Student No. 17451385 Date of Birth: 16-OCT

UNIVERSITY OF HAWAI'I AT MĀNOA

2600 Campus Rd, 010, Honolulu, Hawaii 96822 manoa.hawaii.edu (808)956-8010

Page: 1

Record of: Michinari Sakai

60 N Nimitz Hwy Apt 1107

Honolulu, HI 96817

Issued To: MICHINARI SAKAI

15232 MARTHA ST APT 15

Van Nuys, CA 91411-3201

| Course Level: | Graduate | | | SUBJ NO. | HANNA COURSE TITLE | CRED GRD | PTS R |
|--|---|-----------------|---------|---|--|-------------|--|
| | | | | Institution In | formation continued: | | |
| Comments: | THE EXPENSION AT AN | | | INGITY OF | HALWAUT MARNON | | |
| SUN MOON UNIVE | RSITY, KOREA - BS 2005 | | | Spring 2009 | | | |
| AWALLAL | | | AVAIA | PHYS 600 A | Methods of Theoretical Physics | 3.00 A+ | 12.00 |
| Degree Awarded | : Doctor of Philosophy 14-MAY- | 2016 | | PHYS 651 | Electrodynamics II | 3.00 A | 12.00 |
| M | Major : Physics | | | PHYS 671 | Quantum Mechanics | 3.00 A- | 11.10 |
| | | | | Ehrs: | 9.00 GPA-Hrs: 9.00 QPts: | 35.10 GPA: | 3.90 |
| Dissertation | | | | | MARKET NEW YORK | | |
| "High Energy N | Neutrino Analysis at Kamland | | | | | | LATI |
| and Applicatio | on to Dark Matter Search." | | | Fall 2009 | | | |
| DOWNER THE AUTO | | | | PHYS 460 | Physical Optics | 3.00 A | 12.00 |
| Chairperson-Jo | ohn Learned | | | PHYS 690 | Seminar | 1.00 CR | 0.00 |
| SUBJ NO. | COURSE TITLE | CRED GRD | PTS R | PHYS 699 | Directed Research | 3.00 A | 12.00 |
| 777700 | | | | PHYS 711 | Topics in Particles and Fields | 3.00 A | 12.00 |
| | | | | PHYS 772 | Quantum Field Theory I | 3.00 A | 12.00 |
| INSTITUTION CR | REDIT: | | | Ehrs: | 13.00 GPA-Hrs: 12.00 QPts: | 48.00 GPA: | 4.00 |
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| Fall 2007 | | | | Spring 2010 | | | |
| TO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | TORAL PROGRAM 08/20/07 | | | PHYS 660 | Advanced Optics | 3.00 B+ | 9.90 |
| PHYS 400 | Appl of Math in Physical Sci | 3.00 A+ | 12.00 | PHYS 699 | Directed Research | 3.00 A | 12.00 |
| PHYS 610 | Anlytical Mechanics I | 3.00 A | 12.00 | PHYS 712 | Spec Tpc: Experimental Physics | | 12.00 |
| Ehrs: | 6.00 GPA-Hrs: 6.00 QPts: | 24.00 GPA: | 4.00 | PHYS 773 | Quantum Field Theory II | 3.00 A | 12.00 |
| EPHVENDI | | | | Ehrs: | 12.00 GPA-Hrs: 12.00 QPts: | 45.90 GPA: | 3.82 |
| AND STATEMENT OF THE | | | | | | WINDS AND S | 11 11 11 11 11 11 11 11 11 11 11 11 11 |
| Spring 2008 | | | 10.00 | | | | |
| PHYS 311 | Theoretical Mechanics II | 3.00 A | 12.00 | Fall 2010 | | | |
| PHYS 430 | Thermodynamics & Stat Mechani | | 11.10 | Total Control of the | | | |
| PHYS 450 | Electromagnetic Waves | 3.00 A | 12.00 | PHYS 699 | EXAMINATION PASSED 11/24/10 Directed Research | 3.00 A | 12.00 |
| Ehrs: | 9.00 GPA-Hrs: 9.00 QPts: | 35.10 GPA: | 3.90 | PHYS 777 | Nuclear & Particle Physics I | 3.00 A | 12.00 |
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| / Fall 2008 / / | | | | Enis: | G.VV GEATLE. G.VV VPCS! | ZI.VV OFA: | |
| and the same of the same of | Electrodynamics I | 3.00 A+ | 12.00 | Transport to a | | | |
| PHYS 650 | Ouantum Mechanics | 3.00 A+ | 12.00 | Spring 2011 | | | |
| PHYS 670 Ehrs: | 6.00 GPA-Hrs: 6.00 OPts: | 24.00 GPA: | 4.00 | PHYS 699 | Directed Research | 9.00 A | 36.00 |
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AEGISTRAR

