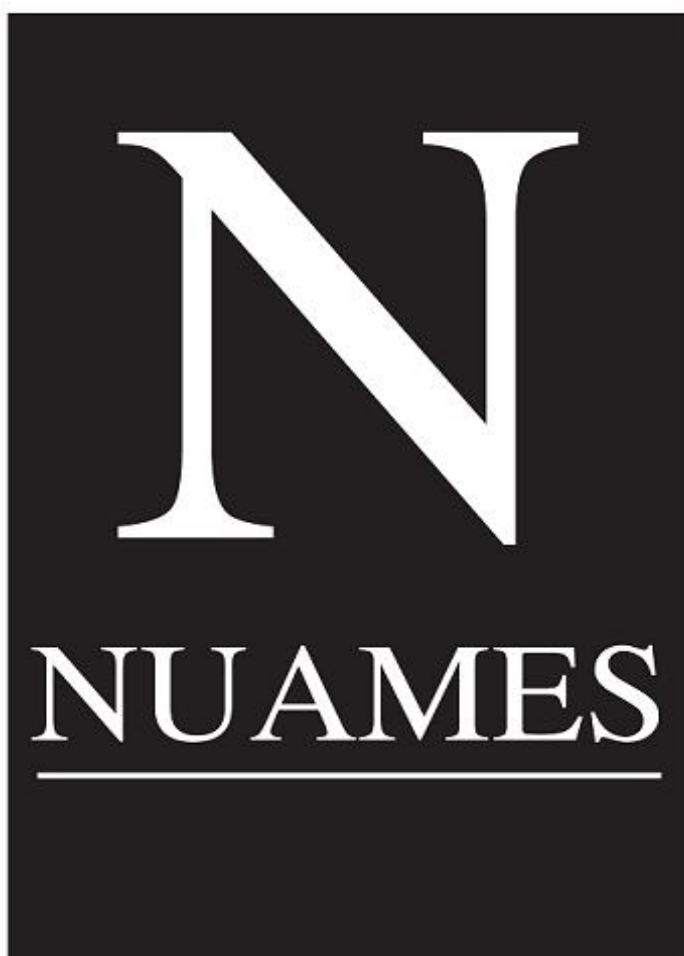


***Northern Utah Academy for Math, Engineering
and Science***

**Course Guide and Class Description
2016-2017**



NUAMES Policy Descriptions

Fee Schedule

In accordance with Utah State Law, the Northern Utah Academy for Math, Engineering, and Science Board of Directors annually reviews all fees charged students for various activities, classes, mailings, yearbooks, etc. This information will be published and made available to parents prior to the time of registration this spring. The State of Utah requires that all students who take Concurrent Enrollment Courses pay \$5 per credit partial tuition. This will be paid directly to the Higher Education Institution offering the concurrent enrollment credit.

Fee Waivers

No student will be denied the opportunity to participate in school activities and educational programs because of the inability to pay fees, deposits, or other charges. Students and/or parent(s) who need assistance should contact the office for assistance on fee waivers.

Civil Rights Certificate

The school assures that it will comply with:

Title IV of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, or national origin.

Section 504 of the Rehabilitation Act of 1973 as amended, which prohibits discrimination on the basis of handicap.

Title IX of the Education Amendments of 1972, as amended, which prohibits discrimination on the basis of sex in educational programs.

The Age Discrimination Act of 1975, as amended, which prohibits discrimination on the basis of age.

All regulations, guidelines, and standards lawfully adopted under the above status by the United States Department of Education.

NUAMES does not discriminate on the basis of race, color, sex, national origin, age or disability in its programs and activities. Title IX Coordinator: Deb Hefner, 801-395-3354. 2750 University Park Blvd., Layton, UT 84041. For discrimination questions regarding disability, section 504 coordinator is Kelli Booth, 801-395-3392. 2750 University Park Blvd., Layton, UT 84041. For assistance related to civil rights, you may contact the enforcement office serving our state. The OCR office for Utah is located at: Office for Civil Rights-Denver Office, U.S. Department of Education, 1244 Speer Blvd., Suite 310, Denver, CO 80204-3582. Phone 303-844-5695. Fax: 303-844-4304. Email: OCR.Denver@ed.gov

Any grievance regarding the above statements should be directed to:

Northern Utah Academy for Math, Engineering, and Science
Attn: Deb Hefner
2750 N. University Park Blvd.
Layton, UT 84041
(801) 395-3354

Asbestos Policy

Federal regulations require that schools be inspected for the presence of asbestos, a toxic material that has been used in the construction industry for many years. This school has been inspected for asbestos-containing material. Results of the inspection are contained in the Asbestos Management Plan available for your review at this school, the District Office, or a copy can be provided to you for the cost of reproduction.

2016 – 2017 Registration Information

Graduation Requirements

All students graduating from the Northern Utah Academy for Math, Engineering and Science must:

- Earn 27 total credits to graduate from NUAMES. Career assessment and guidance is offered to students to assist them in designing a course of study that will meet their needs, particularly during their SEOP. All students are encouraged to enroll in courses which provide development of job skills, prepare them for post high school education, and provide enrichment to life. Requirements are outlined below.
- Students involved in release time activities do not earn credit for release time classes. It is essential that these students pass every quarter of each class to reach the graduation requirement of 27 credits.

COURSES	NUAMES Graduation Credits
Engineering	2 Credits
Computer Technology	.50 Credit
English	4 Credits
Fine Arts	1.50 Credits
Health	.50 Credit
Healthy Lifestyles (PE) (.5 credit must be Fit for Life)	1.50 Credits
Math	4 Credits
Science	4 Credits
Social Studies	3 Credits
Geography	.50 Credit
World Civ.	1 Credit
US History	1 Credit
Gov. & Citizenship	.50 Credit
Financial Literacy	.50 Credit
Electives	5.50 Credits

Total - 27 Credits

If an unsatisfactory citizenship grade (U) is earned, the student must complete 4 hours of counselor approved community service. Forms are available in office.

