic progress may not be re-admitted.

### **STATEMENT ON ATTENDANCE FOR VA CERTIFICATION**

MEC will certify a veteran's enrollment in an approved program to the United States Department of Veterans Affairs (USDVA). This certification, in part, requires MEC to report to the USDVA the amount of clock hours per week a veteran will be in attendance. If a veteran fails to attend the certified amount of hours per week and this failure results in a change of pursuit as defined by the USDVA, MEC must report this issue to the USDVA. This report may result in a lesser monthly payment from the USDVA to the veteran and possible overpayments from the USDVA to the veteran and MEC. MEC strongly advises veterans to pursue their training as specified in the Enrollment Contract.

### **Graduation Requirements**

A student will graduate upon successful completion of each course of their program of education. Successful completion requires a passing grade of the minimum 70% in each course of study, minimum of 75% attendance, and completion of each course of study within the specified time period for the program. Upon successful completion of the program a student will receive a certificate of completion from MEC.

### **Credit for Previous Education and Training for Students receiving GI Bill Benefits**

Credit for previous education and training experience must be evaluated and may be granted. Such a grant of credit is at the discretion of MEC. This credit will shorten the length and cost of the program proportionately. The school is required to maintain a written record of previous education and training experiences which indicates that credit has been given, where appropriate, by the school for noted experiences and provide evidence of the evaluation.

## DIAGNOSTIC MEDICAL SONOGRAPHY (CERTIFICATE PROGRAM)

TOTAL CLOCK HOURS – 600

### GENERAL PROGRAM DESCRIPTION AND GOALS

An Ultrasound Technician is a skilled professional who uses equipment producing high frequency sound waves to create diagnostic images and data that help health care professionals to diagnose patients with disease, determine a lack thereof, or identify potential areas of concern.

Ultrasound imaging is used on many parts of the body. Diagnostic ultrasound is a safe procedure; there are no direct risks from exam. Ultrasound technicians are in high demand due to the expanding health care system and the subsequently growing need for ultrasound services. Employment of ultrasound technicians is expected to increase 44% between 2010 and 2020 (<http://www.bls.gov/ooh/healthcare/diagnostic-medical-sonographers.htm>).

Students will have the opportunity to study the anatomy, physiology and pathology of scanned organ systems, recognize the sonographic patterns of organs, learn the protocols for logical and thorough survey of the organs, and provide accurate and technical impressions to the interpreting physician.

The core curriculum is structured to include both a lecture component and an imaging laboratory component.

Today's ultrasound technician does more than just operate machinery; the goal of the program is to teach students the responsibility of providing through expectations of procedural components to patients, direct patients into position(s) that will achieve the best imaging results, find initial indications of healthy and/or unhealthy areas, and record the images for further diagnostic interpretation.

The objective of the school's program is to thoroughly prepare those who wish to become an ultrasound technician/sonographer – an integral member of the health care team. The program is designed to prepare students to obtain an entry-level position as a Diagnostic Medical Sonographer. Each course works directly toward that objective to develop effective healthcare providers in the field of ultrasound/sonography, and to stimulate a lifelong pursuit of education in ultrasound.

At the conclusion of the program graduates who have diligently attended class, studied and practiced the clinical applications, will have the necessary skills to seek entry-level employment as a Diagnostic Medical Sonographer.

### PROGRAM STRUCTURE AND SEQUENCE

The **DMS** Program consists of topics of study:

- |  |                                       |
|--|---------------------------------------|
| a. Ultrasound Physics & Instrumentation    | e. OB/GYN Ultrasound                  |
| b. Anatomy, Physiology & General Pathology | f. Vascular Ultrasound                |
| c. Abdominal Ultrasound                    | g. Ultrasound of Soft Tissue          |
| d. Small Parts Ultrasound                  | h. Ultrasound Guided Procedures       |
|  | i. Preparation of Preliminary Reports |

The program is 12 months long - 12 clock hours weekly. Eight (8) hours of lecture & four (4) hours of clinical labs, weekly.

