## MVLA 2019-20 COURSE INFORMATION SHEET

Course Title: Engineering Technology II (BC2030) Instructor: Lydia Conoway UC/CSU: "G" Elective - 1 year required Pre-Requisite: Engineering Technology I Textbook and other learning resource: Manufacturing & Automation Technology

# Student Learning Outcomes:

Engineering Technology II is an advanced engineering course designed to expose students to engineering technology careers. The course provides hands-on instruction in several engineering disciplines including Design and Problem Solving, CAD, Mechanical Design, Electricity and Electronics, and Civil Engineering. Projects are designed to allow students to explore topics in depth while making connections with related science and engineering disciplines. Students will demonstrate mastery of content and process by completion and presentation of these long-term projects. Students will be expected to share project results both electronically and during public presentations with peers and teachers. This course is aligned with the California State Department of Education Educational Model Curriculum Standards and Program Frameworks and is an enriching program suitable for students who want to experience and prepare for college and university studies or for future STEM careers.

Students will: Gain knowledge of engineering disciplines. Apply physics and mathematical concepts to solve engineering problems. Use math, science and technology together to enhance general technological/scientific literacy. Continue the development of critical thinking skills. Have practical experience in engineering applications. Understand the applications of engineering in a scientific, technology-based society. Understand that engineering provides opportunities for all students. Be aware of vocational opportunities in the fields of engineering.

Assessment and Grading (<u>BP 5121</u> / <u>AR 5121</u>): To ensure that every student has an equal opportunity to demonstrate their learning, the course instructors implement aligned grading practices and common assessments with the same frequency.

1. Grading categories and their percentage weights:

Culminating Projects and Exams - 40%

Classwork and Homework – 20%

Quizzes and Interim Project Assessments – 20%

Final Exam/Project – 20%

- 2. Achievement evidence collected within each grading category:
  - Final Exam: There will be a cumulative semester 1 Final Exam. It will build on cumulative concepts students have mastered for that semester. The 1st semester final exam makes up 20% of the overall grade.
  - Final Project: There is a final project for semester 2. This project will build on cumulative concepts students have mastered. The 2nd semester final exam makes up 20% of the overall grade.
  - Culminating Projects and Exams: Projects are given to integrate skills and develop mastery of cumulative concepts. Exams are given when the concepts are best assessed with a written or practical exam. They are equal weight making up 40% of the overall grade.
  - Quizzes and Interim Project Assessments: Quizzes are given to assess mastery of learned skills. They will build on cumulative concepts students have mastered for that skill. Interim Project Assessment are given during longer projects and may include written or verbal assessments and check-ins. They are equal weight making up 20% of the overall grade.
  - Classwork and Homework: Assigned regularly through labs, projects, logs, and various activities. They are all equal weight making up 20% of the overall grade.
- 3. Grading scales:

90-100%	А
80-89.99%	В
70-79.99%	С
60-69.99%	D
50-59.99%	F

4. Homework/outside of class practices (<u>BP 6154</u>):

Homework is given regularly to reinforce and apply concepts learned in class through labs, logs, and various activities. They are tied directly into classroom instruction and support student comprehension of learned skills. All work must be completed by the due date and time in order to be graded for full credit.

5. Excused absence make up practices (Education Code 48205(b)):

Students must notify and work out a schedule prior to the due date or upon returning from an excused absence with their teacher to make up any work, quizzes, and exams beyond the due date.

6. Academic integrity violation practices (MVHS Academic Integrity Policy):

The Board expects that students will not cheat, lie, plagiarize or commit other acts of academic dishonesty. Examples of cheating include: anyone who

copies another's work or turns in someone else's ideas as his or her own, collaboration with another student or students could be considered cheating if students are expected to complete an assignment independently, copying homework, allowing someone else to copy your work, plagiarism, copying or allowing others to copy from another's exam, improperly obtaining and/or using tests, questions, or answer keys, using unauthorized notes/materials or electronic equipment (calculators, cell phones, etc.), with greater access to the Internet and electronic sources, students need to be very clear about their responsibilities in using these tools with integrity. Check with your teachers if you are unsure or unclear about his/her expectations regarding the use of the Internet.

## 7. Late work practices:

All work must be completed by the due date and time in order to be graded for full credit. Unexcused late work will receive a maximum grade of 90%. Unexcused late work not turned in after one school week of the due date will not be accepted. Revisions and retakes are encouraged for most assignments. Students will be notified in advance of assignments that are not eligible for revision. Criterias and due dates for revisions will be dependent on course types. All late work submission will require a personal email informing the teacher.

Many projects and groupwork need to be completed on time to participate in the challenge. Additional time outside of class before the end of the project can be arranged with the instructor

8. Revision practices:

Most revisions must be completed within one week, and are allowed only once. The maximum grade a student can receive is a 90% for any revisions or retakes. Students will have only one week from the time the grade is posted to revise their work. All revision submission will require a personal email informing the teacher.

#### 9. Extra credit practices:

There is no extra credit in this course.

10. Additional grading practices: None

### Instructors' email addresses:

Lydia.Conoway@mvla.net

### Additional information:

SAFETY IS OF THE UTMOST CONCERN in this class. Students who create a classroom situation that is physically or emotionally unsafe for

themselves or other students may be dismissed from the class.

Students are to be respectful to everyone including themselves. Students are expected to be focused and on task at all times.

Computer use is for class related activities only, and must in line with the MVLA Digital Device and Behavior Policies of the Parent/Student Handbook. All other electronics are to be silenced and stored out of sight.

Food and drinks are to be put away at all times in the lab except for water.

I am usually in my room, 517/518, during lunch and tutorial periods for help.