University of Oregon
Office of the Registrar 5257 University of Oregon Eugene, Oregon 97403-5257 Phone 541-346-2935

Date of Birth: O605/XX Admit Term: Fall 2017 Physics Declared Physics Declared Physics Declared Physics Dissertation: Office Physics Declared Physics Dissertation: Office O	Graduate Transcript Page 1				
Spring 2019 Physics Doctoral	Record of: Amarel, James Louis Print Date	e: 26-JUL-22 ID: 951-63-9363			
Spring 2020 Advanced to Candidacy for PhD in Physics Cal Poly St U-San Luis Obispo BS 17-JUN-2017	Admit Term: Fall 2017 Matric Term: Fall 2017 UO Degrees: Doctor of Philosophy, Mar 19, 2022 Major: Physics Dissertation: On a Spectral Method for Calculating the Electrical Resistivity of a Low Temperature Metal from the Linearized	Spring 2019 Physics Doctoral PHYS 601 Research 8.00 P* PHYS 607 Sem Physics Colloq 1.00 P* PHYS 607 Sem Theoretical Phys 1.00 P* PHYS 607 Sem Condensed Matter 1.00 P* PHYS 609 Superv Tutoring 1.00 P* PHYS 666 Quantum Field Theory 4.00 A- Earned Hrs: 16.00 GPA Hrs: 4.00 Quality Pts: 14.80 GPA: 3.70			
Earned Hrs: 16.00 GPA Hrs: 00 Quality Pts: 0.00 GPA: 0.00	Spring 2020 Advanced to Candidacy for PhD in Physics	PHYS 601 Research 10.00 P* PHYS 605 Reading 3.00 P* PHYS 607 Sem Phys Colloquium 1.00 P* PHYS 607 Sem Theoretical Phys 1.00 P*			
Phys 612 Statistical Physics 4.00 A A A A A A A A A	Fall 2017 Physics Doctoral PHYS 607 Sem Phys Colloquium 1,00 P* PHYS 609 Superv Tutoring 2.00 P* PHYS 610 Math Mthds Elec & Magn 4.00 A PHYS 631 Theoretical Mechanics 4.00 A + PHYS 631 Quantum Mechanics 4.00 A + Earned Hrs: 15.00 GPA Hrs: 12.00 Quality Pts: 50.40 GPA: 4.20 Winter 2018 Physics Doctoral PHYS 609 Superv Tutoring 1.00 P* PHYS 622 Electromagnetic Theory 4.00 A PHYS 632 Quantum Mechanics 4.00 A PHYS 674 Theor Condensed Matter 4.00 B Earned Hrs: 13.00 GPA Hrs: 12.00 Quality Pts: 44.00 GPA: 3.66 Spring 2018 Physics	Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Winter 2020 Physics Doctoral PHYS 601 Research 13.00 P* PHYS 607 Sem Theoretical Phys 1.00 P* PHYS 607 Sem Phys Colloquium 1.00 P* PHYS 609 Superv Tutoring 1.00 P* Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Spring 2020 Physics Doctoral PHYS 601 Research 16.00 P* COVID-19 disruption: remote instruction for courses; expanded pass/no pass grades. Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Fall 2020 Physics Doctoral PHYS 601 Research 13.00 P*			
PHYS 601 Research PHYS 605 Reading PHYS 607 Sem Theoretical Phys PHYS 607 Sem Phys Colloquium PHYS 607 Sem Condensed Matter PHYS 607 Sem Condensed Matter PHYS 609 Superv Tutoring PHYS 605 Quantum Field Theory PHYS 605 Quantum Field Theory PHYS 605 Reading P* Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Winter 2022 Physics PHYS 603 Res COVID-19 disruption: extended grade option change deadline. PHYS 609 Superv Tutoring PHYS 609 Superv Tutoring PHYS 605 Quantum Field Theory PHYS 605 Quantum Field Theory PHYS 606 P* PHYS 607 Sem Condensed Matter PHYS 609 Superv Tutoring PHYS 609 Superv Tutoring PHYS 605 Quantum Field Theory PHYS 605 Quantum Field Theory PHYS 605 P* PHYS 606 P* PHYS 607 Sem Condensed Matter PHYS 609 Superv Tutoring PHYS 607 PHYS 609 Superv Tutoring PHYS 608 PHYS 609 Superv Tutoring PH	PHYS 623 Electromagnetic Theory 4.00 B PHYS 633 Quantum Mechanics 4.00 A PHYS 675 Theor Condensed Matter 4.00 A Earned Hrs: 16.00 GPA: 3.82 Fall 2018 Physics Doctoral PHYS 601 Research 1.00 P* PHYS 605 Reading 1.00 P* PHYS 607 Sem Theoretical Phys 1.00 P* PHYS 609 Superv Tutoring 1.00 P* PHYS 610 Frontiers Cond Matter 2.00 P* PHYS 634 Adv Quantum Mechanics 4.00 A Earned Hrs: 10.00 GPA Hrs: 4.00 Quality Pts: 16.00 GPA; 4.00	PHYS 609 Superv Tutoring 1.00 P* COVID-19 disruption: remote instruction for most courses; expanded pass/no pass grades. Earned Hrs: 15.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Winter 2021 Physics Doctoral PHYS 603 Dissertation 16.00 P* Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Spring 2021 Physics Doctoral PHYS 601 PHYS 601 Grad Research 16.00 P* Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00			
(Continued on Next Column) (Continued on Page 2)	PHYS 601 Research 1.00 P* PHYS 605 Reading 1.00 P* PHYS 607 Sem Theoretical Phys 1.00 P* PHYS 607 Sem Phys Colloquium 1.00 P* PHYS 607 Sem Condensed Matter 1.00 P* PHYS 609 Superv Tutoring 1.00 P* PHYS 665 Quantum Field Theory 4.00 A- Earned Hrs: 10.00 GPA Hrs: 4.00 Quality Pts: 14.80 GPA: 3.70	PHYS 603 Dissertation Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00 Winter 2022 Physics Doctoral PHYS 603 Res 16.00 P* COVID-19 disruption: extended grade option change deadline. Earned Hrs: 16.00 GPA Hrs: .00 Quality Pts: .00 GPA: .00			