Students must complete the Senior Capstone Project.

Students who would like to apply for the Regents Scholarship should plan to take 2 years of the same foreign language.

General Information

1. Proper registration is important. It is the responsibility of the student and parent(s)/guardian to check graduation requirements and course descriptions carefully. A counselor will be available for consultation.
2. Each student should have three goals in mind when registering for classes: filling core requirements, developing life skills, and preparing for post high school.
3. A counselor will work with students and parents to develop a College and Career Readiness Plan (CCRP) to assist students in meeting individual needs for graduation, career goals, and post high school education.
4. Each student must register for a full eight period schedule for both semesters. Select courses carefully. After registration, changes must be approved by parents and counselor unless a scheduling error has been made.
5. Some classes listed in this course guide may not be offered if minimum enrollment requirements are not met.
6. The State of Utah requires that all students who take Concurrent Enrollment Courses pay \$5 per credit partial tuition. **This will be paid directly to the Higher Education Institution offering the Concurrent Enrollment credit.**
7. Students who desire to take religious instruction (release time/Bible study) may do so on a non-credit basis.
8. Students are required to select either one full year or two half year alternate classes.
8. Early College enrollments allow students the opportunity to take college level courses from Weber State University and receive credit which applies to both high school and colleges. Students must take the ACT and have the following scores to be eligible for college courses. Students must also meet the one year enrolled at NUAMES and university index requirements. Index of 106 or above to qualify for scholarship. Students must also maintain a 3.25 GPA at both WSU and NUAMES. Parents and students are required to attend a Weber State University Parent/Student Information meeting prior to enrollment in Early College courses. Students must be approved by counselor to enroll in Weber State University courses:
9. Foreign language through level 2 is strongly recommended by the four-year universities. Some require it. Students should check with the college of their choice to determine foreign language requirements. NUAMES offers a full Spanish program. Students are required to have 2 years of foreign language for the Utah Scholars Program.
10. NUAMES will **NOT** be responsible for transporting or arranging for the transport of students who elect to take classes at schools other than NUAMES. The parent/guardian of such students will be solely responsible for the transport of their students to and from each school.

CITIZENSHIP POLICY

Along with an academic score, students earn citizenship credit as well. If a student's citizenship is unsatisfactory in a class, the student will earn an unsatisfactory grade in citizenship, or a "U". All U's must be made up to qualify for graduation.

If an unsatisfactory grade (U) is earned, the result is a .25 credit reduction. To make-up a "U", the student must complete 4 hours of approved community service and pay \$10 per "U". Forms are available in office.

All unsatisfactory citizenship grades ("U"s) must be made up prior to graduation. It is the student's responsibility to arrange to make-up all "U"s with the counselor.

COURSE SCHEDULE AND SELECTION

Students at NUAMES will register for eight classes and three alternates each semester. Periods 1, 2, 3, and 4 will be taught on "A" Day. Periods 5, 6, 7, and 8 are on "B" Day. Each of the four classes is 85 minutes long.

WAYS TO MAKE-UP CREDIT

1. District Night & Summer School Programs - Neighborhood high schools offer make-up classes in the evening and during the summer. The cost per .25 credits is \$50.00. Some high schools require you to pre-register for classes. Contact the night school director at your neighborhood high school for registration information.
2. Correspondence Courses - Any courses taken through correspondence must be from an accredited institution and approved by the counselor before they are taken. The most common site for taking courses through this option is BYU independent study courses for high school students. Tuition is approximately \$124.00 per .5 credits and is subject to change at any time. Learn more about these courses at elearn.byu.edu or call 1-800-914-8931.
3. USOE - EHS Online Courses – Online courses are available free of charge to NUAMES students. These courses can be used for original credit as well as make-up credit. To access these courses, please make an appointment with one of the NUAMES counselors.
4. Private Accredited Programs - Students can earn make-up credit through private programs like Sylvan Learning Center or Northridge Tutoring Center. Prior approval through the counselor is required for credit from these sources to be accepted. Tuition is charged.
5. Students needing to make-up citizenship credit may do so under the supervision of the teacher who gave the U or other school personnel, at any volunteer organization or at a site that is pre-approved by the counselor. Forms are available in Office. Four (4) hours of volunteer service is required to make-up one U (unsatisfactory citizenship). There is a \$10 posting fee per "U".
6. Home school credit must be done through an accredited institution on an official transcript for NUAMES to accept the credit. If 9th grade credit has not been done through an accredited institution, see high school counselor.

SENIORS: All make-up credit must be completed by May 1, 2017.

Master List of NUAMES Courses: 2016-2017

Art	1150	ART HISTORY & CRITICISM	Sem	10-11-12	
	1190	ART FOUNDATIONS 2	Sem	10-11-12	
	1200	PAINTING 1	Sem	10-11-12	
	1230	DRAWING	Sem	10-11-12	
	8650	DIGITAL MEDIA 1	Sem	10-11-12	
	8828	COMMERCIAL & ADVERTISING ART	Sem	10-11-12	
	8831	BASIC DIGITAL PHOTOGRAPHY	Sem	10-11-12	
	8832	ADVANCED COMMERCIAL PHOTOGRAPHY	Sem	11-12	Prerequisite - 8831

Business	2900	FINANCIAL LITERACY	Sem	11-12	
	8518	COMPUTER TECHNOLOGY	Sem	10-11-12	
	8536	BUSINESS WEB PAGE DESIGN	Sem	10-11-12	

