

PHYSICAL EDUCATION AND HEALTH EDUCATION (CONT)

Practicum in Sports Medicine (235111) The objective of this offering is to give the high school student academic credit for the many hours of study and practical experience one receives as a student athletic trainer.

- The practical experience includes individualized instruction in the prevention and care of athletic injuries and the career opportunities in the area of sports medicine. The student will be evaluated in cognitive and practical areas such as injury recognition, basic and advanced first aid techniques, muscle testing, record keeping procedures, rehabilitation, conditioning, weight training, and preventive strapping (taping) techniques.
- Some of the positive educational outcomes of this course can be certification in cardiopulmonary resuscitation and standard first aid, socialization with peers, job shadowing experience, and service to others. This course cannot be taken in lieu of Physical Education.

Lifeguarding (232311) The purpose of this course is to teach students the skills and knowledge needed to become a professional lifeguard. The course content and activities prepare lifeguard candidates to recognize and respond quickly and effectively to emergencies; prevent drowning and other incidents. Students must be 15 years old by the beginning of the class. No exceptions. The student must successfully complete the following swimming prerequisites:

- 1) Swim 500 yards continuously, using each one of the following strokes for at least 100 yards of each: crawl stroke and breaststroke. Participants choose their stroke(s) for the remaining 200 yards. There is a fifteen minute time limit.
- 2) Submerge to a minimum depth of 10 feet, retrieve a 10 pound object, and return with it to the surface.
- 3) Tread water for 2 minutes using legs only

Upon successful completion of the course, participants will receive two certificates: one for American Red Cross Lifeguard Training, which is valid for three years; and the second for American Red Cross CPR for the Professional Rescuer, which is valid for one year.

Outdoor Education (231311) This course will provide an alternative to our traditional P. E. classes. During this course you will go biking, canoeing & kayaking, and cook over an open fire. You will also be involved in wilderness education, initiative tasks, trust activities, and cooperative games. This course is limited to 27 students, nine per high school, and is open to all qualified Davenport high school students. It may only be scheduled 1st or 4th block. Students must provide their own transportation to Central for this course.

- Students must be able to pass a pre-test; 1) bike agility test, 2) swim 250 yards, 3) run one mile under eleven minutes. Application forms may be picked up in the guidance office or from a P. E. staff member.
- There is an additional fee which will cover canoe rental and provide insurance through Venturer membership.

Bigger, Faster, Stronger - BFS (231401) This course will provide an alternative to our traditional PE class, offered. The class will introduce the BFS athletic training program to all student athletes. The purpose of the class is to increase participants' speed, strength, and athleticism. These are coed classes with all workouts designed for individual level of conditioning. The units are: Rest and Nutrition; Year Round Training; Record Keeping; Sprint Training; Agility Training; Endurance Training; Flexibility Training; Plyometric Training; Strength Training; Skill Training.

- Student registration based on senior, junior, sophomore, and freshman status. Athletes given first priority, coach recommendation required. It will be offered as an elective.

Extreme Fitness (230121) This class is an alternate to traditional Physical Education. Student will have their weight, body fat, blood pressure and pulse measured at the beginning and end of the course. Journaling will be required. Students will be involved in a variety of aerobic, strength and conditioning activities. These activities include: Tae Bo, light weight lifting, plyometrics, and water exercise, running/walking and aerobic routines. This class requires a high level of motivation and physical activity. There is an additional fee for materials.

COOPERATIVE HEALTH OCCUPATIONS

This program is designed as a cooperative effort between the senior student, the instructor, and health facilities in the community. Students enrolled in this program attend regular high school classes one-half day and are employed one-half day in an approved medical facility.

Related Health Occupations (159812) West High School only. This course includes the teaching of fundamental principles that determine success on the job such as employer-employee relations, personal adjustment, money management, insurance, etc., along with other topics pertinent to the student's work experience.