Issued to: James Amarel jlamarel@gmail.com



TRANSCRIPT EXPLANATION PRINTED ON REVERSE SIDE

Course Title

Credits Grade Repeat

Graduate Transcript

Page 2

Record of: Amarel, James Louis Print Date: 26-JUL-22 ID: 951-63-9363

Transcript Totals

Earned Hrs GPA Hrs GPA**Points** Total Institution: Total Transfer: 207.00 201.20 52.00 3.86

Overall: 207.00

Subject No

THE INFORMATION IN THIS TRANSCRIPT IS CONFIDENTIAL AND SHOULD NOT BE RELEASED WITHOUT THE STUDENT'S WRITTEN CONSENT

End of Transcript



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University of Oregon

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Summer 2018 Physics

Bouldering I

Earned Hrs: 1.00 GPA Hrs: .00 Quality Pts:

Office of the Registrar 5257 University of Oregon Eugene, Oregon 97403-5257 Phone 541-346-2935

1.00

Doctoral

P*

.00 GPA: .00

Undergraduate Transcript Page 1 ID: 951-63-9363 Record of: Amarel, James Louis Print Date: 26-JUL-22 Date of Birth: 06/05/XX Doctor of Philosophy, Mar 19, 2022 **UO** Degrees: Physics
On a Spectral Method for Calculating
the Electrical Resistivity of a Low Major: Dissertation: Temperature Metal from the Linearized Boltzmann Equation. Comments: Cal Poly St U-San Luis Obispo BS 17-JUN-2017 Subject No Course Title Credits Grade Repeat Winter 2018 **Physics Doctoral**

PEMB 211 Hatha Yoga I Earned Hrs: .00 GPA Hrs: .00 Quality Pts: 1.00 .00 GPA: .00 **Doctoral** Winter 2019 **Physics PEO** 285 Wilderness Survival 1.00

Earned Hrs: 1.00 GPA Hrs: 1.00 Quality Pts: 4.00 GPA: 4.00

Transcript Totals Earned Hrs GPA Hrs GPAPoints -2.00 Total Institution: 4.00 4.00 Total Transfer: 2.00 Overall:

End of Transcript

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TRANSCRIPT EXPLANATION PRINTED ON REVERSE SIDE

Accreditation

The University of Oregon is accredited by the Northwest Commission on Colleges and Universities.

Authenticity

An official University of Oregon transcript is printed on white security paper with a green background and a dark green border. The University seal appears in the center. Facsimiles of the University Registrar's signature and the University seal are printed at the bottom or on the reverse. If the transcript is photocopied, the word "void" will appear across the face. Attempts to alter the transcript using chemical agents will cause the paper to stain brown. A thermochromic ink square appears at the bottom of the page.

Academic records for students attending Fall 1986 and after are printed in portrait format (81/2" x 11" vertical). Records prior to Fall 1986 are printed in landscape format (81/2" x 11" horizontal). Some records of coursework taken prior to Fall 1986 may have been converted to the portrait format.

Separate transcripts are generated for each level: undergraduate, graduate, law. Students may request a partial transcript to include only a specific level.

In accordance with the recommendations of the American Association of Collegiate Registrars and Admissions Officers, all transcripts provided directly to the student, whether official or unofficial, will be marked "Issued to Student," or have other markings to clearly inform the receiver that the transcript has been personally handled by the student.

Degrees and Credit Awarded by other Institutions

Any information displayed reflecting degrees awarded by, or transfer work accepted from, other institutions should be verified with the original institution for accuracy.