Drivers Ed	7880	DRIVERS EDUCATION	Sem	10-11-12	
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Engineering	8637	PLTW - INTRO TO ENGINEERING DESIGN	Year	10-11-12	
	8638	PLTW - PRINCIPLES OF ENGINEERING	Year	10-11-12	8609
	8639	PLTW - DIGITAL ELECTRONICS TECNOLOGY	Year	11-12	8609 or 8616
	8642	PLTW - AEROSPACE ENGINEERING	Year	11-12	8609 or 8616
	8347	PLTW – BIOTECHNICAL ENGINEERING	Year	11-12	8609 and Biology
	8611	ROBOTICS AND AUTOMATION	Year	10-11-12	
	8670	PLTW – COMPUTER SCIENCE PRINCIPLES	Year	11-12	

English	4100	ENGLISH 10	Year	10	
	4110	ENGLISH 11	Year	11	
	4120	ENGLISH 12	Year	12	
	4125	CE ENGLISH 1010 (WSU)	Sem	12	ACT English 17
	4122	CE ENGLISH 2010 (WSU)	Sem	12	Prereq-CE English 1010
	4146	CREATIVE WRITING (Elective Credit)	Sem	10-11-12	

Foreign Language	4620	SPANISH 1	Year	10-11-12	
	4630	SPANISH 2	Year	10-11-12	4620
	4640	SPANISH 3	Year	10-11-12	4630
	4650	SPANISH 4	Year	11-12	4640

Math	5756	SECONDARY MATH 2A/MATH ESSENTIALS	Year	10	Placement Test
	5776	SECONDARY MATH 2	Year	10-11	Placement Test
	5778	SECONDARY MATH 3	Year	11-12	Placement Test
	5410	PRE-CALCULUS	Year	11	Teacher Recommend/ACT
	5245	CE MATH 1010	Sem.	12	Teacher Recommend/ACT
	5746	MATHEMATICAL DECISION MAKING FOR LIFE/CE Math 1030	Year	12	Teacher Recommend/ACT
	5763	INTRODUCTORY STATISTICS – CE MATH 1040	Sem.	11-12	Teacher Recommend/ACT
	5420	CE 1050 - COLLEGE ALGEBRA	Sem	11-12	Teacher Recommend/ACT
	5430	CE 1060 - TRIGONOMETRY	Sem	11-12	Teacher Recommend/ACT

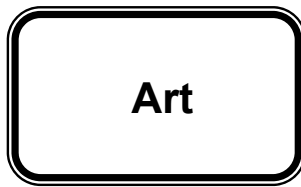
PE & Health	7785	BODY CONDITIONING	Sem	11-12	
	7710	FITNESS FOR LIFE	Sem	10-11-12	No Repeat
	7720	LIFETIME ACTIVITIES	Sem	10-11-12	
	7150	HEALTH EDUCATION 2	Sem	10-11-12	

Released Time	850	RELEASED TIME	Year	10-11-12	
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Science	3520	BIOLOGY CP	Year	10-11-12	
	3524	AP BIOLOGY	Year	10-11-12	See Course Description
	3900	ZOOLOGY	Year	10-11-12	
	3620	CHEMISTRY	Year	10-11-12	
	3630	CE CHEMISTRY 1010	Sem	11-12	
	3640	PHYSICS	Year	10-11-12	SSM 2 completed
	3700	HUMAN PHYSIOLOGY	Year	11-12	See Course Description
	3950	ASTRONOMY	Sem	10-11-12	

Social Studies	6240	WORLD CIVILIZATIONS	Year	10	
	6234	AP EUROPEAN HISTORY	Year	10-11-12	See Course Description
	6250	UNITED STATES HISTORY 2	Year	11	
	6261	CE HISTORY 1700	Sem	11-12	
	6277	CE POLS 1100	Sem	11-12	See Course Description
	6275	US GOVERNMENT & CITIZENSHIP	Sem	11-12	
	6320	INTRODUCTION TO PSYCHOLOGY	Sem	10-11-12	
	6324	AP PSYCHOLOGY	Year	10-11-12	6320 Recommended

Electives	600	HOME RELEASE	Sem	10-11-12	See Counselor
	720	WEBER STATE - EC	Sem	11 - 12	See Counselor
	2214	TEACHER ASST	Sem	10-11-12	See Counselor
	2300	STUDENT GOVERNMENT	Year	10-11-12	Election
	2400	STUDY SKILLS	Sem	10-11-12	Admin/Counselor Referral
	2660	ACT PREP	Sem	10	Recommended for 10th graders
	4190	YEARBOOK 1	Year	10-11-12	See Mr. Weaver
	8733	LAW ENFORCEMENT	Sem	10-11-12	
		DATC/OWATC SKILLS TRAINING COURSES		11-12	See Counselor



Art Foundations 2/Fine Arts Credit (10, 11, 12)
Course Number 1190/Semester

This course is recommended as a prerequisite for Design and Visual Art. This course reviews basic compositional principles, unity, balance, contrast, emphasis, variety and the principle of movement. This course increases student awareness of the ways line, shape, form, space, texture, value, and color apply to these principles. Representative and interpretive drawing using such media as pencil, ink, and oil pastel are emphasized. Students will study the principles of proportion, light and shadow, depth, color, and creative expression as they apply to landscapes, portraits, animals, and man-made structures.

Lab and Materials Fee: \$20.00

Art History & Criticism/Fine Arts Credit (10, 11, 12)
Course Number 1150/Semester

This course is designed to provide an understanding and enjoyment of architecture, sculpture, painting, and other art forms within historical and cultural contexts. In the course, students explore major forms of artistic expressions; learn to look at works of art critically, and to analyze what they see.

Lab and Materials Fee: \$20.00

Commercial & Advertising Art/Fine Arts Credit (10, 11, 12)
Course Number 8828/Semester

Includes instruction in the preparation of copy: logos, poster, package, and product design: computer graphics; and inks and color dynamics. Students will learn basic skills and techniques of good design, advertising, pencil and ink drawing, color theory and design, and the use of varied of equipment and materials.