Health Occupations On-The-Job (159712) West High School Only Students enrolled in this course will be required to complete a minimum of 15 hours per week in an approved medical facility. The number of hours worked plus the number of class hours at school, should not exceed 40 hours per week. Some of the occupations approved for on-the-job training are listed below:

Nurse Assistant	Dental Office Assistant	Physical Therapy Aide	X-ray Assistant
Veterinary Assistant	Dental Lab Assistant	Pharmacy Aide	
Child Care Worker	Home Health Aide	Medical Lab Aide	

PROJECT LEAD THE WAY (PLTW)

Subject	Course Numbers	Units per course	Grade level offered				Prerequisites and related information
			9	10	11	12	
*Introduction to Engineering Design (IED)	160313 /160314	1	X	X	X	X	Algebra I or CT Algebra I
*Principles of Engineering (POE)	162612 /162613	1	X	X	X	X	Algebra I or CT Algebra I, Introduction to Engineering Design recommended

PROJECT LEAD THE WAY (PLTW) (CONT)

Subject	Course Numbers	Units per course	Grade level offered				Prerequisites and related information
			9	10	11	12	
*Civil Engineering & Architecture (CEA)	169521 /169522	1		X	X	X	Geometry and Introduction to Engineering Design
*Computer Integrated Manufacturing (CIM)	162751 /162752	1			X	X	Introduction to Engineering Design and Principles of Engineering

Introduction to Engineering Design (IED) (160313/160314) Students use a problem-solving model to improve existing products and invent new ones. They learn how to apply this model to solve problems in and out of the classroom. Using sophisticated three-dimensional modeling software, students communicate the details of the products. Emphasis is placed on analyzing potential solutions and communicating ideas to others. **This is a dual credit/college course. Students may have the opportunity to receive 3 credit hours at the U of I, ISU, or EICCD.**

Principles of Engineering (POE) (162612/162613) This course explores the wide variety of careers in engineering and technology and covers various technology systems and manufacturing processes. Using activities, projects, and problems, students learn first-hand how engineers and technicians use math, science, and technology in an engineering problem-solving process to benefit peoples. The course also addresses concerns about social and political consequences of technological change. **This is a dual credit/college course. Students may have the opportunity to receive 3 credit hours at the U of I, ISU, or EICCD.**

Civil Engineering and Architecture(CEA) (169521/169522) This course is an overview of civil engineering and architecture. CEA emphasizes the inter-relationship and mutual dependence of both fields. Students use state-of-the-art software to solve real world problems and apply knowledge to hands-on projects and activities. By developing and implementing plans for a playground/park or vacation home, for example, students experience first-hand the job responsibilities of architects and civil engineers. By the end of the course, students are able to give a complete presentation to the client, including three-dimensional renderings of buildings and improvements, zoning and ordinance constraints, infrastructure requirements, and other essential project plans. **This is a dual credit/college course. Students may have the opportunity to receive 3 credit hours at the U of I, ISU, or EICCD.**

Computer Integrated Manufacturing (CIM) 162751/162752 Students take the three-dimension modeling software skills learned in Introduction to Engineering Design to a whole new level. Using a three-dimensional model, students use automation, control systems, sensing devices, computer programming and robotics to efficiently mass produce products. Trouble-shooting is emphasized throughout the course. **This is a dual credit/college course. Students may have the opportunity to receive 3 credit hours at the U of I, ISU, or EICCD.**

SCIENCE

Subject	Course Numbers	Units per course	Grade Level Offered				Prerequisites and Related Information
			9	10	11	12	
Investigative Biology (2-term course)	171121 /171122	1	X	X	X	X	None
Molecular Biology (2-term course)	171131 /171132	1	X	X	X	X	None
Environmental Studies I	175111	0.5		X	X	X	Molecular or Investigative Biology
Environmental Studies II	175121	0.5		X	X	X	Environmental Studies I
Invertebrate Zoology	171411	0.5		X	X	X	Molecular or Investigative Biology
Vertebrate Zoology	171442	0.5		X	X	X	Invertebrate Zoology
Anatomy & Physiology	171311 /17312	1		X	X	X	Molecular or Investigative Biology
Forensics Science	174221	1		X	X	X	Chemistry or Physical Science
Genetics	171431	0.5		X	X	X	Molecular Biology required and General Chemistry suggested
AP Biology (3-term course)	171511 /171512 /171513	1.5		X	X	X	Molecular or Investigative Biology and General Chemistry
Earth Materials	170121	0.5		X	X	X	None
Weather, Climate and Space	170122	0.5		X	X	X	None
Meteorology	170131	0.5		X	X	X	Weather, Climate & Space and Algebraic Principles or Teacher Approval
General Chemistry (2-term course)	172111 /172112	1		X	X	X	Molecular or Investigative Biology and Algebra required.
Advanced Chemistry	172331	0.5		X	X	X	Successful completion of General Chemistry and Algebra 2 required. Physics is strongly recommended.