Under the provisions of Public Law 93-380, the information provided in this document is not to be released to others without the written consent of the student. The University of Oregon is an equal opportunity, affirmative action institution committed to cultural diversity.

1		Course Numbering System
	001-099	Remedial courses which carry no credit toward a degree. Exceptions: MATH 095 and first-year foreign languages taken prior to Summer 1982.
	100-299	Lower-division undergraduate credit. H designates Honors College courses.
	300-399	Upper-division undergraduate credit. H designates Honors College courses.
	400-499	Upper-division undergraduate credit H designates Honors College courses. Prior to Fall 1990, courses designated G or M carry graduate credit.
	500-599	Graduate credit intended for graduate students; undergraduates may be enrolled in the same course when a corresponding 400-level section is being offered. Prior to Fall 1990, with designation P, professional courses suitable for graduate students holding a bachelor's degree in a field other than their graduate professional field.
l	600-699	Graduate credit: enrollment limited to graduate students only.
l	700-799	Graduate credit for graduate professional degrees only.
ı	Courses nun	nhered 198, 199, 399, 400-410, 500-510, 600-610, and 700-710, may be

repeated in successive terms under the same number, with varying credits. M designates multi-listed courses.

Student Classification

Student major and type appear with each term designation for students attending after Summer 1990.

Undergraduate (UG)	Graduate (GR)	Law (LW)	Non-Admit (NU, NG)
Freshman (0-44 credits) Sophomore (45-89 credits) Junior (90-134 credits) Senior (135+ credits) Post Baccalaureate	Post Baccalaureate Pre-Masters Conditional-Masters Masters Post-Masters Conditional Doctoral Doctoral Post-Doctoral	Unclassified First Year Second Year Third Year Master of Laws	Unclassified Community Education Pre-Baccalaureate

	5	Grading System
Grade	Points	Definition
Α	4	Excellent
В	3	Good
С	2	Satisfactory
D	1	Inferior performance. Not used Fall 1970-Summer 1977. Law School use effective Fall 1978.
F	0	Unsatisfactory performance, no credit awarded. Not used Fall 1970-Summer 1977.
+ or -	-	Plus or minus 0.30 points, effective Fall 1990; Law School: plus 0.50 points, Fall 1990-Summer 1993.
Р	-	Satisfactory: undergraduate work, C- or above; graduate work, B- or above; law work, D- or above.
N	-	Less than satisfactory performance, no credit awarded: undergraduate work, D+ or lower; graduate work, C+ or lower.
		Law work calculated as F (0 points) in the GPA.
AU	-	Audit, no credit awarded. Effective Fall 1990.
W	-	Officially withdrawn without penalty.
I	-	Incomplete; when the quality of work is satisfactory, but some minor yet essential requirement must be completed.
X	-	No grade reported by the instructor. Recorded by the Registrar.
Υ	-	No basis for grade. Recorded by the instructor. Used through Summer 2017.

Credit

Undergraduate and graduate credits are recorded in quarter hours. Effective Fall 1973, Credit on Law-level records is recorded in semester hours. Credit earned at another institution and accepted by the University of Oregon is recorded in quarter hours.

Symbols used on the Transcript

Immediately following the grade:

- Course offered P/N only. Restriction set by Curriculum Committee or academic department.
- # Following grade of N, course taken P/N. Used Fall 1970-Summer 1977.
- D or E Repetition, or remedial course carrying no credit. Excluded from term and cumulative GPA. +
 - Repeated course, excluded from cumulative GPA only. Effective Fall 2016. + G
 - L Repeated course, included in term and cumulative GPA. Effective Fall 2016. +
 - Regression, included in term and cumulative GPA. Effective through Summer 2016, also used to indicate repetition. + Μ
 - Reserved for graduate credit. Effective through Summer 1990.
- + Credit is awarded only once for non-repeatable courses, and is not awarded for regression or coursework taken beyond catalog limitations. GPA exclusions apply only to graded (A-F) courses.

Immediately following the course title:

- Approved for Arts & Letters group. (Undergraduate degree requirement effective Fall 1982.) >1
- Approved for Social Science group. (Undergraduate degree requirement effective Fall 1982.) >2
- >3 Approved for Science group. (Undergraduate degree requirement effective Fall 1982.)
- >4 Approved for Science group and Math requirement. (Undergraduate degree requirement effective Fall 1983.)
- Approved for Math requirement. (Undergraduate degree requirement effective Fall 1983.)

Definitions: Ehrs, Earned hours; GPA-hrs, credits used in GPA calculation; Pts, quality points. Academic Standing is indicated either in the comments section or as a notation following the term totals line.

Grade Point Average

The University of Oregon reinstated the GPA Fall 1990. No GPA is calculated for students last enrolled prior to Fall 1990. The GPA is determined by dividing the total points by total GPA hours. Only UO work is used in calculating the GPA.