ISSUED TO STUDENT

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Spring 2015 PHYS 699

Student No. 17451385

Date of Birth: 16-OCT

UNIVERSITY OF HAWAI'I AT MĀNOA

2600 Campus Rd, 010, Honolulu, Hawaii 96822 manoa.hawaii.edu (808)956-8010 Date Issued: 25-JAN-2018

| ANAGA HAT | | | | raye. | 1 Y |
|----------------|--|---|--|----------------|--------|
| | Michinari Sakai | | | | pero n |
| Level: | Graduate | JIMAL | SUBJ NO. COURSE TITLE | CRED GRD I | PTS R |
| | | AWARAT | Institution Information continued: | | |
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| AAAAH AT | | DTC D | R Fall 2015 | | |
| SUBJ NO. | COURSE TITLE CRED GRD | | PHYS 800 Dissertation Research | 9.00 S 0 | .00 |
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| Fall 2011 | Electronics for Physicists 3.00 A | 12 00 | COLUMN TALES SEASON OF THE STATE OF THE SEASON | UNIVER | |
| | Directed Research 6.00 A | 24.00 | Spring 2016 | | |
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HEGISTRAR

TRANSCRIPT RECORD

SUN MOON UNIVERSITY

B06-7745 June 21, 2006 No. Date.

| - | 65 | sex | Date of Birth | | 100 | October 16, 1980 | |
|--|-------------|---------|---|----------------|---------|--|---------|
| Name SAKAI MICHINAKI | M | Male | Date of Admission | | | March 2, 2001 | |
| Department NATURAL SCIENCE | | | graduation | | | August 19, 2005 | |
| Subject | Grade Cr | Credits | Subject | Grade | Credits | Subject Grade | Credits |
| Total recognition: 0 | | | Introduction to Modern Optics Real Analysis I Analytical Geometry | A+ A+ A+ | ოოო | Differential Geometry A+ Abstract Algebra I Unification Thought B+ | 000 |
| 2001 Year 1st Semester Bible and Divine Principle I | B+ | 2 | Chinese I Fineart Life | A+ A+ | 600 | | 19 |
| Chapel Calculus I | P A+ | | Total C. Long C. | 4.35 | 20 | Total Credits: 159 | |
| General Chemistry 1 Information Processing I | A+ A+ | നന | Chapel | | | Total Grade Average: 4.33(95.8/100) | |
| Freshman English I General Physics and Physics Experiment I | A+ A+ | ာကက | Japanese II Introduction to Quantum Mechanics Amplication of Photo-electrical Experiments | A+ ++ | 000 | | |
| Total | 4.4 | 20 | Application of index electrons applications Laser Physics | 4+ 4+ |) e) e) | | |
| 2001 Year 1st Semester AUF Inernational Fellowship Program | A+ | 23 | Real Analysis II Em-Yang constitution and health | A+ B+ | m 01 | | |
| Total | 4.5 | 2 | Total + | 4.4 | 20 | | |
| 2001 Year 2nd Semester | | | Chanel 2004 Year 1st Semester | Д | | | |
| Bible and Divine Principle II Chapel | A+ | 7 0 | Solid State Physics Experiments in Physical Properties of Materi- | A+ A+ | 99 | | |
| Science and Philosophy Introcuction To The Creativity | A+ P + + | n m m | als I Introduction to Material Science | A+ | 000 | | 7 E |
| Information flocessing in General Physics and Physics Experiment II | A++ | -67 | Linear Algebra Number Theory | A+ O+ A+ | ကက | | |
| General Members 11 | A+ A+ | | C Programing Language Discrete Mathematics | A+ A+ | 03 65 | Kemarks. 1. Hours—Per_Week: 50 Minutes gloss work for 1 semaster | |
| Total | 4.35 | 20 | Total | 4.45 | 20 | makes 1 credits. (100 minutes of laboratory work per week for 1 semester makes 1 credit) | |
| Changle 2002 Year 2nd Semester | c | | 2004 Year 2nd Semester | | | 2. Week-Per-Year | |
| Chapter Electromagnetic Engineering Tritoduction to Mothematical Duncies II | A+ A+ | | Applied Linear Algebra Advanced Calculus | A+ A+ | ကက | 3. Grade Points: | |
| Digital Circuits Lab. | A+ 0 | | Statistics Numerical Analysis | A+ A+ | ကက | CT = 75-79, C=70-74, D=65-69, D=60-64 | |
| Vacuum Sorience | ± = | o eo e | Digital Control Lab. Fuzzy Theory | A+ A+ | ကက | THE LOWEST DASSING STAGE IS D (00) | |
| Morea Global Issues | A+ B | | Total | 4.5 | 18 | | |
| Total | 3.9 | 20 | 2005 Year 1st Semester | | | San San | |
| 2003 Year 1st Semester | | | Assemble and Application of PC | A | 2 0 | and me | 1 |
| Chapel Sensor and Vacuum Experiments Thermal and Statistical Mechanics | P A+ | ကက | Special Topics in Advanced Materials Chinese II | A+ A | ာကက | BONG TAE KIM President | |

#100, KalSanRi TangJeongMyeon AsanSI ChungNam 336-708 Korea TEL:(041) 530-2114 FAX:(041) 530-2139