Lab and Materials Fee: \$20.00

Digital Media I/Fine Arts Credit (Grades 10, 11, 12)
Course Number 8650/Semester

Design and Development is the first-year multimedia course where students will create interactive computer applications to be delivered on CD-ROM, Internet or other delivery media using the elements of text, graphics, animation, sound, video, and digital imaging. These skills can prepare students for entry-level positions and other occupational/educational goals.

Lab and Materials Fee: \$20.00

Drawing/Fine Arts Credit (10, 11, 12)
Course Number 1230/Semester

Drawing focuses on black and white or monochromatic rendering from life, pictures, masterworks, and imagination. With an emphasis on studio production, this course is designed to develop higher level thinking and art related technology skills. Some experience in art criticism, art history, and aesthetics may be included.

Lab and Materials Fee: \$20.00

Painting I/Fine Arts Credit (10, 11, 12)
Course Number 1200/Semester

Painting 1 includes wet and dry color media with processes such as transparent and opaque painting focuses on the operations of color. Techniques with color media and preparation of ground and supports will be covered. With an emphasis on studio production, this course is designed to develop higher-level thinking skills and art related technology skills. Some art criticism, art history, and aesthetics may be included.

Lab and Materials Fee: \$20.00

Basic Digital Photography I/Fine Arts Credit (10, 11, 12)
Course Number 8831/Semester

The class will explore the world of digital photography and video production, beginning with artistic expression. The class will work with composition, rule of thirds, emphasis, message conveyance, delivery and professionalism. Connecting to the computer, the student will download both still shots and video onto Adobe Photoshop, Adobe Illustrator, and Adobe Premiere to manipulate, print, and edit their final images. Assignments will include (1st term using a still camera) landscapes, people, animals, buildings, fast action and advertising using photography, and (2nd term using a video camera) video about you, newscasts, sitcoms, and advertisements. Pre-edit, shooting, and post editing will be the focus of the second term. *Lab and Materials Fee: \$20.00* **Digital camera will be required.**

Advanced Commercial Photography/Fine Arts Credit (11, 12)
Course Number 8832/Semester

Pre-requisite: Basic Digital Photography I
This course is an advanced continuation of Basic Digital Photography 1 with an emphasis on aesthetics and artistic presentation. Adobe Photoshop and Illustrator will be used to increase artistic and aesthetic processes. Final project will be a professional portfolio of photograph prints.
Lab and Materials Fee: \$20.00 **Digital camera will be required.**



Business Web Page Design/Art or Elective Credit (Grades 10, 11, 12)
Course Number 8536/Semester

This semester course provides students with advanced internet skills and techniques as well as a major emphasis on beginning Web page design. Students will explore resources of the Internet and its tools through the use of e-mail, search engines and browsers. HTML and Web publishing software will be used to design, create, format, and edit Web pages. *Lab and Material Fee: \$20.00*

Computer Technology/Computer Tech Credit (Grades 10, 11, 12)
Course Number 8518/Semester

Students will learn about computer application software, i.e., word processing, spreadsheets, and electronic presentations. An understanding of ethics and use of operating systems, information resources, and electronic mail is included. **This class is required for graduation.**

Financial Literacy/Financial Literacy Credit (Grades 11, 12)
Course Number 2900/Semester

This course is designed to teach students to skillfully manage personal financial decisions and transactions. Students will receive a knowledge base as well as opportunities for application through simulated activities. The basics of checking, credit, savings, investing, consumer loans, and insurance will be discussed. Students will use this knowledge and related skills to take individual responsibility for personal economic well-being. **This class is required for graduation.**

Drivers Ed

Drivers Education/Elective Credit (10, 11, 12)
Course Number 7880/Semester

The Drivers Education and Drug and Alcohol class is taught as an elective, semester course during the regular school day. These students will complete road driving with NUAMES high school driving instructors. *Class fee: \$160.00*

Drivers Education is offered both semesters and is open to students by birth date. There will be no exceptions to this policy: **1st Semester – students who turn 16 between September 1 and February 28, 2017 and 2nd Semester – students who turn 16 between March 1 and August 31, 2017.** All road driving will be done after school and on Saturdays. Teachers will schedule student driving times based on the availability of cars. Older students will be scheduled first. Students who turn 16 during the summer may be scheduled to drive during the summer. **Students must get their permit prior to starting the Drivers Education class.** The law requires that students attend a specific number of hours in the classroom as well as behind the wheel.

It will be the student's responsibility to arrange for transportation to and from the school for these driving sessions. Because the law requires a specific number of the classroom and behind-the-wheel hours, students must maintain good attendance. Students who miss any of the driving time will not receive a completion certificate.

NUAMES WILL OFFER A SUMMER DRIVER'S ED THIS YEAR, IF WE HAVE ENOUGH INTERESTED. THE CLASS COST IS \$250 AND WOULD BE HELD THE FIRST 2 WEEKS AFTER SCHOOL IS OUT (June 6-16, 2016). MUST HAVE DRIVERS PERMIT TO BE IN CLASS. PLEASE CONTACT HOLLY @ 801-395-3352 if interested.

