

Program of Study	:	General Medicine
Course	:	Acute Conditions in Medicine
Abbreviation	:	PLE/VA031
Schedule		48 hours of seminars 48 hours of practical training
Course distribution	:	6 th year, 11 th semester
Number of credits	:	6
Course form	:	block 4 days of emergency medicine 2 days of acute conditions in pulmonology 2 days of acute conditions in gastroenterology 2 days of acute conditions in cardiology 1 day of acute conditions in diabetology 1 day of acute conditions in nephrology

Seminars and practical training:

Teachers: **Department of Emergency Medicine**
MUDr. Vladislav Kutěj – *head of the department*
MUDr. Krátká Jana - *responsible for teaching*
MUDr. Malvína Křivánková, Ph.D.
MUDr. Hynek Fiala, Ph.D.
MUDr. František Horák
MUDr. Tereza Kopecká
MUDr. Ivana Pejpková

Department of Respiratory Medicine
MUDr. Petr Jakubec, Ph.D. – *head of the department*
MUDr. Samuel Genzor, Ph.D. – *responsible for teaching*
MUDr. Juraj Kultán
MUDr. Jan Mizera
MUDr. Andrea Müllerová
MUDr. Martin Vykopal
MUDr. Jaromír Zatloukal, Ph.D.

Department of Clinical Biochemistry
prof. Mgr. Martin Modrianský, Ph.D. – *head of the department*
Other members of the department

Department of Microbiology
Prof. MUDr. Milan Kolář, Ph.D. – *head of the department*

Department of pharmacology
doc. MUDr. Karel Urbánek, Ph.D. – *head of the department*

Department of Forensic Medicine and Medical Law

doc. RNDr. Peter Ondra, CSc. – *head of the department*

Department of Radiology

prof. MUDr. Miroslav Heřman, Ph.D. – *head of the department*

prof. MUDr. Marie Černá, Ph.D. . – *responsible for teaching*

doc. MUDr. Stanislav Buřval, Ph.D.

doc. MUDr. Filip Čtvrtlík, Ph.D.

prof. MUDr. Martin Köcher, Ph.D.

MUDr. Radim Kovář

MUDr. Zuzana Sedláčková

MUDr. Zbyněk Tüdös, Ph.D.

MUDr. Lucia Veverková

Department of Hemato-Oncology

prof. MUDr. Tomáš Papajík, CSc. – *head of the department*

prof. MUDr. Edgar Faber, CSc. – *responsible for teaching*

doc. MUDr. Tomáš Szotkowski, Ph.D.

MUDr. Martin Čerňan

MUDr. Miroslava Palová

MUDr. Jana Procházková, Ph.D.

Department of Internal Medicine I - Cardiology

prof. MUDr. Miloš Táborský, CSc., FESC, FACC, MBA – *head of the department*

MUDr. Vlastimil Doupal, Ph.D. – *responsible for teaching*

prof. MUDr. Martin Hutýra, Ph.D., FESC

doc. MUDr. Dan Marek, Ph.D., FESC

MUDr. Monika Kamasová

MUDr. Jan Přeček

Department of Internal Medicine II - Gastroenterology and Geriatrics

doc. MUDr. Ondřej Urban, Ph.D. – *head of the department*

MUDr. Diana Hexspoor Bawadekji – *responsible for teaching*

prof. MUDr. Jiří Ehrmann, CSc.

MUDr. Lukáš Daniš

MUDr. Lea Zarivnijová

Department of Internal Medicine III - Nephrology, Rheumatology and Endocrinology

prof. MUDr. Pavel Horák, CSc. – *head of the department*

doc. MUDr. Milan Halenka, Ph.D. – *responsible for teaching*

MUDr. Jiří Vymětal, Ph.D. – *responsible for teaching*

doc. MUDr. Karel Krejčí, Ph.D.

MUDr. Miroslav Hrubý

MUDr. Ondřej Krystyník

MUDr. Jiří Orság, Ph.D.

MUDr. Jan Schovánek, Ph.D.

MUDr. Jiří Vymětal, Ph.D.