## **DESCRIPTIONS of Topics of Study**

### **Ultrasound Physics and Instrumentation**

Physics and Instrumentation include information about Sound Theory & properties; transducers construction; components & functions of imaging system, real-time equipment, different types of image artifacts, quality assurance testing.

#### **Instructional Objectives:**

At the completion of this part of the course student will be able to:

- a. Demonstrate knowledge in the advantage and disadvantage of B-scan and real time systems
- b. Describe the difference between overall gain and time-compensated gain, and the manipulation of these two controls to obtain a high quality diagnostic image
- c. List the effects of the focal zone or plane and its importance in the clinical application
- d. Perform the photographic quality control procedures that should be utilized in ultrasound facility

### **Anatomy, Physiology and General Pathology**

Anatomy, Physiology & General Pathology include information about basic medical terminology, body planes and reference system; organization of the human body; maintains of the human body; function of the human body and general pathology.

#### **Instructional Objectives:**

- a. Define the anatomic terms used to refer to the body in terms of direction and geometric planes
- b. Describe the major cavities of the body and the organs they contain. List the major system of the body, the organs they contain and the function of those systems
- c. Describe the major function of the four types of human tissues
- d. Define homeostasis
- e. Concept maps of body systems introduce students to the connection between anatomy and physiology of the organs of each body system

## Abdominal Ultrasound

Abdominal Ultrasound concentrates on the: retroperitoneal organs, liver, biliary system, pancreas, kidneys and adrenal glands, normal and abnormal ultrasound appearance of those structures, clinical symptoms and laboratory values.

### Instructional Objectives:

- a. Perform the scanning protocol for liver sonography
- b. List the clinical symptoms and pathology, including cirrhosis, hepatitis, cysts, carcinomas and benign neoplasm of the liver
- c. Describe the clinical laboratory tests used for evaluation liver function, including SGOT, SGPT, bilirubin and LDH
- d. Perform the scanning protocol for sonography of the biliary system
- e. Identify on sectional sonogram disease processes of the biliary system including acute and chronic cholecystitis, cholelithiasis, and gallbladder pathology
- f. Perform the scanning protocol for sonography of the kidneys
- g. Describe the clinical symptoms and pathology of the kidneys, including renal dysplasia, renal ectopia, polycystic kidney disease, renal calculi, renal abscess, and renal transplant complication
- h. Demonstrate knowledge of the clinical laboratory tests used for evaluation of the kidneys function, including the BUN, creatinine and urine pH
- i. Identify sectional sonography of spleen
- j. Describe clinical symptoms & pathologic basis for the disease processes of the spleen, including infections that cause splenomegaly, simple cyst, & primary benign and malignant tumor
- k. Perform sectional sonogram of abdominal aorta
- l. Describe the clinical symptoms, laboratory tests and pathology of abdominal aorta, including aortic aneurysms

## Small Parts Ultrasound

Ultrasound of small parts or superficial parts includes sonogram of thyroid glands, evaluation of testicles and breast sonogram.

### Instructional Objectives:

- a. Identify on sectional sonogram thyroid glands, testicle and scrotum, and breast
- b. Describe the clinical symptoms, laboratory tests, and pathology of scrotum, including hydrocele, epididymitis, and neoplasm of the testicle
- c. List the clinical laboratory tests used for evaluating the function of the thyroid gland including T3, T4 and TSH stimulation test
- d. Describe the standard scanning protocol of the thyroid, scrotum, testicles and breast
- e. Learn the technical pitfalls related to sonography of superficial parts

## Ultrasound OB/GYN

Concentration on the female bladder, uterus, ovaries and pregnancy

### Instructional Objectives:

- a. Perform standard scanning protocol of the urinary bladder, ovaries, adnexa and uterus
- b. Identify major female pelvic pathology, including ovarian cysts, fibroids, inflammatory pelvic disease, malignant and benign neoplasm in female pelvis area
- c. Describe menstrual cycle physiology, common problem of female infertility and congenital uterine malformation
- d. Learn the preparation for the pelvic sonogram; collect the patient information to perform a quality sonogram
- e. Identify intrauterine contraceptive devices, the types of devices, their positions and common complication
- f. Perform standard scanning protocol for first, second and third trimester pregnancy
- g. Identify major fetus pathology, including ectopic pregnancy, abnormal fetus presentation, placenta pathology, intrauterine growth retardation, premature rupture of membranes and microcosmic fetuses
- h. Learn about multiple pregnancies, difference between monozygotic identical twins and dizygotic fraternal twins