Engineering

PLTW Introduction to Engineering Design (IED)/Engineering Credit (Grade 10, 11, 12)
Course Number 8637/Year

This class is required for all 10th graders and new incoming 11th graders. IED is an introductory course which develops student problem solving skills, with emphasis placed on the development of 3-D solid models. Students will work from sketching simple geometric shapes to applying a solid-modeling computer software package. They will learn a problem-solving design process and how it is used in industry to manufacture a product. Students will be exposed to the techniques learned and equipment used by engineers throughout the United States. **WSU Concurrent Enrollment DET1010 – WSU 3 credits.** *Lab and Material Fee: \$20.00.*

PLTW Principles of Engineering (POE)/Engineering Credit (Grade 10, 11, 12)
Course Number 8616/Year

Pre-requisite: Intro to Engineering Design (IED)

This course provides an overview of engineering and engineering technology. Students develop problem-solving skills by tackling real-world engineering problems. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem-solving process to benefit people. Through theory and practical hands-on experiences, students address the emerging social and political consequences of technological change. **WSU Concurrent Enrollment MET 1000/MFET 1150 – WSU 4 credits.**

Lab and Material Fee: \$20.00.

PLTW Computer Science Principles/Engineering Credit (Grade 11, 12)
Course Number 8670/Year

This course opens doors in any career with computer science! In CSE, students create apps for mobile devices, automate tasks in a variety of languages, and find patterns in data. Students collaborate to create and present solutions that can improve people's lives, and weigh the ethical and societal issues of how computing and connectivity are changing the world. *Lab and Material Fee: \$20.00*

PLTW Digital Electronics Technology (DE)/Engineering Credit (Grade 11, 12)
Course Number 8639/Year

Pre-requisite: Intro to Engineering Design (IED) or Principles of Engineering (POE)

Digital Electronics is a course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to test digital circuitry prior to the actual construction of circuits and devices. Course includes sections on circuit design, microprocessor controls and design, and sequential logic programming. **WSU Concurrent Enrollment EET 1130 – WSU 4 credits.**

Lab and Material Fee: \$20.00.

PLTW Aerospace Engine (AE)/Engineering Credit (Grade 11, 12)
Course Number 8642/Year

Pre-requisite: Intro to Engineering Design (IED) or Principles of Engineering (POE)

The major focus is to acquaint the students with the world of flight and space travel. The course covers the following: the history of flight; aerodynamics and aerodynamics testing; flight systems; astronautics; space life sciences; aerospace materials; systems engineering. Aerospace Engineering is intended to serve as a specialization course within the engineering sequence. *Lab and Material Fee: \$20.00*

PLTW Biotechnical Engineering (BE)/Engineering Credit (Grade 11, 12)
Course Number 8347/Year

Prerequisite: Introduction to Engine Design (IED) and Biology w/passing class grade of C or above.

The major focus of the Biotechnical Engineering (BE) course is to expose students to the diverse fields of biotechnology including biomedical engineering, bio-molecular genetics, bioprocess engineering, and agricultural and environmental engineering. Lessons engage students in engineering design problems that can be accomplished in a high school setting related to biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering biomedical devices, human interface, bioprocesses, forensics, and bio-ethics. *Lab and Material Fee: \$20.00*

SLCC Concurrent Enrollment – SLCC 4 credits.

Robotics and Automation/Elective Credit (Grade 10, 11, 12)
Course Number 8611/Year

Robotics and Automation is a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program and control robotic devices by applying science, technology, engineering and math concepts. A rigorous study and application of electrical concepts will include: sources of energy, electrical safety, use and identification of basic electronic components, sensors and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming, and proper engineer documentation. Industrial automation, robotic applications and career opportunities will also be discussed. **This class does not count as an engineering credit.** *Lab and Material Fee: \$20.00*



English 10/English Credit (Grade 10)
Course Number 4100/Year

This course will continue to develop comprehension, composition, and grammar skills developed in Ninth Grade English. The students will use the entire writing process to develop skills in writing narratives, informative papers, character sketches, persuasive essays and research reporting using non-traditional materials. The students will study world literature including the in-depth study of novels and short stories. Grammar and usage, including daily oral language exercises will be emphasized. **Honors credit available on an individual basis.**

English 11/English Credit (Grade 11)
Course Number 4110/Year

This course will help students develop all communication skills, including reading, writing, speaking, and listening. This course is designed to build on the skills of literary comprehension, composition, and grammar that were developed in English 10. Students will continue to use the entire composing process to develop skills in writing narratives and poetry, persuasive essays, interpretative essays, and research skills. The major course of study is American literature. Students will prepare for college entrance exams by focusing on grammar, mechanics, usage and daily oral language exercises. **Honors credit available on an individual basis.**

English 12/English Credit (Grade 12)
Course Number 4120/Year

This course will help students develop reading, writing, and critical thinking skills which is a prerequisite for entry-level college courses. Course will also focus on reading of functional, literary, and narrative texts; speaking/listening; vocabulary; grammar usage and mechanics; research skills; presentation skills; workplace writing; and study skills. **Honors credit available on an individual basis.**

CE English 1010/English Credit (Grade 12)
Course Number 4125/Semester

Prerequisites: ACT English score of 17 or above (scores must be obtained by May of junior year). Concurrent Enrollment offers students the opportunity to get credit for college freshman English, or English 1010 while fulfilling the requirement for high school senior English. This class requires you to read and think about broad issues and then write about them using a process to come up with the best essay. The curriculum is the same for all freshman English classes in any college or university. The grading standards are those of a college class rather than a high school class. **WSU Concurrent Enrollment - WSU - 3 credits**

CE English 2010/English/Elective Credit (Grade 12)
Course Number 4122/Semester

Prerequisites: CE English 1010

Concurrent Enrollment offers students the opportunity to get credit for college freshman English, or English 2010. The course provides instruction and practice in exposition, argumentation/persuasion, and documented research. It emphasizes critical thinking, the reciprocity of reading and writing, and the production of well-developed analytical arguments. **WSU Concurrent Enrollment – WSU – 3 credits.**



Spanish 1/Elective Credit (Grade 10, 11, 12)
Course Number 4620/Year

First year Spanish is an exciting introduction to this wonderful and most useful language. Communicative skills will be acquired primarily through interactive stories that require students to participate in various ways. These activities will benefit all students because the approach works for visual, auditory and hands-on learners. Students will have a daily opportunity to use the language, and as they work, they will gain confidence and competence. A positive class atmosphere will provide students a comfortable and safe learning experience.

