



MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE OURO PRETO
PRÓ-REITORIA DE GRADUAÇÃO



COURSE OF PHYSICS - 2020/1 (curriculum 3)
OURO PRETO'S CAMPUS

CODE	MANDATORY DISCIPLINES	PREREQUISITE	SWL	CWL	CLASSES		SEM
					T	P	
EDU252	HISTORICAL STUDIES ON EDUCATION		60	72	4	0	1
FIS118	CONCEPTUAL PHYSICS		60	72	2	2	1
FIS119	PHYSICS IN THE MODERN WORLD		60	72	4	0	1
MTM122	DIFFERENTIAL AND INTEGRAL CALCULUS I		90	108	6	0	1
MTM131	ANALYTICAL GEOMETRY AND VECTOR CALCULUS		60	72	4	0	1
EDU253	SOCIOLOGICAL STUDIES ON EDUCATION		60	72	4	0	2
FIS305	THEORETICAL PHYSICS I		60	72	4	0	2
FIS315	EXPERIMENTAL PHYSICS I		60	72	0	4	2
FIS400	HISTORY OF PHYSICS	FIS118	60	72	2	2	2
LET966	INTRODUCTION TO BRAZILIAN SIGN LANGUAGE (LIBRAS)		60	72	2	2	2
MTM123	DIFFERENTIAL AND INTEGRAL CALCULUS II	MTM122	60	72	4	0	2
FIL643	PHILOSOPHY OF SCIENCES: XX CENTURY		60	72	3	1	3
FIS306	THEORETICAL PHYSICS II	MTM122 MTM131	60	72	4	0	3
FIS316	EXPERIMENTAL PHYSICS II	MTM122 MTM131	30	36	0	2	3
FIS401	INFORMATION TECHNOLOGY AND COMMUNICATION IN EDUCATION		90	108	4	2	3
MTM124	DIFFERENTIAL AND INTEGRAL CALCULUS III	MTM123	60	72	4	0	3
QUI242	GENERAL CHEMISTRY	MTM122 MTM131	60	72	4	0	3
QUI243	EXPERIMENTAL GENERAL CHEMISTRY	MTM122 MTM131	30	36	0	2	3
EDU256	EDUCATIONAL PSYCHOLOGY	EDU252	60	72	4	0	4
FIS307	THEORETICAL PHYSICS III	FIS305 MTM122 MTM131	60	72	4	0	4
FIS317	EXPERIMENTAL PHYSICS III	FIS305 FIS315	30	36	0	2	4
FIS406	SUPERVISED INTERNSHIP IN PHYSICS I	EDU252	30	36	1	1	4
FIS415	CURRICULUM, HISTORY AND STS IN PHYSICAL EDUCATION	FIS305	90	108	4	2	4
MIF001			30	36	1	1	4
EDU254	POLICY AND EDUCATIONAL REGULATION	EDU252 EDU253	60	72	4	0	5
FIS214	RATIONAL MECHANICS	FIS305 MTM123	60	72	2	2	5
FIS308	THEORETICAL PHYSICS IV	FIS307	60	72	4	0	5
FIS318	EXPERIMENTAL PHYSICS IV	FIS317	30	36	0	2	5
FIS403	EXPERIMENTATION AND INQUIRY-BASED TEACHING IN PHYSICAL EDUCATION	FIS401	90	108	2	4	5
FIS407	SUPERVISED INTERNSHIP IN PHYSICS II	EDU252 EDU253	90	108	2	4	5
FIS302	STRUCTURE OF MATTER I	FIS308 MTM123	60	72	4	0	6
FIS304	THERMODYNAMICS I	FIS306 MTM123	60	72	4	0	6
FIS404	NON-FORMAL AND INFORMAL EDUCATION IN NATURAL SCIENCE	FIS401 FIS415	90	90	4	2	6
FIS408	SUPERVISED INTERNSHIP IN PHYSICS III	FIS407	90	108	2	4	6
MIF002			30	36	1	1	6
FIS405	METHODOLOGY OF RESEARCH IN SCIENCE TEACHING	FIS401 FIS415	60	72	4	0	7
FIS409	SUPERVISED INTERNSHIP IN PHYSICS IV	FIS408	120	144	2	6	7
FIS413		FIS302 FIS318	60	72	0	4	7
FIS835	PROJECT AND MONOGRAPH I		60	72	0	4	7
FIS410	SUPERVISED INTERNSHIP IN PHYSICS V	FIS409	90	108	1	5	8
FIS427		FIS413	60	72	0	4	8
FIS836	PROJECT AND MONOGRAPH II		60	72	0	4	8
MIF003			30	36	1	1	8

CODE	ELECTIVE DISCIPLINES	PREREQUISITE	SWL	CWL	CLASSES		SEM
					T	P	
BCC701	COMPUTER PROGRAMMING I	FIS305 MTM122 MTM131	60	72	2	2	
BEV290	ENVIRONMENTAL EDUCATION	FIS415	60	72	2	2	
BEV299	FUNDAMENTALS OF BIOETHICS	FIS415	30	36	2	0	



MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE OURO PRETO
PRÓ-REITORIA DE GRADUAÇÃO



CODE	ELECTIVE DISCIPLINES	PREREQUISITE	SWL	CWL	CLASSES		SEM
					T	P	
EST202	STATISTICS AND PROBABILITY	FIS305 MTM122 MTM131	60	72	4	0	
FIS215	CONTINUUM MECHANICS	FIS214	60	72	4	0	
FIS301	COMPUTATIONAL PHYSICS I	BCC701 FIS306 MTM123	60	72	3	1	
FIS319	MATERIAL PHYSICS I	FIS308	60	72	4	0	
FIS411	SCIENTIFIC CULTURE AND PUBLIC COMMUNICATION OF SCIENCE	FIS401	60	72	2	2	
FIS412	INTERFACE BETWEEN SCIENCE AND CULTURE	FIS401	60	72	2	2	
FIS424	METHODS OF THEORETICAL PHYSICS I	FIS307 MTM125	60	72	4	0	
FIS515	THEORY OF ELECTROMAGNETISM I	FIS307 MTM125	60	72	4	0	
FIS516	QUANTUM MECHANICS I	FIS302	60	72	4	0	
FIS524	CRYSTALS GROWTH	FIS304 QUI242 QUI243	60	72	4	0	
FIS624	MODELING AND SIMULATION	FIS301	60	72	4	0	
FIS724	INTRODUCTION TO STATISTICAL PHYSICS	FIS306 MTM123	60	72	4	0	
FIS827	INTRODUCTION TO QUANTUM INFORMATION		60	72	4	0	
FIS831	RELATIVITY	FIS302	60	72	4	0	
MTM112	INTRODUCTION TO LINEAR ALGEBRA	MTM122 MTM131	60	72	4	0	
MTM125	INTRODUCTION TO ORDINARY DIFFERENTIAL EQUATIONS	FIS306 MTM123	60	72	4	0	
MUL450	GENERAL ASTRONOMY	FIS415	60	72	4	0	
MUL451	FUNDAMENTALS TO ASTRONOMY TEACHING	FIS415	30	36	2	0	
QUI275	HISTORY OF CHEMISTRY	FIS415	60	72	2	2	

CODE	ACTIVITIES	PREREQUISITE	CHARACTER	SWL	SEM
ATV006			MANDATORY	90	
ATV100			MANDATORY	200	

Required Courses Load	Work Load
Mandatory Disciplines	2640
Elective Disciplines	300
Optative Disciplines	0
Facultative Disciplines	0
Activities	290
Total	3230