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COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

NAME: Noah Jacob Zweben
SSN#: XXX-XX-1123
SCHOOL: FU FOUNDATN SCHL OF ENGINEERING & APPLIED SCIENCE:UGRAD

DEGREE(S) AWARDED: DATE AWARDED:
Bachelor of Science   May 17, 2017   MAJOR: COMPUTER SCIENCE
                                              HONORS: SUMMA CUM LAUDE
                                                      VALEDICTORIAN

SUBJECT COURSE TITLE	POINTS	GRADE		SUBJECT COURSE TITLE	POINTS	GRADE
NUMBER				NUMBER		

Fall 2013

SUBJECT		COURSE	TITLE	POINTS	GRADE
CHEM	C	1403	GENERAL CHEMISTRY I-LECTURES	3.50	A+
CHEM	C	1405	GENERAL CHEMISTRY I – REC	0.00	
ENGL	C	1010	UNIVERSITY WRITING	3.00	A
MATH	V	1102	CALCULUS II	3.00	A+
MECE	E	1001	MECH ENGI:MICROMACH/JUMBO JETS	3.00	A+
PHYS	C	1401	INTRO TO MECHANICS & THERMO	3.00	A+
				GPA	4.266

HONORS: DEAN'S LIST

Spring 2014

SUBJECT		COURSE	TITLE	POINTS	GRADE
ELEN	E	1201	INTRO-ELECTRICAL ENGINEERING	3.50	A+
ENGI	E	1006	INTRO TO COMP FOR ENG/APP SCI	3.00	A+
ENGI	E	1102	THE ART OF ENGINEERING	4.00	A
MATH	V	1201	CALCULUS III	3.00	A+
PHYS	C	1402	INTRO TO ELEC/MAGNETSM & OPTCS	3.00	A
				GPA	4.190

HONORS: DEAN'S LIST

Fall 2014

SUBJECT		COURSE	TITLE	POINTS	GRADE
COCI	C	1101	CONTEMP WESTERN CIVILIZATION I	4.00	A
ELEN	E	3081	CIRCUIT ANALYSIS LABORATORY	1.00	A+
ELEN	E	3201	CIRCUIT ANALYSIS	3.50	A+
MATH	V	1202	CALCULUS IV	3.00	A+
PHED	C	1001	PHYSICAL EDUCATION ACTIVITIES	1.00	P
PHYS	C	1403	INTRO-CLASSCL & QUANTUM WAVES	3.00	A-
PHYS	C	1493	INTRO TO EXPERIMENTAL PHYS-LAB	3.00	A
				GPA	4.084

HONORS: DEAN'S LIST

Spring 2015

SUBJECT		COURSE	TITLE	POINTS	GRADE
APMA	E	2101	INTRO TO APPLIED MATHEMATICS	3.00	A+
COCI	C	1102	CONTEMP WESTRN CIVILIZATION II	4.00	A+
DNCE	BC	2252	AFRICAN DANCE I	1.00	A
ECON	W	1105	PRINCIPLES OF ECONOMICS	4.00	A+
ECON	W	1155	PRINCIPLES OF ECONOMICS-DISC	0.00	
ENME	E	3105	MECHANICS I	4.00	A+
MECE	E	3408	COMPUTER GRAPHICS & DESIGN	3.00	A+
				GPA	4.312

HONORS: DEAN'S LIST

Fall 2015

SUBJECT		COURSE	TITLE	POINTS	GRADE
COMS	W	1004	INTRO-COMPUT SCI/PROGRAM-JAVA	3.00	A+
COMS	W	3134	DATA STRUCTURES IN JAVA	3.00	A+
COMS	W	3203	INTRO-COMBINATORICS/GRAPH THRY	3.00	A+
CSEE	W	3827	FUNDAMENTALS OF COMPUTER SYSTS	3.00	A+
HUMA	W	1123	MASTERPIECES OF WESTERN MUSIC	3.00	A+
				GPA	4.330

HONORS: DEAN'S LIST

Spring 2016

SUBJECT		COURSE	TITLE	POINTS	GRADE
COMS	E	0004	APPLICATIONS-TRACK	0.00	
COMS	W	3157	ADVANCED PROGRAMMING	4.00	A+
COMS	W	3261	COMPUTER SCIENCE THEORY	3.00	A
COMS	W	4160	COMPUTER GRAPHICS	3.00	A+
DNCE	BC	2253	AFRICAN DANCE II	0.00	A
POLS	W	3100	JUSTICE	3.00	P
SIEO	W	3600	INTRO PROBABILITY/STATISTICS	4.00	A-
				GPA	4.070