Spanish 2/Elective Credit (Grade 10, 11, 12)
Course Number 4630/Year

Pre-requisite: Spanish 1

Second year Spanish is an exciting and challenging continuation in the wonderful world of the Spanish language. Communicative skills will be enhanced through interactive stories that require students to participate in various ways. Class activities will be fun and relevant. Students will have a daily opportunity to use the language, and as they work, they will gain confidence and competence.

*All students taking Spanish for the first time at NUAMES that want to take Spanish 2 must first take a placement test. It is available in the office.

Spanish 3/Elective Credit (Grade 10, 11, 12)
Course Number 4640/Year

Prerequisite: Spanish 2

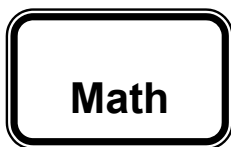
Third year Spanish is a class in which the goal of achieving communicative proficiency will continue at an advanced level. We will work hard on reading, writing, speaking and understanding skills. Students will have a daily opportunity to use the language, and as they work, they will gain confidence and competence. **This can be a difficult class** and if you are not already very comfortable with both forms of past tense (preterit and imperfect) which are covered extensively in Spanish 2 at NUAMES, Spanish 2 is probably a better option for you.

*All students taking Spanish for the first time at NUAMES that want to take Spanish 3 must first take a placement test. It is available in the office.

Spanish 4/Elective Credit (Grade 11, 12)
Course Number 4650/Year

Prerequisite: Spanish 3

Spanish 4 is a considerable step up from Spanish 3. We will focus on achieving advanced speaking, understanding, reading and writing abilities. There will be class discussions and a wide variety of activities that will expand vocabulary, grammar, and research skills. This class is ONLY for juniors and seniors that have taken Spanish 3 at NJUAMES or for native speakers.



Secondary Math 2/Math Credit (Grade 10, 11)
Course Number 5776/Year

Pre-requisite: Successful completion of Secondary Math 1

The focus of Mathematics 2 is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics 1 as organized into 6 critical areas, or units. Those units are: Extending the number system; Quadratic functions and modeling; Expressions and equations; Applications of probability; Similarity, right triangle trigonometry, and proof; Circles with and without coordinates.

Secondary Math 3/Math Credit (Grade 11, 12)
Course Number 5778/Year

Pre-requisite: Successful completion of Secondary Math 2

This course will focus on pulling together and applying the accumulation of learning that they have from their previous course. They will apply methods from probability and statistics, expanding their repertoire of functions to include polynomial, rational, and radical functions, they will expand their study of right triangle trigonometry and will bring together all of their experience with functions and geometry to create models and solve contextual problems.

Pre-Calculus/Math Credit (Grade 11)
Course Number 5410/Year

This is an accelerated and enriched course which includes all the content of Algebra 2 as well as a study of Trigonometry. The class will spend 3 to 4 weeks reviewing Algebra 2 and then continue the study of the structure of the real and complex numbers. Trigonometry is studied both from the ratio of coordinates of real numbers approach and the circular function approach. Each section is accompanied by calculators and writing. We cover the nuances of Algebra that will make learning calculus so much easier. Students should plan to spend a minimum of one hour per day in out-of-class preparation.

CE Math 1010/Math Credit (Grade 11, 12)
Course Number 5245/Semester (3 credits-WSU)

This course covers basic algebraic concepts in more depth than elementary Algebra. Topics of study include: linear equations and inequalities; quadratic equations; polynomial and rational expressions; radicals and complex numbers; exponential expressions (negative and rational exponents) and logarithmic expressions; linear systems of equations; introduction to conic sections; introduction to functions. Graphing of functions will be done by hand. Real world applications of algebra will be addressed throughout the course. **CE Math 1010 (3 credit hours) WSU.**

Pre-requisite for class: Students must have a "C" or above in Sec Math I, II, and III

Mathematical Decision Making for Life/Math Credit (Grade 12)
Course Number 5746/Year

This class requires students to use advanced mathematical concepts to make decisions and communicate ideas within 5 domains: Statistics, logic, probability, mathematical modeling, and financial management. **CE Math 1030 (3 credit hours) available for qualified students 2nd semester.**

For concurrent enrollment credit, students must meet the following conditions:

- 1. ACT Math score of 21 or higher or**
- 2. Taken Accuplacer Test with CLM Score of 50-69.**

CE Math 1040 Introductory Statistics/Math Credit (Grade 11,12)
Course Number 5763/Semester

Statistics is a branch of mathematics that explores concrete connections with everyday living. Students will develop critical thinking skills with life-long application. Students will gather, graph, examine, compare and interpret data using technology, including graphing calculators or computer statistics software. They will describe data and make informed decisions and predictions based on data.

For concurrent enrollment credit, students must meet the following conditions:

- 1. ACT Math score of 22 or higher and ACT Reading score of 16 or**
- 2. Taken Accuplacer Test with CLM Score of 58 or above and Reading Score of 71 or above within 1 year.**

CE Math 1050 College Algebra/Math Credit (Grade 11, 12)
Course Number 5420/Semester (4 credits-WSU)

Solving equations and inequalities; complex number; functions and their graphs; transformations of functions; inverse functions; polynomial functions; rational functions and asymptotes; exponential and logarithmic functions; exponential and logarithmic equations; exponential growth and decay models; systems of linear and nonlinear equations; systems of inequalities; mathematical models and applications; counting techniques.

