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OFFICE OF THE REGISTRAR  
CALGARY, ALBERTA, CANADA

# TRANSCRIPT OF ACADEMIC RECORD

Page 1 of 2

► INFORMATION TO ASSIST IN EVALUATING  
TRANSCRIPT ON REVERSE.

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AND BEARING REGISTRAR'S SIGNATURE AND THE  
UNIVERSITY SEAL. CERTIFIED TRUE STATEMENT OF  
ACADEMIC RECORD. STUDENT IN GOOD STANDING  
UNLESS OTHERWISE NOTED.

Name: Hemanto Bairagi  
Student ID: 30030922  
Birthdate: Mar 01  
Print Date: 2025-10-12



INTERIM REGISTRAR

## ----- Credential Awarded -----

Credential: Bachelor of Science (Honours)  
Conferral: 2021-02-12  
Major: Astrophysics  
Major: Physics

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)

## Spring 2017

Course	Description	Attempted	Earned	Grade	Points
MATH 311	Linear Methods II	3.00	3.00	B+	9.900
Term GPA:	3.30	Term Totals:	3.00	3.00	9.900

## ----- Beginning of Undergraduate Programs Record -----

### ----- Transfer Credits -----

Transfer Credit from Athabasca University  
Total Transfer Units: 6.000

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

## Fall 2017

Course	Description	Attempted	Earned	Grade	Points
ASPH 307	Intro to Observational ASPH	3.00	3.00	B+	9.900
MATH 375	Diff Equations Eng & Scie	3.00	3.00	C	6.000
PHYS 341	Classical Mechanics I	3.00	3.00	B+	9.900
PHYS 375	Introduction to Optics & Waves	3.00	3.00	C+	6.900
PHYS 397	Applied Physics Laboratory I	3.00	3.00	A-	11.100

Term GPA: 2.92 Term Totals: 15.00 15.00 43.800

### ----- Test Credits -----

Total Transfer Units: 6.000

## Fall 2016

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)

Course	Description	Attempted	Earned	Grade	Points
ARKY 201	Introduction To Archaeology	3.00	3.00	B	9.000
GERM 202	German I	3.00	3.00	A-	11.100
MATH 275	Calculus for Engineers & Scie	3.00	3.00	B	9.000
PHYS 227	Classical Physics	3.00	3.00	B	9.000

Term GPA: 3.17 Term Totals: 12.00 12.00 38.100

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

## Winter 2018

Course	Description	Attempted	Earned	Grade	Points
CHEM 203	Gen CHEM:Change & Equil	3.00	3.00	B	9.000
Req Designation:	Extra to Degree				
GERM 204	German II	3.00	0.00	W	
MATH 377	Vector Calc for Eng & Scie	3.00	3.00	A-	11.100
PHYS 325	Modern Physics	3.00	3.00	A	12.000
PHYS 343	Classical Mechanics II	3.00	3.00	B-	8.100

Term GPA: 3.35 Term Totals: 12.00 12.00 40.200

## Winter 2017

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)

Course	Description	Attempted	Earned	Grade	Points
ASPH 213	Introduction To Astrophysics	3.00	3.00	B+	9.900
CPSC 217	Intro CPSC Multidisc Study I	3.00	0.00	D+	
MATH 211	Linear Methods I	3.00	3.00	C	6.000
MATH 277	Multivariable Calc Eng & Scie	3.00	3.00	B-	8.100
PHYS 255	Electromagnetic Theory I	3.00	3.00	A	12.000

Term GPA: 2.66 Term Totals: 15.00 12.00 39.900

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

## Spring 2018

Course	Description	Attempted	Earned	Grade	Points
CPSC 217	Intro CPSC Multidisc Study I	3.00	3.00	B+	9.900
ECON 201	Principles Of Microeconomics	3.00	3.00	A	12.000
Term GPA:	3.65	Term Totals:	6.00	6.00	21.900



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Name: Hemanto Bairagi  
Student ID: 30030922  
Birthdate: Mar 01  
Print Date: 2025-10-12



INTERIM REGISTRAR

Summer 2018

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

Course	Description	Attempted	Earned	Grade	Points
ECON 203	Principles Of Macroeconomics	3.00	3.00	B	9.000
PHIL 377	Elementary Formal Logic	3.00	3.00	B	9.000
Term GPA:	3.00	Term Totals:	6.00	6.00	18.000

Fall 2018

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

Course	Description	Attempted	Earned	Grade	Points
ASPH 401	Galactic Astrophysics	3.00	3.00	A-	11.100
MATH 433	Mathematical Methods Physics	3.00	3.00	A	12.000
PHYS 449	Statistical Mechanics I	3.00	3.00	A-	11.100
PHYS 455	Electromagnetic Theory II	3.00	3.00	B	9.000

Term GPA: 3.60 Term Totals: 12.00 12.00 43.200

Winter 2019

Program: Science Bachelor  
Bachelor of Science (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

Course	Description	Attempted	Earned	Grade	Points
ASPH 503	The Interstellar Medium	3.00	3.00	B+	9.900
PHYS 381	Computational Physics I	3.00	3.00	A-	11.100
PHYS 443	Quantum Mechanics I	3.00	3.00	A-	11.100
PHYS 457	Electromagnetic Theory III	3.00	3.00	B-	8.100
PHYS 497	Applied Physics Laboratory II	3.00	3.00	A-	11.100

Term GPA: 3.42 Term Totals: 15.00 15.00 51.300

Fall 2019

Program: Science Bachelor  
Bachelor of Science - Honours (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

Course	Description	Attempted	Earned	Grade	Points
PHYS 481	Computational Physics II	3.00	3.00	A-	11.100
PHYS 507	Solid State Physics	3.00	3.00	A+	12.000
PHYS 543	Quantum Mechanics II	3.00	3.00	A-	11.100
PHYS 597	Senior Physics Laboratory	3.00	3.00	A	12.000
PHYS 598A	Honours Research Thesis		0.00	MT	