Fall 2016

SUBJECT		COURSE	TITLE	POINTS	GRADE
COMS	W	3998	UNDERGRAD PROJECTS IN COMP SCI	2.00	A
COMS	W	4731	COMPUTER VISION	3.00	A+
COMS	W	4733	COMPUTATNL ASPECTS OF ROBOTICS	3.00	A+
COMS	E	6998	UBIQUITIOUS GENOMICS	3.00	A-
LING	UN	3101	INTRODUCTION TO LINGUISTICS	3.00	A
				GPA	4.070

This official transcript was produced on
NOVEMBER 16, 2017.

NAME: Noah Jacob Zweben
SSN#: XXX-XX-1123

SUBJECT	COURSE NUMBER	TITLE	POINTS	GRADE
		Spring 2017		
COMS	W 3998	UNDERGRAD PROJECTS IN COMP SCI	2.00	A
COMS	W 4115	PROGRAMMING LANG & TRANSLATORS	3.00	A+
COMS	E 4156	ADVANCED SOFTWARE ENGINEERING	3.00	A+
COMS	W 4172	3D UI AND AUGMENTED REALITY	3.00	A
HIST	UN 2555	AMERICA IN DEPRESSION & WAR	4.00	A
HIST	UN 2556	AMER IN DEPRESSION & WAR-DISC	0.00	
			GPA	4.132

HONORS: DEAN'S LIST

REMARKS

Cumulative GPA: 4.186

SEAL OF COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

Barry S. Kane
Associate Vice President and University Registrar

FINAL

SEAL OF COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

Columbia College, Engineering and Applied Science, General Studies, Graduate School of Arts and Sciences, International and Public Affairs, Library Service, Human Nutrition, Nursing, Occupational Therapy, Physical Therapy, Professional Studies, Special Studies Program, Summer Session
A, **B**, **C**, **D**, **F** (excellent, good, fair, poor, failing). NOTE: Plus and minus signs and the grades of **P** (pass) and **HP** (high pass) are used in some schools. The grade of **D** is not used in Graduate Nursing, Occupational Therapy, and Physical Therapy.

American Language Program, Center for Psychoanalytic Training and Research, Journalism
P (pass), **F** (failing). Grades of **A**, **B**, **C**, **D**, **P** (pass), **F** (failing) — used for some offerings from the American Language Program Spring 2009 and thereafter.

Architecture
HP (high pass), **P** (pass), **LP** (low pass), **F** (failing), and **A**, **B**, **C**, **D**, **F** — used June 1991 and thereafter **P** (pass), **F** (failing) — used prior to June 1991.

Arts
P (pass), **LP** (low pass), **F** (fail). **H** (honors) used prior to June 2015.

Business
H (honors), **HP** (high pass), **P1** (pass), **LP** (low pass), **P** (unweighted pass), **F** (failing); plus (+) and minus (-) used for H, HP and P1 grades Summer 2010 and thereafter.

College of Physicians and Surgeons
H (honors), **HP** (high pass), **P** (pass), **F** (failing).

College of Dental Medicine
H (honors), **P** (pass), **F** (failing).

Law
A through **C** [plus (+) and minus (-) with **A** and **B** only], **CR** (credit - equivalent to passing). **F** (failing) is used beginning with the class which entered Fall 1994. Some offerings are graded by **HP** (high pass), **P** (pass), **LP** (low pass), **F** (failing). **W** (withdrawn) signifies that the student was permitted to drop a course, for which he or she had been officially registered, after the close of the Law School's official Change of Program (add/drop) period. It carries no connotation of quality of student performance, nor is it considered in the calculation of academic honors.
E (excellent), **VG** (very good), **G** (good), **P** (pass), **U** (unsatisfactory), **CR** (credit) used from 1970 through the class which entered in Fall 1993.

Any student in the Law School's Juris Doctor program may, at any time, request that he or she be graded on the basis of Credit-Fail. In such event, the student's performance in every offering is graded in accordance with the standards outlined in the school's bulletin, but recorded on the transcript as Credit-Fail. A student electing the Credit-Fail option may revoke it at any time prior to graduation and receive or request a copy of his or her transcript with grades recorded in accordance with the policy outlined in the school bulletin. In all cases, the transcript received or requested by the student shall show, on a cumulative basis, all of the grades of the student presented in single format – i.e., all grades shall be in accordance with those set forth in the school bulletin, or all grades shall be stated as Credit or Fail.