For concurrent enrollment credit, students must meet the following conditions:

- 1. ACT Math score of 23 or higher, or**
- 2. Taken WSU Accuplacer Test with CLM Score of 50-69 or above or,**
- 3. Passed CE Math 1010 with “C” or better**

CE Math 1060 Trigonometry/Math Credit (Grade 11, 12)
Course Number 5430/Semester (2 credits-USU)

MATH 1060 is intended to prepare students for entry into the Calculus sequence by providing rigorous coverage of trigonometric functions, trigonometric identities, and vector analysis. **For concurrent enrollment credit, students must successfully completed Math 1050 with a “C” or better.**

P.E.

Body Conditioning/PE Credit (Grade 11, 12) Course Number 7785/Semester

This semester class offers students instruction in a number of body conditioning principles and techniques. Students will have the opportunity to develop strategies for overall body conditioning. The class will target the following areas of fitness: Flexibility, cardiovascular, muscle strength, muscle endurance, coordination, agility, and speed. Activities will include running, jump rope, weightlifting, aerobic exercise, hiking, and team sports which promote overall fitness. Students will be encouraged to develop good habits in the following areas essential to fitness: regular exercise, healthy diet, and adequate rest. *Class Fee: \$20.00*

Fitness for Life/PE Credit (Grade 10, 11, 12) Course Number 7710/Semester – **No Repeat**

This course helps each student adopt a personal life-style that will help them achieve physical fitness through correct concepts of flexibility, cardiovascular endurance, strength, weight control, and nutrition and stress management. This class is required once for every student. **This class is required for graduation.** *Class Fee: \$20.00*

Lifetime Activities/PE Credit (Grade 10, 11, 12) Course Number 7720/Semester

Student will acquire skills in a variety of lifetime activities that contribute to sustain fitness and well-being. Skills and activities offer position ways to cope with stress and contribute to the quality of life. Individual, dual, and team sports activities are included, with the emphasis on activities offering lifelong participation opportunities. *Class Fee: \$20.00*

Health

Health Education 2/Health Credit (Grade 10, 11, 12) Course Number 7150/Semester

This health course emphasizes the physical, mental, social, emotional, and spiritual development of young people. The class is a comprehensive program of interrelated components designed to assist students in the lifelong process of choosing and enjoying a HEALTHY LIFE–STYLE. **This class is required for graduation.**

Released Time

Released Time / No Credit (10, 11, 12) Course Number 850/Year

Parents may release students for religious instruction or other school-approved activities any of the 8 class periods on either Block A or Block B throughout the regular school day.

Science

4th YEAR SCIENCE CREDIT OPTIONS

In addition to regular science classes, the following can count as your 4th year of Science:

Aerospace Engineering
Biotechnical Engineering
Computer Science Principles
Digital Electronics Technology
Principles of Engineering

Astronomy/Science Credit (Grade 10, 11, 12) Course Number 3950/Semester

This course will introduce students to the wonders of space science. We will use some Algebra 2 math & hands on activities to learn about Kepler's and Newton's laws, stellar evolution, light behavior, the big bang theory and much more. Science has opened our understanding of long misunderstood marvels of the universe.

Biology/Science Credit (Grade 10, 11, 12) Course Number 3520/Year

This course is intended to give students a solid background in fundamental and current topics in biology. Units studied will focus on organization of life at the chemical and cellular levels, chemistry, genetics, evolution, plants and animals, the relationships of living things and their environment. The basic concepts of ecology, including the impact of human society on nature will also be studied. *Lab and Material Fee: \$20.00*

AP Biology/Science Credit (Grade 10, 11, 12) Course Number 3524/Year

Prerequisite: B or above grade in previous science class and SRI Reading Score of 1100 or better. Designed to meet the objectives of a general biology course at lower division college level. Includes: Knowledge of facts, principles & processes of biology, understanding data collection/interpretation, and career opportunities. The grading standards are those of a college class rather than a high school class. This course will have an AP Biology Lab after school hours. **College credit may be obtained by successfully completing the course and by passing a required AP Examination in May.** Sophomores are limited to 1 AP class per 10th grade year. *Lab and Material Fee: \$20.00*

Chemistry/Science Credit (Grade 10, 11, 12) Course Number 3620/Year

An introductory course for students with no previous chemistry background. This is a lab oriented course which provides a background in chemistry for students interested in a career in science, engineering, medicine, nursing as well as those who would like to improve their basic scientific knowledge. Students will learn about atomic structure and forces, chemical formulas and equations, acid, bases, salts and an introduction to organic chemistry. Student needs to have successfully finished Geometry or Sec Marth 2 to be successful in this class.

CE Chemistry 1010/Science Credit (Grade 11, 12)
Course Number 3630/Semester

Survey of general chemistry: structure, composition, properties and chemical transformations.
Qualifications: On track for High School graduation, Cum GPA 3.0, completion of Secondary Math 2 or higher. Not recommended for those seeking Regents Scholarship. **SLCC Concurrent Enrollment – SLCC 3 credit hours.**

Human Physiology/Science Credit (Grade 10, 11, 12)
Course Number 3700/Year

Prerequisite: Biology w/passing class grade of B or above and SRI Reading Score of 1100 or above.
Human Physiology will cover, in detail, the systems of the human body. Students will learn about the increasingly complex levels of the human body, from cells, to tissues, to organ systems. The majority of the course will be devoted to the detailed coverage of human body systems. In addition to learning about the physiology of these systems, students will also learn about many pathological disturbances (disorders and disease) of the systems. *Lab and Material Fee: \$20.00*

Physics/Science Credit (Grade 11, 12)
Course Number 3640/Year

Prerequisite: Successful completion of Algebra 2 or Secondary Math 3.
Designed for students planning college majors in non-technical fields, (e.g. the arts, social sciences, education, or business). The mathematical techniques used in this class include Algebra and some Trigonometry. The course is designed to encourage students to integrate physical-related ideas into their ways of thinking about the world and provide some of the tools needed to make intelligent decisions in a science-based culture. Emphasis is a problem-solving approach to motion, heat, matter, sound, light, electricity, and astrophysics.

