

Trauma Biomechanics

2022 m. pavasario semestras, 2022.04.04-2022.04.15

Informacija apie paskaitų ciklą

40 val. paskaitų kursas „Traumos biomechanika“

Tikslinė auditorija – I, II ir III pakopos biomechanikos, mechanikos inžinerijos, transporto inžinerijos studentai.

Paskaitos vyks anglų kalba**Paskaitų tvarkaraštis**

Diena	Paskaitos tema	Paskaitos tipas	Val.	Data ir laikas	Aud.
Pagrindinės žinios					
1	Introduction / Injury models and failure of biological tissue	Paskaita	2	2022.04.04 14 ⁰⁰ -15 ³⁰	MR-II 2-107
	Analysing accidents	Pratybos	2	2022.04.04 15 ³⁰ -17 ⁰⁰	MR-II 2-107
2	Head injury	Paskaitos	2	2022.04.05 9 ⁰⁰ -10 ³⁰	MR-II 2-107
	Sports helmets	Pratybos	2	2022.04.05 10 ³⁰ -12 ⁰⁰	MR-II 2-107
3	Trauma to the spine and thorax	Paskaitos	2	2022.04.06 10 ²⁰ -11 ⁵⁵	MR-II 2-107
	Concepts of injury prevention	Pratybos	2	2022.04.06 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
4	Injury to the upper and lower extremities	Paskaitos	2	2022.04.07 10 ²⁰ -11 ⁵⁵	MR-II 2-107
	Safety applications in sports	Pratybos	2	2022.04.07 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
5	Experiments in trauma biomechanics	Paskaitos	1	2022.04.08 14 ⁰⁰ -14 ⁴⁵	MR-II 2-107
	Experiments in trauma biomechanics	Pratybos	1	2022.04.08 14 ⁴⁵ -15 ³⁰	MR-II 2-107
Traumos biomechanikos specialios temos					
6	Computer simulations	Paskaitos	2	2022.04.11 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
	Student project	Pratybos	2	2022.04.11 14 ⁰⁰ -15 ³⁰	MR-II 2-107
7	Occupant protection	Paskaitos	2	2022.04.12 9 ⁰⁰ -10 ³⁰	MR-II 2-107
	Student project	Pratybos	2	2022.04.12 10 ³⁰ -12 ⁰⁰	MR-II 2-107
8	Pedestrian Impact	Paskaitos	2	2022.04.13 10 ²⁰ -11 ⁵⁵	MR-II 2-106
	Student project	Pratybos	2	2022.04.13 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
9	Experiments in trauma biomechanics	Paskaitos	2	2022.04.14 10 ²⁰ -11 ⁵⁵	MR-II 2-107
	Exam	Pratybos	2	2022.04.14 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
10	Student competition	Paskaitos	2	2022.04.15 9 ⁰⁰ -10 ³⁰	MR-II 2-107
	Summary /Wrap-up and final discussion	Paskaita	2	2022.04.15 10 ³⁰ -12 ⁰⁰	MR-II 2-107

Information about lectures

40 hours course on “Trauma Biomechanics”

Target auditorium – I, II and III study cycle students from biomechanics, mechanical engineering, and transport engineering.

Lectures – fundamental theory, concepts, knowledge

Exercise – focus on practical aspects of knowledge application.

Seminar – exchange of information and discussions about topics of interests

Schedule of the lectures

Day	Topic	Type of lecture	Dur.	Date and time	Room
Basic knowledge					
1	Introduction / Injury models and failure of biological tissue	Paskaita	2	2022.04.04 14 ⁰⁰ -15 ³⁰	MR-II 2-107
	Analysing accidents	Pratybos	2	2022.04.04 15 ³⁰ -17 ⁰⁰	MR-II 2-107
2	Head injury	Paskaitos	2	2022.04.05 9 ⁰⁰ -10 ³⁰	MR-II 2-107
	Sports helmets	Pratybos	2	2022.04.05 10 ³⁰ -12 ⁰⁰	MR-II 2-107
3	Trauma to the spine and thorax	Paskaitos	2	2022.04.06 10 ²⁰ -11 ⁵⁵	MR-II 2-107
	Concepts of injury prevention	Pratybos	2	2022.04.06 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
4	Injury to the upper and lower extremities	Paskaitos	2	2022.04.07 10 ²⁰ -11 ⁵⁵	MR-II 2-107
	Safety applications in sports	Pratybos	2	2022.04.07 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
5	Experiments in trauma biomechanics	Paskaitos	1	2022.04.08 14 ⁰⁰ -14 ⁴⁵	MR-II 2-107
	Experiments in trauma biomechanics	Pratybos	1	2022.04.08 14 ⁴⁵ -15 ³⁰	MR-II 2-107
Special topics of trauma biomechanics					
6	Computer simulations	Paskaitos	2	2022.04.11 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
	Student project	Pratybos	2	2022.04.11 14 ⁰⁰ -15 ³⁰	MR-II 2-107
7	Occupant protection	Paskaitos	2	2022.04.12 9 ⁰⁰ -10 ³⁰	MR-II 2-107
	Student project	Pratybos	2	2022.04.12 10 ³⁰ -12 ⁰⁰	MR-II 2-107
8	Pedestrian Impact	Paskaitos	2	2022.04.13 10 ²⁰ -11 ⁵⁵	MR-II 2-106
	Student project	Pratybos	2	2022.04.13 12 ¹⁰ -13 ⁴⁵	MR-II 2-107
9	Experiments in trauma biomechanics	Paskaitos	2	2022.04.14 10 ²⁰ -11 ⁵⁵	MR-II 2-107
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10	Student competition	Paskaitos	2	2022.04.15 9 ⁰⁰ -10 ³⁰	MR-II 2-107
	Summary /Wrap-up and final discussion	Paskaita	2	2022.04.15 10 ³⁰ -12 ⁰⁰	MR-II 2-107