Term GPA: 3.85 Term Totals: 12.00 12.00 46.200

Winter 2020

Program: Science Bachelor  
Bachelor of Science - Honours (Degree Stream)  
Astrophysics (Major)  
Physics (Major)

Course	Description	Attempted	Earned	Grade	Points
ASPH 403	Stellar Structure & Evolution	3.00	3.00	CR	
ASPH 509	HighEnergyAstrophys&Cosmology	3.00	3.00	CR	
PHYS 451	Statistical Mechanics II	3.00	3.00	B+	9.900
PHYS 501	Relativity	3.00	3.00	A	12.000
PHYS 598B	Honours Research Thesis	6.00	6.00	CR	

Term GPA: 3.65 Term Totals: 18.00 18.00 21.900

Dean's List - Faculty of Science

----- End of Transcript -----



UNIVERSITY OF  
CALGARY

# UNIVERSITY OF CALGARY

## RECOGNIZED STANDARD

The University of Calgary, established under the Statutes of the Province of Alberta, is a member of the Association of Commonwealth Universities and of the Association of Universities and Colleges of Canada.

## THE ACADEMIC YEAR

In May 1973 the University began operating under a four session organization. The length of sessions, exclusive of the examination periods, are:

Fall:	September to December (13 weeks)
Winter:	January to April (13 weeks)
Spring:	May to June (6 to 7 weeks)
Summer:	July to August (6 weeks)

Courses offered during the Spring/Summer carry the same weight as if offered in the Fall/Winter Sessions.

Prior to Spring 1973 the University conducted a Winter Session of 2 thirteen week terms and Summer Session of 6 weeks during the academic year (July 1-June 30).

In January 2007, the University replaced the word Session with Term.

## COURSE NUMBERING

Courses at the freshman level (immediately following Grade 12) are generally numbered in the 100's and 200's, senior courses 300's and 400's and upper level undergraduate courses 500's. Graduate courses may be 500's, 600's and 700's. In certain upper level undergraduate and graduate level courses, a decimal system may be used to identify different subject matter which may change from year to year but with the same course title and the same basic three digit number. There are also courses numbered 001-099 which are not restricted to a particular level of study.

Since July 1971 all even numbered courses denote full courses normally offered for 26 weeks over the Fall/Winter Sessions and all odd numbered courses denote half courses or less normally offered over 1 thirteen week session. Effective July 2003, this distinction was removed.

Effective July 1983, some courses numbered in the 100's may not have been counted toward degree requirements. Prior to this date, certain 100 level courses could be counted toward degree requirements in some programs.

## EXPLANATION OF CODES

In January 2007, the University adopted a framework of course weights, as follows:

Earned - Course Weight: 6 = Full Course, 3 = Half Course, 1.5 = Quarter Course, .75 = Eighth Course.

This change was applied retroactively to all courses offered in previous years.

## CREDIT/FAIL

Information about student performance in programmes where all or most courses are credit (CR) graded, (also known as pass/fail), may be obtained by contacting the faculty offering the programme.

## Grading System – Effective September 1975

Undergraduate and Graduate Grading

Grade	Grade Point Value (GPV)	Description
A+	4.0	Outstanding performance
A	4.0	Excellent
A-	3.7	Approaching excellent performance
B+	3.3	Exceeding good performance
B	3.0	Good performance
B-	2.7	Approaching good performance
C+	2.3	Exceeding satisfactory performance
C	2.0	Satisfactory performance
C-	1.7	Approaching satisfactory performance
D+	1.3	Marginal Pass
D	1.0	Minimal pass
CR		Completed requirements
F	0	Failure
I	0	Incomplete

## Symbols:

SGR	Supplemental granted
AE	Aegrotat standing
AU	Auditor
X	Grade not reported
DFT	Deferred term work
DFE	Deferred final examination
SFE	Special deferred final examination
RTW	Required to Withdraw
W	Withdraw
RMW	Remedial work required
MT	Multi term
GP	Grade pending
I	Incomplete
EW	Extenuating circumstance withdraw
IP	In progress/future registration

## PRIOR TO SEPTEMBER 1975

Undergraduate & Graduate Grading		Graduate Grading only (Effective Sept. 1973) - in courses numbered 600 or higher		
Grade	Grade Point Value	Grade	Grade Point Value	Description
A+	4	A+	4	Outstanding
A	4	A	4	Excellent
A-	4	A-	3.70	-
B+	3	B+	3.30	Good
B	3	B	3	Satisfactory
B-	3	B-	2.70	-
C	2	C	2	Fail
D	1	D	1	Fail
F	0	F	0	Fail

## PRIOR TO SEPTEMBER 1970

From July 1, 1967 to August, 1970 a five point letter grade system was used: A = 4, B = 3, C = 2, D = 1, F = 0 with the same descriptions as above.

## PRIOR TO JULY 1967 – PERCENTAGE GRADES

First Class Standing	80 and above
Second Class Standing	65 – 79
Third Class Standing	50 – 65
Fail (Undergraduate)	below 50

The pass grade for graduate students was 65 or higher.

NOTE: The General Faculties Council of the University has ruled that no conversion of letter grades to numerical grades will be issued.

## EXPLANATION OF OTHER SYMBOLS WHICH HAVE BEEN USED PRIOR TO 1970

S	- failure, supplemental granted
F	- failure, no supplemental
N	- credit withheld
Ab.D.	- absent, granted deferred final
Ab.F.	- absent, failed
P	- ungraded pass
IN	- incomplete
WP	- withdrew with permission
AB	- absent from final exam
Inc.	- incomplete