

# VREP Program

**Northwood-Kensett Jr.-Sr. High School**

**704 7th Street North**

**Northwood, Iowa 50459**

**Amy Renwick, Program Coordinator/Instructor**



**Description:** VREP is a self-directed course that is designed to allow students the freedom to tailor their work to reflect their areas of interest. Students use Virtual Reality (3D) programs, such as Blender software, to create virtual products that can be utilized in the real world.

Students strengthen their skills in design software, as well as using research skills, problem-solving skills, perseverance, tenacity, and being a self-directed learner and worker. Students must use 21st Century Employability skills in order to be successful in this self-directed environment. Students who have taken the VREP program feel that this program is substantive preparation for college and beyond.

Each semester, students must choose a project on which to focus their time and then work to achieve that goal. The teacher monitors progress and offers resources as help, but functions as “manager” rather than a traditional instructor. Students plan, practice, research, design, implement, improve, and use critical thinking skills and resourcefulness to overcome obstacles and finish the project in the given time frame, while reporting back to the managing teacher throughout the process.

**Careers of Interest:** Northwood-Kensett encourages students who are considering any of the following career choices to participate in the VREP program:

- Engineering
- Video Game Design
- Creative Design
- Web Design
- Simulation & Animation Development
- Architecture
- Computer Programming

**Background: Course Development & Sponsors** The VREP program began in 2006 at East Marshall High School in LeGrand, Iowa. Before long, the efforts of East Marshall caught the attention of Rockwell-Collins, Inc., who increased efforts to bring the program to other schools. Rockwell-Collins and other members of the Iowa Business Council saw the opportunity to cultivate more potential employees for CAD modeling, engineering design, and other design-related fields. Today, the Iowa Area Education Agency acts as the manager of the state-wide program, with Iowa businesses like R-W acting as partners & sponsors. Nearly 100 Iowa School Districts participate in the program, as well as a few other districts across the country.

**Credits:** At Northwood-Kensett, students may take up to four semesters of this elective class. Students increase their skills using the programs available over time, and work to improve their products each semester they re-enroll in the course. Since the course is self-driven, Pass/Fail Credit is given. Students may only earn credit by fulfilling the semester’s requirements.

- VREP 1 (1 Credit)
- VREP 2 (1 Credit)
- VREP 3 (1 Credit)
- VREP 4 (1 Credit)

***For more information:*** <http://www.vrep.org/>