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# **One Year Post Graduate Diploma In Medical Diagnostic Ultrasound**

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General Track



# One Year Post Graduate Diploma In Medical Diagnostic Ultrasound (General Track)

## Weekly Planner

<b>Semester 1</b>	
<b>Course Name: Sonography Principles &amp; Instrumentation</b>	
<b>Course Director: Associate Prof. Dr. Raham Bacha (PhD)</b>	
<b>Course Code: PGDG-7101</b>	
<b>Teaching Faculty</b>	
Prof. Dr. Syed Amir Gilani (PhD)	
Associate Prof. Dr. Raham Bacha (PhD)	
<b>Week</b>	<b>Course Content</b>
<b>Week 1</b>	Introduction to SPI (1)
<b>Week 2</b>	Common Artifacts (2)
<b>Week 3</b>	Sound Waves (2)
<b>Week 4</b>	Resolution (1)
<b>Week 5</b>	Image Processing (2)
<b>Week 6</b>	Transducer (2)
<b>Week 7</b>	Image Depth, Gain and focusing (2)
<b>Week 8</b>	<b>Mid Term</b>
<b>Week 9</b>	Dynamic Range (2)
<b>Week 10</b>	Bio-Effects (2)
<b>Week 11</b>	Color Doppler Physics (1)
<b>Week 12</b>	CWD (2)
<b>Week 13</b>	Tissue Harmonics(2)
<b>Week 14</b>	Spectral Doppler (2)
<b>Week 15</b>	Ultrasound Contrast Agents (1)
<b>Week 16</b>	<b>Final Exam</b>

# Semester 1

**Course Name: Applied Anatomy & Pathology**

**Course Director: Associate Prof. Dr. Raham Bacha (PhD)**

**Course Code: PGDG-7102**

**Teaching Faculty**

**1: Associate Prof. Dr. Raham Bacha (PhD)**

**Associate Prof. Dr. Khadija tul Sughra (PhD)**

**3: Asst. Prof. Dr Muhammad Yousaf**

<b>Week</b>	<b>Course Content</b>
<b>Week 1</b>	Applied anatomy of upper limb-I (3)
<b>Week 2</b>	Applied anatomy of lower limb-I (3)
<b>Week 3</b>	Neck applied anatomy (1)
<b>Week 4</b>	Applied Anatomy of upper Abdomen-I (2)
<b>Week 5</b>	Applied Anatomy of lower Abdomen-I (2)
<b>Week 6</b>	Cardiac applied anatomy (1)
<b>Week 7</b>	Vascular applied anatomy of Limbs-I (1)
<b>Week 8</b>	<b>Mid Term</b>
<b>Week 9</b>	Applied anatomy of peripheral nerves-I (1)
<b>Week 10</b>	Vascular applied anatomy of Abdomen -I (3)
<b>Week 11</b>	Male genitourinary system anatomy-I (3)
<b>Week 12</b>	Female genitourinary system anatomy-I (2)
<b>Week 13</b>	Quiz 2
<b>Week 14</b>	Applied pathology of upper limb (2)
<b>Week 15</b>	Applied pathology of Abdomen (2)
<b>Week 16</b>	<b>Final Exam</b>

# Semester 1

**Course Name: Gynecological Ultrasound**

**Course Director: Associate Prof. Dr. Khadija tul Sughra (PhD)**

**Course Code: PGDG-7103**

**Teaching Faculty**

Prof. Dr. Syed Amir Gilani (PhD)

Associate Prof. Dr. Khadija tul Sughra (PhD)