B-Braun Aesculap Academy Praha

Teaching: Block

Monday	08:00 – 11:00 seminars, 12:00 – 16:30 practical training
Tuesday	08:00 – 11:00 seminars, 12:00 – 16:30 practical training
Wednesday	08:00 – 11:00 seminars, 12:00 – 16:30 practical training
Thursday	08:00 – 11:00 seminars, 12:00 – 16.30 practical training
Friday	08:00 – 11:00 seminars, 12:00 – 16:30 practical training

Seminars:

Day	Week	Topic	Hours	Teachers
1	Monday 9.1.2023 Room TD 2.521	<i>Seminary: cardiac arrest, sudden circulatory collapse, ACLS</i> Definition, aetiology, types, law problematics, pathophysiology, GL 2015 for ACLS for shockable rhythms, PEA, asystole Pharmacology Ischemic hypoxic/anoxic and reperfusion injury	4	Kutěj, Pejpková, Fiala, Horák, Krátká, Urbánek, Modrianský, Stejskal,
2	Tuesday 10.1.2023 Room TD 2.521	<i>Seminary: shocks (sepsis, anaphylaxis)</i> Definition, aetiology, types, pathophysiology, guidelines Microbiology tests + antibiotic therapy	4	Kutěj, Pejpková, Fiala, Horák, Krátká, Kolář
3	Wednesday 11.1.2023 Room TD 2.521	<i>Seminary: disorders of consciousness, convulsions</i> Terminology, aetiology, types and differential diagnosis, guidelines for management and therapy of the conditions Craniocerebral pathologies – CT, CTA, MRI Disorders of effective osmolality (CSWS, SIADH)	4	Kutěj, Pejpková, Fiala, Horák, Krátká, Modrianský, Stejskal, Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář
4	Thursday 12.1.2023 Room TD 2.521	<i>Seminary: intoxication, inhalation injury</i> Types, general guidelines, specific guidelines and therapy, antidotes. Differential diagnosis in toxicology and sources of information	4	Kutěj, Pejpková, Fiala, Horák, Krátká, Ondra
5	Friday 13.1.2023 Room TD 2.521	<i>Seminary: acute gastrointestinal bleeding</i> Bleeding from oesophageal varices, gastric ulcer Imaging techniques Severe bleeding in haematology, DIC, ITP, acquired haemophilia, complications of antithrombotic	4	Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář, Faber, Sztokowski, Čerňan, Procházková, Palová, Zarivnijová,

		therapy		Daniš
6	Monday 16.1.2023 Room TD 2.521	<i>Seminary: chest pain</i> Chest pain Imaging techniques Differential laboratory diagnostics of chest pain and dyspnea	4	Hutyra, Marek, Kamasová, Přeček, Modrianský, Stejskal, Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář
7	Tuesday 17.1.2023 Room TD 2.521	<i>Seminary: dyspnea</i> Chest pain Acute conditions in new-onset haematological diseases, APL, leukostasis syndrome, SVCS, MAHA, polycythemia, severe haemolysis + blood count	4	Hutyra, Marek, Kamasová, Přeček, Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář, Faber, Szotkowski, Čerňan, Procházková, Palová
8	Wednesday 18.1.2023 Room TD 2.521	<i>Seminary: dyspnea</i> Pneumothorax, effusion – empyema, pneumonia, mediastinal tumours, fibrosis and other ILD, COPD, bronchial asthma, carcinoma, tracheal stenosis Laboratory diagnostics of infection and sepsis	4	Jakubec, Genzor, Mizera, Müllerová, Kultan, Zatloukal, Modrianský, Stejskal, Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář
9	Thursday 19.1.2023 Room TD 2.521	<i>Seminary: chest pain, haemoptysis</i> Pneumothorax, effusion – empyema, pneumonia, mediastinal tumours, tumours, respiratory tract infections, bronchiectasis, vessels, sequestration Pharmacology	4	Jakubec, Genzor, Mizera, Müllerová, Kultan, Zatloukal, Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář, Urbánek
10	Friday 20.1.2023 Room TD 2.521	<i>Seminary: acute conditions in diabetology and haematology</i> Acute conditions in diabetology Homeostasis, electrolyte and ABR changes in diabetic patients in coma Acute complications of therapy in haematology: febrile neutropenia, tumour lysis syndrome, OPSI, SOS, transfusion reactions...	4	Hrubý, Krystyník, Orság, Schovánek, Vymětal, Modrianský, Stejskal, Faber, Szotkowski, Čerňan, Procházková, Palová
11	Monday 23.1.2023 Room TD 2.521	<i>Seminary: nephrology</i> Acute Kidney Injury Imaging techniques Laboratory diagnostics of AKI	4	Hrubý, Krystyník, Orság, Schovánek, Vymětal, Modrianský, Stejskal, Heřman,

				Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář
12	Tuesday 24.1.2023 <i>Room</i> <i>TD 2.521</i>	<i>Seminary: abdominal pain</i> <i>Abdominal pain</i> Biliary pancreatitis, Crohn disease Imaging techniques Laboratory diagnostics of acute conditions in gastroenterology (pancreatitis, cholecystitis, hepatitis)	4	Daniš, Sovová, Zarivnijivá, Heřman, Köcher, Černá, Buřval, Čtvrtlík, Tüdös, Hazliger, Veverková, Sedláčková, Remeníková, Kovář

Practical training:

Day	Week	Topic	Hours	Teachers
1	Monday 9.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Cardiac arrest, sudden circulatory collapse, ACLS</i> Refractory VF Pulseless electrical activity	4	See the schedule
2	Tuesday 10.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Shocks (sepsis, anaphylaxis)</i> Septic shock Anaphylactic shock	4	
3	Wednesday 11.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Disorders of consciousness, convulsions</i> Status epilepticus Stroke with hypertensive crisis	4	
4	Thursday 12.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Intoxication, inhalation trauma</i> Organophosphate poisoning CO/cyanide poisoning	4	
5	Friday 13.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Acute gastrointestinal bleeding</i> Bleeding from oesophageal varices Gastric ulcer	4	
6	Monday 16.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Chest pain</i> Acute coronary syndrome Aortic dissection	4	
7	Tuesday 17.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Dyspnea</i> Pulmonary oedema Pulmonary embolism	4	

8	Wednesday 18.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Dyspnea</i> Pneumothorax, COPD Pneumonia Effusion-empyema Pulmonary fibrosis Bronchial asthma	4	
9	Thursday 19.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Dyspnea</i> Pneumothorax, COPD Pneumonia Effusion-empyema Pulmonary fibrosis Bronchial asthma	4	
10	Friday 20.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Acute conditions in diabetology:</i> Ketoacidosis Hyperglycaemia Hypoglycaemia	4	
11	Monday 23.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Nephrology</i> Acute renal failure	4	
12	Tuesday 24.1.2023 <i>Centesimo</i>	<i>Practical training (SimMan 3G):</i> <i>Abdominal pain</i> Acute biliary pancreatitis Crohn disease	4	
13	Wednesday 25.1.2023 <i>Centesimo</i>	Colloquium Modern procedures and techniques in medicine (B-Braun Aesculap Academy Praha) 8:00 – 17:00		
14	Thursday 26.1.2023 <i>Centesimo</i>	Colloquium Modern procedures and techniques in medicine (B-Braun Aesculap Academy Praha) 8:00 – 17:00	6	Kalina, Hrouda, Bartáková, Cheníčková, Slezák, Kovrzek, Dvořáková, Hořák, Karas, Bártová, Zouharová

Completed by: Colloquium

Requirements: 90 % attendance to seminars and practical trainings

Literature:

1. Roberts JR, Hedges JR: clinical procedures in emergency medicine and acute care, 7th Edition, Elsevier 2017, ISBN: 978-0323354783.
2. Rosen's Emergency Medicine, Concepts and Clinical Practice, 9th Edition, Elsevier 2017, ISBN-13: 9780323354790.
3. Goldman L, Schaffer AI: Goldman-Cecil Medicine, 2-Volume Set, 26th Edition, Elsevier 2019, ISBN: 9780323532662

4. Gibbon GJ, Geddes DM, Costabel U, Sterk PJ, Corrin B: Respiratory Medicine, 2003, ISBN 0 7020 2613 1.
5. Tintinalli JE, Stapczynski JS, Ma OJ: Tintinalli's Emergency Medicine, 9th Edition, McGraw-Hill Education 2019, ISBN: 978-1260019933
6. Wyatt JP, Illingworth RN, Graham CA: Oxford Handbook of Emergency Medicine, 5th edition, Oxford University Press 2020, ISBN 9780198784197
7. Ramrakha P, Moore K, Sam A: Oxford Handbook of Acute Medicine, 4th edition, Oxford University Press 2019, ISBN: 9780198797425
8. PORTAL LF UP – MOODLE