

Student Academic Transcript

Academic Transcript

Transcript Level

All Levels

Transcript Type

Unofficial

Student Information

Degree Awarded:

Institution Credit

Transcript Totals

This is not an official transcript. Courses which are in progress may also be included on this transcript.

Student Information

Name

Lyman Moreno

Birth Date

20-FEB

Curriculum Information

Current Program :

College

Graduate and  
Postdoc Studies

Major and  
Department

Chemical  
Engineering,  
Chemical and  
Biological Engin

## Degree Awarded:

### Awarded

Master of Science

### Degree Date

01-Jun-2010

### Major

Environmental  
Engineering

### Master's Thesis

Laboratory, Semi-Pilot and Room Scale Control of H<sub>2</sub>S Emission from Swine Barns Using Nitrite and Molybdate

### Awarded

Doctor of Philosophy

### Degree Date

04-Jun-2018

### Major

Chemical Engineering

### PhD Thesis

Treatment of Organic Wastewaters Using Microbial Fuel Cell Technology

## Institution Credit

Term : 2007 Fall Term

### College

Graduate Studies  
and Research

### Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CE	824	USask - Main Saskatoon Campus	GS	Advanced Physical Chemical Treatment	82	3.000	
CHE	861	USask - Main Saskatoon Campus	GS	Fundamental Biochemical Engineering	85	3.000	

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	6.000	6.000	6.000
Cumulative	6.000	6.000	6.000

Term : 2008 Winter Term

## College

Graduate Studies  
and Research

## Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ABE	840	USask - Main Saskatoon Campus	GS	Building Science	70	3.000	
ENVE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	
GSR	985	USask - Main Saskatoon Campus	GS	Introduction to Ethics and Integrity	CR	0.000	
SLSC	871	USask - Main Saskatoon Campus	GS	Research Design and Statistical Analysis in Soil Science	82	3.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	6.000	6.000	6.000
Cumulative	12.000	12.000	12.000

Term : 2008 Spring Term

## College

Graduate Studies  
and Research

## Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
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Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	12.000	12.000	12.000

Term : 2008 Summer Term

**College**

Graduate Studies  
and Research

**Major**

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	12.000	12.000	12.000

Term : 2008 Fall Term

**College**

Graduate Studies  
and Research

**Major**

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	882	USask - Main Saskatoon Campus	GS	Design of Industrial Waste Treatment Systems	72	3.000	
ENVE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	3.000	3.000	3.000

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Cumulative	15.000	15.000	15.000

Term : 2009 Winter Term

### College

Graduate Studies  
and Research

### Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

Term : 2009 Spring Term

### College

Graduate Studies  
and Research

### Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

Term : 2009 Summer Term

## College

Graduate Studies  
and Research

## Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

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Term : 2009 Fall Term

## College

Graduate Studies  
and Research

## Major

Environmental  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
ENVE	990	USask - Main Saskatoon Campus	GS	Seminar	CR	0.000	
ENVE	994	USask - Main Saskatoon Campus	GS	Research - Thesis	CR	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

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Term : 2010 Spring Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

Term : 2010 Summer Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

Term : 2010 Fall Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	15.000	15.000	15.000

Term : 2011 Winter Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CE	825	USask - Main Saskatoon Campus	GS	Biological Waste Water Treatment	85	3.000	
CHE	898	USask - Main Saskatoon Campus	GS	Elec Methods for Biol Fuel Cell	90	3.000	
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	6.000	6.000	6.000
Cumulative	21.000	21.000	21.000

Term : 2011 Spring Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2011 Summer Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering



Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2011 Fall Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2012 Winter Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2012 Spring Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2012 Summer Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2012 Fall Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	
GSR	989	USask - Main Saskatoon Campus	GS	Introduction to University Teaching	P	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2013 Winter Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	
GSR	989	USask - Main Saskatoon Campus	GS	Introduction to University Teaching	P	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2013 Spring Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2013 Summer Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2013 Fall Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2014 Winter Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	
GSR	984	USask - Main Saskatoon Campus	GS	Thinking Critically Professional Skills for Global Citizens	CR	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2014 Spring Term

**College**

Graduate Studies  
and Research

**Major**

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2014 Summer Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2014 Fall Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2015 Winter Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2015 Spring Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2015 Summer Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2015 Fall Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2016 Winter Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2016 Spring Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	



Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2016 Summer Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2016 Fall Term

### College

Graduate Studies  
and Research

### Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2017 Winter Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2017 Spring Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

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Term : 2017 Summer Term

## College

Graduate Studies  
and Research

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2017 Fall Term

## College

Graduate and  
Postdoc Studies

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	IP	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	IP	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Term : 2018 Winter Term

## College

Graduate and  
Postdoc Studies

## Major

Chemical  
Engineering

Subject	Course	Campus	Level	Title	Grade	Credit Hours	R
CHE	990	USask - Main Saskatoon Campus	GS	Seminar	CR	0.000	
CHE	996	USask - Main Saskatoon Campus	GS	Research - Dissertation	CR	0.000	

Term Totals (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Current Term	0.000	0.000	0.000
Cumulative	21.000	21.000	21.000

Transcript Totals

Transcript Totals - (Graduate Studies Level)	Attempt Hours	Passed Hours	Earned Hours
Total Institution	21.000	21.000	21.000