**3:** Associate Prof. Dr. Ahmed Abdel Rahim (PhD)

<b>Week</b>	<b>Content</b>
<b>Week 1</b>	Anatomy and pathology of uterus-I (3)
<b>Week 2</b>	Sonography of uterus (2)
<b>Week 3</b>	Ultrasound for Uterine pathologies (3)
<b>Week 4</b>	Transvaginal Ultrasound-I (3)
<b>Week 5</b>	Ultrasound of Ovaries-I (3)
<b>Week 6</b>	Gynecological Emergency-II (3) + Quiz
<b>Week 7</b>	Ultrasound in pelvic inflammatory diseases (1)
<b>Week 8</b>	<b>Mid Term</b>
<b>Week 9</b>	Ultrasound Guided Interventional Procedures in Gynae (2)
<b>Week 10</b>	Acquired abnormalities of the cervix (2)
<b>Week 11</b>	Color doppler in gynecology (2) +Quiz
<b>Week 12</b>	Advances in Gynecological ultrasound (2)
<b>Week 13</b>	Ultrasound in menopause (1) + Ultrasound for abnormalities of endometrium (3)
<b>Week 14</b>	Pediatric gynecological ultrasound (1)
<b>Week 15</b>	Report Writing in Gynecological Ultrasound (1)
<b>Week 16</b>	<b>Final Exam</b>

# Semester 1

**Course Name: Obstetrical Ultrasound**

**Course Director: Associate Prof. Dr. Syed Amir Gilani**

**Course Code: PGDG-7104**

**Teaching Faculty**

Prof. Dr. Syed Amir Gilani (PhD)

Associate Prof. Dr. Khadija tul Sughra (PhD)

<b>Week</b>	<b>Course Content</b>
<b>Week 1</b>	Early Fetal Development (1)
<b>Week 2</b>	Ectopic pregnancy (1)
<b>Week 3</b>	fetal growth disorders (1)
<b>Week 4</b>	Multiple pregnancy (1)
<b>Week 5</b>	Quiz 1(2)
<b>Week 6</b>	Maternal disorders complicating pregnancy (1)
<b>Week 7</b>	Amniotic fluid (1)
<b>Week 8</b>	<b>Mid Term</b>
<b>Week 9</b>	The umbilical cord (1)
<b>Week 10</b>	Ultrasound evaluation of the fetal spine(2)
<b>Week 11</b>	Ultrasound evaluation of the fetal heart (1)
<b>Week 12</b>	Quiz 2
<b>Week 13</b>	Interventional Procedures in Obs-I(1)
<b>Week 14</b>	Color Doppler in Obs-I(1)
<b>Week 15</b>	Multiple Pregnancy (1)
<b>Week 16</b>	<b>Final Exam</b>

<b>Semester 1</b>	
<b>Course Name: Abdominal Ultrasound</b>	
<b>Course Director:</b> Asst. Prof. Dr. Yousaf Farooq (PhD)	
<b>Course Code:</b> PGDG-7105	
<b>Course Faculty</b>	
<b>1:</b> Prof. Dr. Syed Amir Gilani (PhD) Associate Prof. Dr. Khadija tul Sughra (PhD) <b>3:</b> Asst. Prof. Dr. Yousaf Farooq (PhD)	
<b>Week</b>	<b>Course Content</b>
<b>Week 1</b>	Normal abdominal vasculature (1)
<b>Week 2</b>	Sono anatomy of liver (2)
<b>Week 3</b>	Focal liver Diseases-I (2)
<b>Week 4</b>	Cystic Liver Diseases-II (2)
<b>Week 5</b>	Ultrasound of Gall Bladder (3)
<b>Week 6</b>	Ultrasound of Pancreas (1)
<b>Week 7</b>	Ultrasound of Spleen (1) + Quiz
<b>Week 8</b>	<b>Mid Term</b>
<b>Week 9</b>	Ultrasound of normal kidney (1)
<b>Week 10</b>	Ultrasound of suprarenal glands (1)
<b>Week 11</b>	Ultrasound of solid lesions (1)
<b>Week 12</b>	Ultrasound of renal cystic lesions (1)
<b>Week 13</b>	Ultrasound abdominal vessels (1)+ Quiz 2
<b>Week 14</b>	Ultrasound of ureters, urinary bladder and urethra and Prostate (3)
<b>Week 15</b>	Interventional Ultrasound in abdomen+ Report Writing (3)
<b>Week 16</b>	<b>Final Exam</b>