



Name:	TRU#
Advisor:	Date:
Major: PHYSICS	Minor:

## Bachelor Of Science PHYSICS MAJOR Checksheet (120 credits)

1000-Level CORE courses (27-30 credits)		2000-Level CORE courses (27 credits)		3000/4000-Level (39 credits)	
COURSE	GRADE	COURSE	GRADE	COURSE	GRADE
ENGL 1100 or 1110 <sup>2</sup>		MATH 2110 – Calculus 3		PHYS 3080 - Optics	
OR any two of ENGL 1100, 1110, 1120, 1140 and 1210 <sup>2</sup>		MATH 2120 – Linear Algebra		PHYS 3090 - Analog Electronics	
		MATH 2240 - Differential Equations 1		PHYS 3100 - Digital Electronics	
PHYS 1100 or <b>1150</b>		MATH 3170 - Calculus 4 (take in 2 <sup>nd</sup> year)		PHYS 3120 – Intro to Mathematical Physics	
PHYS 1200 or <b>1250</b>		PHYS 2000 - Relativity and Quanta		PHYS 3160 - Classical & Statistical Thermodynamics	
MATH 1140 - Calculus 1		PHYS 2150 - Circuit Analysis		PHYS 3200 - Advanced Mechanics	
MATH 1240 - Calculus 2		PHYS 2200 - Mechanics		PHYS 3250 - Advanced Electromagnetism	
CHEM 1500 - Chemical Bonding/Organic Chem		PHYS 2250 - Intermediate Electromagnetism		PHYS 3400 - Principles & App. of Quantum Mech 1	
CHEM 1510 or 1520		CMNS 2290 or 2300 <sup>1</sup>		PHYS 4400 - Principles & App. of Quantum Mech 2	
One of BIOL 1110, 1210, GEOL 1110 OR 2050		ELECTIVES (24-27 credits)		Physics electives (12 Cr):	
		COURSE	GRADE	Choose four from: PHYS 3000, 3140, 3150, 3300, 3500, 4140, 4500 or 4480	
COMP 1130 or 1520 <sup>1</sup>		Non-science elective <sup>3</sup>		PHYS Elective	
<b>Notes:</b> 1. COMP 1130, COMP 1520, CMNS 2290, CMNS 2300 should be taken in the first or second year. 2. Students with a B or better in ENGL 1100 or 1110 may proceed into CMNS 2290 or 2300 in their second year; students with less than a B in first year English must take another 3 credits of 1000-level English before their second year English requirement. 3. Electives must include 9-12 credits in at least two disciplines outside of science (other than English). The 15 remaining elective credits may be chosen from any discipline; 6 of these credits must be in courses numbered 3000 or above.		Non-science elective <sup>3</sup>		PHYS Elective	
		Non-science elective <sup>3</sup>		PHYS Elective	
		Elective in lieu of 2 <sup>nd</sup> ENGL <sup>2</sup>		PHYS Elective	
		Elective <sup>3</sup>		PHYS Elective	
		Elective <sup>3</sup>		Not all upper-level physics courses are offered every year, but they will be alternated over a two-year period.	
		Elective <sup>3</sup>			
		3000/4000 level elective <sup>3</sup>			
		3000/4000 level elective <sup>3</sup>			

### KEEP IN MIND

**Course Load:** Transitioning to university can be challenging and many students choose to take a lighter course load. Please speak with Academic Advising to discuss sequencing and workload.

**Resources:** See the current [Academic Calendar](#) for more about the program requirements. Find more in the [Course Schedule](#) about course prerequisites, co-requisites and course times.

## COURSE OFFERINGS

FALL SEMESTER ONLY	WINTER SEMESTER ONLY
BIOL 1110	BIO L1210
CHEM 1500	CHEM 1510 or 1520
PHYS 1100 or 1150	PHYS 1200 or 1250
PHYS 2000	PHYS 2200
PHYS 2150	PHYS 2250
MATH 1140	MATH 1140
MATH 1150	MATH 1250
MATH 1240	MATH 1240
MATH 2110	MATH 2200
MATH 2120	MATH 2120
	MATH 2240
	MATH 3170

## INSTITUTIONAL LEARNING OUTCOMES

To graduate from a TRU Bachelor degree, students may be required to satisfy 8 Institutional Learning Outcomes (ILO) plus a Capstone course. (27 credits).

To find out if these requirements apply to you, please refer to DegreeWorks (available through [myTRU](#)) or contact your Program Advisor for more information.

If you are required to satisfy the ILO's, you must have courses that meet the following requirements:

- 1 course for each of the eight Institutional learning outcomes
- Of those 8 courses, a minimum of 4 (1 in each theme) must be outside the discipline.
- Of those 8 courses, one must also be designated as high impact.
- You must also complete the Capstone course in the final 30 credits of your study.

	Institutional Learning Outcome	Course	Inside or Outside?	High Impact?
Connection	Communication			
	Teamwork			
Engagement	Lifelong Learning			
	Social Responsibility			
Exploration	Knowledge			
	Critical Thinking			
Local-to-Global	Indigenous Knowledges & Ways			
	Intercultural Awareness			
	Capstone			

**How do I search for an ILO course?**

Visit the [course schedule](#) and select a term. On the following screen, click the Attribute box and select an ILO.