Physics Course Learning Outcome Results

11		Out of 18 students	4A		Out of 50 students
Momentum-Collisions	q5	33.33%	Rotational Dynamics	q6	42.00%
First Law Thermodynamics	q8	33.33%	Linear Dynamics	q5	32.00%
Coulomb's Law	q10	33.33%	Energy Conservation	q7	32.00%
Energy Conservation	q6	27.78%	Momentum Collisions	q8	26.00%
Temperature Defintion	q7	27.78%	Rotational Kinematics	q2	24.00%
Scientific Method	q1	22.22%	Statics	q10	20.00%
Electric Charge	q9	16.67%	Vectors 2D Kinematics	q4	14.00%
1D Motion	q2	11.11%	Linear Kinematics	q1	8.00%
Equilibrium	q3	5.56%	Calculus Linear Kinematics	q9	8.00%
Newton's 3rd Law	q4	0.00%	Angular Momentum	q3	4.00%
2A		**Out of 43 students**	**4B**		**Out of 30 students**
Transverse Waves	q9	29.55%	Resistance Joule Heating	q5	43.33%
Rotational Dynamics	q5	22.73%	Induction Generator	q8	30.00%
Momentum Collisions	q7	22.73%	Electric Field-Integration	q2	23.33%
Fluid Statics	q8	20.45%	Lrc Circuit Resonance	q9	23.33%
Linear Dynamics	q4	15.91%	Magnetic Field Wire	q7	20.00%
Energy Conservation	q6	15.91%	Experiment Purpose Hypothesis	q10	16.67%
Simple Harmonic Motion	q10	13.64%	Potential Energy Conservation	q3	13.33%
Rotational Kinematics	q2	9.09%	Gauss' Law Conductor	q4	10.00%
Linear Kinematics	q1	6.82%	Equivalent Resistance Network	q6	6.67%
Gravity 2D Kinematics	q3	4.55%	Coulomb's Law-Vector	q1	3.33%
2B		**Out of 41 students**	**5**		**Out of 7 students**
AC Generator	q8	51.22%	Climate Change Essay	q10	57.14%
Current	q4	31.71%	Photoelectric Effect	q3	28.57%
Induced Electric Fields	q9	26.83%	Relativity Dynamics	q2	14.29%
Magnetic Field Wire	q7	24.39%	Quantum Energy States	q4	14.29%
Climate Change Essay	q10	21.95%	Hydrogen Energy States	q5	14.29%
Ohms Law Heating	q5	19.51%	Compton Effect	q6	14.29%
Equivalent Resistance	q6	17.07%	Relativity Kinematics	q1	0.00%
Coulombs Law Force	q1	12.20%	Debroglie Wave Mechanics	q7	0.00%
Coulombs Law Field	q2	7.32%	Debroglie Relatvistic Mechanics	q8	0.00%
Capacitance	q3	7.32%	Uncertainty Principle	q9	0.00%

* – Percents represent percent of students having the question as a low outlier (defined as a topic with a student score at least one unit below the student's individual median). The higher the percentage the larger number of students viewed this as a topic in need of more assistance when compared to the other questions.