



Taste of Engineering Careers (TEC) Course

GNT 1210 – Illinois Valley Community College – 2 semester hours



The Taste of Engineering Careers Course focuses on engineering technology skills with a single project – designing and building an electric guitar. Each student will design and construct a guitar which becomes the property of the student upon successful completion of the course.

Course Credit: 2 semester hours (IVCC credit hours)

Course Eligibility: Open to LaSalle-Peru High School and Area Career Center seniors by application. Juniors may be eligible in special circumstances. Since this course is supported by a National Science Foundation grant and only 10 seats are available, applications will be evaluated on the basis of the goal/objectives of the NSF grant, the quality of responses on the application and the individual's potential for success in a technical/technology-related project.

Tuition: Free. IVCC tuition of \$139.50 for 2 credit hours plus a \$5 registration fee and \$100 of the cost of guitar components are supported by a National Science Foundation grant.

Fee: \$75 to be paid to IVCC by the student before the first course session. This fee covers the portion of the cost of guitar components not funded through the NSF grant.

Schedule: The course will meet on nine Saturdays: October 3 to Dec. 5, 2009 (does not meet Nov. 28) from 8 a.m. to noon in the Agriculture Building on the IVCC East Campus.

Course Content:

- How a guitar works : music and physics
- Wiring and setup
- Instrument design, using CAD tools
- Neck and body blanks: Tolerance, uniformity
- Fretboards
- Sanding and finishing
- Wiring harnesses
- Assembly and setup
- Measuring build variation

Instructors: Dorene Perez, Program Coordinator of CAD; Jim Gibson, Program Coordinator of Electronics; Tim Bias, Program Coordinator of Manufacturing/Industrial Maintenance

FOR FURTHER INFORMATION contact: Dorene Perez, Illinois Valley Community College, 815 North Orlando Smith Ave., Oglesby, IL 61348. Phone: 815-224-0221. Email: dorene_perez@ivcc.edu
Or visit www.ivcc.edu/nsf



National Science Foundation Grant #0802505

Building an Engineering Technology Workforce: A Plan for Reaching Young People, Adults and Women

Illinois Valley Community College
2008 - 2011

Goal and Objectives

The goal of Building An Engineering Technology Workforce is to increase the number of people in the Illinois Valley Community College district who prepare to enter engineering and engineering technology careers. This project targets high school and middle school students and adults (non-traditional students), with specific efforts directed at women. The objectives of project activities are:

- To increase awareness of and interest in engineering and engineering technology careers, with special emphasis on the work of engineering technicians.
- To assist in preparing students to enter engineering and engineering technology programs by integrating science, technology and math into project activities
- To increase enrollment in engineering technology programs at IVCC.

Further information about the grant project is available at www.ivcc.edu/nsf and from the grant project staff:

Project Principal Investigator: Dorene Perez, dorene_perez@ivcc.edu

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