Public Health
A, **B**, **C**, **D**, **F** - used Summer 1985 and thereafter. **H** (honors), **P** (pass), **F** (failing) — used prior to Summer 1985.

Social Work
E (excellent), **VG** (very good), **G** (good), **MP** (minimum pass), **F** (failing).
A though **C** is used beginning with the class which entered Fall 1997. Plus signs used with **B** and **C** only, while minus signs are used with all letter grades. The grade of **P** (pass) is given only for select classes.

OTHER GRADES USED IN THE UNIVERSITY

AB = Excused absence from final examination.

AR = Administrative Referral awarded temporarily if a final grade cannot be determined without additional information.

AU = Audit (auditing division only).

CP = Credit Pending. Assigned in graduate courses which regularly involve research projects extending beyond the end of the term. Until such time as a passing or failing grade is assigned, satisfactory progress is implied.

F* = Course dropped unofficially.

IN = Work Incomplete.

MU = Make-Up. Student has the privilege of taking a second final examination.

R = For the Business School: Indicates satisfactory completion of courses taken as part of an exchange program and earns academic credit.

R = For Columbia College: The grade given for course taken for no academic credit, or notation given for internship.

R = For the Graduate School of Arts and Sciences: By prior agreement, only a portion of total course work completed. Program determines academic credit.

R = For the School of International and Public Affairs: The grade given for a course taken for no academic credit.

UW = Unofficial Withdrawal.

UW = For the College of Physicians and Surgeons: Indicates significant attempted coursework which the student does not have the opportunity to complete as listed due to required repetition or withdrawal.

W = Withdrew from course.

YC = Year Course. Assigned at the end of the first term of a year course. A single grade for the entire course is given upon completion of the second term. Until such time as a passing or failing grade is assigned, satisfactory progress is implied.

OTHER INFORMATION

NOTE: All students who cross-register into other schools of the University are graded in the **A, B, C, D, F** grading system regardless of the grading system of their own school, except in the schools of Arts (prior to Spring 1993) and in Journalism (prior to Autumn 1992), in which the grades of P (pass) and **F** (failing) were assigned. Notations at the end of a term provide documentation of the type of separation from the University.

% of **A** Effective fall 1996: Transcripts of Columbia College students show the percentage of grades in the **A** (**A+**, **A**, **A-**) range in all classes with at least 12 grades, the mark of **R** excluded. Calculations are taken at two points in time, three weeks after the last final examination of the term and three weeks after the last final of the next term. Once taken, the percentage is final even if grades change or if grades are submitted after the calculation. For additional information about the grading policy of the Faculty of Columbia College, consult the College Bulletin.

KEY TO COURSE LISTINGS
A course listing consists of an area, a capital letter(s) (denotes school bulletin) and the four digit course number (see below).

*The **capital letter** indicates the University school, division, or affiliate offering the course:*

A	Graduate School of Architecture, Planning, and Preservation
B	School of Business
BC	Barnard College
C	Columbia College
D	College of Dental Medicine
E	School of Engineering and Applied Science
F	School of General Studies
G	Graduate School of Arts and Sciences
H	Reid Hall (Paris)
J	Graduate School of Journalism
K	School of Library Services/Continuing Education (effective Fall 2002)
L	School of Law
M	College of Physicians and Surgeons, Institute of Human Nutrition, Program in Occupational Therapy, Program in Physical Therapy, Psychoanalytical Training and Research
N	School of Nursing

O	Other Universities or Affiliates/Auditing
P	School of Public Health
Q	Computer Technology/Applications
R	School of the Arts
S	Summer Session
T	School of Social Work
TA-TZ	Teachers College
U	School of International and Public Affairs
V	Interschool Course
W	Interfaculty Course
Y	Teachers College
Z	American Language Program

*The **first digit** of the course number indicates the level of the course, as follows:*

0	Course that cannot be credited toward any degree
1	Undergraduate course
3	Undergraduate course, advanced
4	Graduate course open to qualified undergraduates
5	Graduate course open to qualified undergraduates
6	Graduate course
7	Graduate course
8	Graduate course, advanced
9	Graduate research course or seminar

Note: Level Designations Prior to 1961:
1-99 Undergraduate courses
100-299 Lower division graduate courses
300-999 Upper division graduate courses

The term designations are as follows:
X=Autumn Term, Y=Spring Term, S=Summer Term
Notations at the end of a term provide documentation of the type of separation from the University.