## Vascular Ultrasound

This part of the program focuses on the use of Doppler technology

### Educational Objectives:

- a. Perform arterial and venosis scanning protocol for lower extremity with the ankle-brachial index
- b. Describe the clinical symptoms and pathologic basis for the disease processes of the major vessels: peripheral vascular disease, arterial occlusive disease, and arterial aneurysms
- c. Perform standard scanning procedure for carotid artery for investigation of the intracranial vascular structure
- d. Identify Doppler findings with stenotic vessels for diagnostic interpretation criteria
- e. Describe the neurologic symptoms the typical indication for the ultrasound examination of the carotid artery

## Ultrasound of soft tissue

Ultrasound of soft tissue, often used for ankle and foot injuries

### Educational Objectives:

- a. Describe scanning protocol for normal ultrasound appearance of muscles and tendons.
- b. Identify major soft tissue pathology, including ankle joint effusion, tendon tear, plantar fasciitis and bursitis.

## Ultrasound guided procedure

Ultrasound is now used to guide a variety of invasive procedures; ultrasound is also used daily to guide interventions in the operating rooms.

### Educational Objectives:

- a. Learn about physicians' procedures when ultrasound guide is crucial helpful: amniocentesis, chorionic villi sampling, fluid collection aspiration, abscess drainage, liver, and breast and thyroid biopsy.

## Preparation of Preliminary reports

Preliminary reports describe sonographic findings without offering conclusions about pathology.

### Educational Objectives:

- a. Students learn how to prepare preliminary report to radiologist.

## Consumer Information

### Program Outcome Data

<b>Fiscal Year 2017-2018 Program Outcome</b>	<b>Number</b>
Number of students admitted in the Program as of 7/1/17	4
New starts, re-enrollments, and new transfers after 7/1/17	0
Total Number of Students	4
Transferred out of the course of instruction to another course of instruction at MEC	0
Completed the program and/or graduated	4
Withdrew from the school	0
Are still enrolled	0
Placed in their field of study	3
Placed in a related field	1
Placed in other field	0
Not available for placement (due to personal reasons)	0
Not employed	0
Number of students who took licensing/professional certification exam	3
Number of students who passed the above exam	3
Number of graduates who obtained employment in the field who did not use the school's placement assistance during the reporting period.	4
Average starting salary for all school graduates employed during this reporting period.	\$22 - \$25,000

Note: MEC does not guarantee transferability of credit and that acceptance of credits or coursework is entirely at the will of the institution to which a student is applying. Students seeking to transfer credit/coursework are advised to consult with the institution(s) to which transfer is being sought.



# Addendum A

## Enrollment Agreement-Refund Policy Addendum for Students Receiving GI Bill Benefits Medical Educational Center

All tuition is subject to the following pro-rata refund policy and will be paid no later than 40 days from date of cancellation:

<b>Percentage of days in class completed</b>	<b>Percentage of tuition and instructional charges that school may retain</b>
<b>At notice of cancellation</b>	
In excess to 5% to 10%	15%
In excess to 10% to 15%	20%
In excess to 15% to 20%	25%
In excess to 20% to 25%	30%
In excess to 25% to 30%	35%
In excess to 30% to 35%	40%
In excess to 35% to 40%	45%
In excess to 40% to 45%	50%
In excess to 45% to 50%	55%
In excess to 50% to 55%	60%
In excess to 55% to 60%	65%
In excess to 60% to 65%	70%
In excess to 65% to 70%	75%
In excess to 70% to 75%	80%
In excess to 75% to 80%	85%
In excess to 80% to 85%	90%
In excess to 85% to 90%	95%
In excess to 90%	100%