Zoology/Science Credit (Grade 10, 11, 12)
Course Number 3900/Year

This class explores the tremendous diversity of animal life and their interactions with different animal species. This class will complete dissections. *Lab and Material Fee: \$20.00*

Social Studies

World Civilizations / Social Studies Credit (Grade 10)
Course Number 6240/Year

Students will learn about the contributions of major cultures and societies over time in the five major regions of the world: Middle East/North Africa, Asia, Africa, Europe, and the Americas. The course stresses the diverse economic, political, religious, and social systems that have shaped major world events and movements within these regions both past and present.

AP European History/Social Studies Credit (Grade 10, 11, 12)
Course Number 6234/Year

Prerequisite: B or above grade in previous science class and SRI Reading Score of 1100 or better. AP European history is a college-level survey course using a college-level text. It covers the political, economic, religious, social, intellectual, and artistic heritage of Europe. It spans the period from 1450 to the beginning of the 21st century. Students enrolled in the course will engage in debates, simulations, and mock trials, analyze historical evidence and read the analysis of both the primary textbooks, novels, and primary sources to recognize trends and patterns over the last 600 years. **This course will help prepare students to take the Advanced Placement Exam from which students can earn college credit. Sophomores are limited to 1 AP class per 10th grade year.**

U.S. History/Social Studies Credit (Grade 11)
Course Number 6250/Year

This course devotes attention to the basic geographic, economic, social, and historic developments in the United States, with particular emphasis on the events of the 20th Century. It also helps students develop an understanding of the Constitution, the American system of government, and the legal system as well as an appreciation of the major ethical considerations supported by American society over time.

CE History 1700/Social Studies Credit (Grade 11, 12)
Course Number 6261/Semester

An analysis of American civilization that traces social, cultural, economic, and political developments in the United States. May be taken to complete the American Institutions requirement with a university (grade of C or better required). **WSU Concurrent Enrollment – WSU 3 credits.**

CE POLS 1100 AI/Social Studies Credit (Grade 11, 12)
Course Number 6277/Semester

Prerequisite: B or above grade in previous Social Studies Class and a SRI Reading Score of 1100 or better. A study of American constitutional democracy at the national level, including political institutions, interests, ideals, and the processes through which policies are formulated and implemented. **WSU Concurrent Enrollment – WSU 3 credits. This class will also give you high school credit for US Gov't & Citizenship.**

U.S. Government and Citizenship/Social Studies Credit (Grade 11, 12)
Course Number 6275/Semester

The goal of this course is to foster informed, responsible participation in life. Knowing how to be a good citizen is essential to the preservation and improvement of democracy in the United States. Upon completion of this course, students will understand the major ideas, protections, privileges, structures, and economic systems that affect the life of a citizen in the US political system. **This class is required for graduation.**

Intro to Psychology/Elective Credit (Grades 10, 11, 12)
Course Number 6320/Semester

Introduction to Psychology is an exciting and comprehensive course that will help students gain a relevant understanding of the complex nature of human behavior and thought and the science behind the efforts of professionals who work in fields relating to this discipline.

AP Psychology/Elective Credit (Grades 10, 11, 12)
Course Number 6324/Year

AP Psychology is an advanced course about the science behind human behavior and thought. This class will prepare serious students to take the Advanced Placement (AP) test in May. In order to accomplish this, extensive study outside of school hours will be required. **This course will help prepare students to take the Advanced Placement Psychology Exam from which students can earn college credit.**

*Intro to psychology is **not** required before taking AP psychology, though it can help considerably.



ACT Prep/Elective Credit (Required for Grade 10)
Course Number 2660/Semester

The purpose of this course is to provide core strategies that enable students write more effectively, comprehend text more fully and quickly, and diagnose and solve test questions more accurately. Our hope is that by mastering the strategies taught in this course, NUAMES students will be better prepared for the ACT Test, the rigors of NUAMES High School, and future university coursework.

Law Enforcement/Elective Credit (Grade 10, 11, 12)
Course Number 8733/Semester

This class gives students a better understanding of what a police officer does, how laws affect them and what is expected of them as citizens. Most lessons are taught in the classroom. Some lessons will have actual police situations explained or presented to them. Some of the major points covered in this class include juvenile law and school rules, civil law vs. criminal law, reasonable suspicion/probably cause, arrest & court procedures, dating violence, K-9 demo, identity theft, internet safety, investigations, alcohol & drug awareness, sexual assault awareness, crimes against property & persons, escalation of force and traffic stops & DUI.

Yearbook/Elective Credit (Grade 10, 11, 12)
Course Number 4190/Year

Pre-requisite: Students must have at least a 3.0 cumulative GPA in order to be admitted into yearbook Newspaper. No prior journalism experience is required. Yearbook/newspaper focuses on developing journalistic skills of interviewing, writing, photography, and design to create professional-level newspapers each month as well as the school yearbook. The curriculum includes writing assignments for everyone, as well as assignments pertaining to specific staff requirements. Students will have homework requirements and may be expected to cover after school events such as dances, club activities, and other meetings. Students are encouraged (but not required) to attend a yearbook camp in Logan during the final week of June. There is an associated cost, as well as available college credit. *Class Fee: \$15.00*

DATC/OWATC/Elective Credit (Grade 11, 12)
Skills Training Courses

Students wishing to develop job related skills can enroll in courses at the Davis Applied Technology College or the Ogden Weber Applied Technology College. Students must provide their own transportation and must take courses in a two period block. If interested, please see counselor at NUAMES for transmittal papers.