

# Virginia Western Community College

## SDV 101

### Orientation for Engineering

#### Prerequisites

None

#### Course Description

Introduces students to the skills which are necessary to achieve their academic goals, to services offered at the college and to the discipline in which they are enrolled. Covers topics such as services at the college including the learning resources center; counseling, and advising; listening, test taking, and study skills; and topical areas which are applicable to their particular discipline. Explores the careers, skills, and pathways in engineering and mathematics.

**Semester Credits: 1 Lecture Hours: 1 Lab/Recitation Hours: 0**

#### **Required Materials**

##### **Textbook:**

None required

##### **Other Required Materials:**

Pencil  
Paper  
Scientific calculator



**The following supplementary materials are available:**

1. VWCC College Catalog  
<http://www.viriniawestern.edu/catalog/>
2. VWCC Student Handbook  
<http://www.viriniawestern.edu/documents/StudentHandbook.pdf>
- 3.

**Course Outcomes****At the completion of this course, the student should be able to:**

- A. Be familiar with the contents of the college catalog, including programs of study that the college offers, requirements for graduation, GPA calculation, admission policies and academic regulations.
- B. The student will know where to locate specific services including the learning technology center, library, disability services, and financial aid.
- C. List and describe specific methods to:
  1. Improve ability to recall information
  2. Manage time more efficiently
  3. Read a textbook with improved retention
  4. Prepare for and take tests
  5. Take effective notes
  6. Discuss several procedures for focusing attention on the task at hand when reading, listening, taking notes and tests
- D. The student will have a better understanding of social and personal issues that affect college success including diversity, substance abuse, financial management, and interpersonal relationships.
- E. The student will learn small group activities how to more effectively communicate and interact with other students, counselors, and faculty.



**Topical Description**

<b>Week</b>	<b>Topic</b>
<b>1</b>	<b>How well do you know VWCC?</b>
	<b>Introduction to the College</b>
	<b>VWCC Rules &amp; Regulations</b>
	<b>The Student Handbook, Class Schedule, College Catalog</b>
<b>2, 3</b>	<b>Who are you and what do you want?</b>
	<b>Student information sheet</b>
	<b>College/career goals / Why you chose your major</b>
	<b>Academic matriculation program</b>
	<b>The Engineering team and their duties</b>
	<b>Engineering opportunities</b>
<b>4</b>	<b>What else can I do with an engineering degree?</b>
	<b>Extracurricular activities</b>
	<b>National societies</b>
<b>5</b>	<b>So what are you doing with your 168 hours? And your money?</b>
	<b>Time organization</b>
	<b>Money management</b>
<b>6</b>	<b>What haven't engineers touched?</b>
	<b>Understanding some of today's devices</b>
<b>7, 8</b>	<b>So should you 'blow the whistle' on your boss?</b>
	<b>Engineering ethics and professionalism</b>
<b>9, 10</b>	<b>So how did you get that answer?</b>
	<b>Reading for retention</b>
	<b>Problem-solving techniques</b>
	<b>Creativity / Estimating</b>
<b>11, 12</b>	<b>So is all this math really that important?</b>
	<b>Applications of mathematical concepts</b>
	<b>Units and conversions</b>
	<b>Trigonometry / Geometry concepts</b>
<b>13, 14</b>	<b>Introduction to force concepts</b>
	<b>Scalars and vectors</b>
	<b>Force analysis / Material science</b>
<b>15</b>	<b>What will putting your finger in a wall outlet do?</b>
	<b>Introduction to electricity</b>
	<b>Electrical circuit analysis</b>



	<b>What did that Professor say yesterday?</b>
	<b>Ways to improve memory and academic success</b>

### Notes to Instructors

1. Homework assignments, quizzes, reports, final exam are all subject to change during the course of the semester and will be announced in class.
2. Homework will be assigned during class periods as required.
3. The final exam/project is worth 10-15% of the final grade.

