

2010



Making Industry Meaningful In College

Guide Book

MAKING INDUSTRY MEANINGFUL IN COLLEGE

MIMIC Student Guide Book

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Introduction

Congratulations!

As a student in MIMIC, you are a part of an award-winning program at IVCC. Making Industry Meaningful In College is a nationally recognized curriculum project that places students from electronics, engineering design, and a variety of business fields in companies to select, design, manufacture, and market a product. Students from Integrated Business Operations, Engineering Design Projects, and the Electrical Capstone participate in MIMIC.

The goal of this project is to expose you to real life experiences that will better prepare you for the world of work. Since its inception in 1995, this program has been training students for the workplace by developing essential workplace skills. MIMIC gives you the opportunity to use creative thinking skills, teamwork, and communication skills by creating a true life situation mimicking an industry. You will be joined by students from different disciplines and you will use your technical skills and people skills to successfully design and sell a product on campus.

You will begin with company meetings and brainstorming to decide how to produce and market your product. Then, marketing students will conduct a marketing survey, analyze the results, and make recommendations. After company approval, engineering students will refine the design of the product and the electronics and engineering students will produce a prototype. During this time, accounting students will prepare budgets and do cost accounting, information technology students will handle company correspondence, and business students will organize the MIMC Fair, where the products will be sold. After prototype approval, production will begin and marketing students will advertise and sell the product.

You and students in the other disciplines will work on the project at different times throughout the semester. Your classes, however, are scheduled at a common time to allow you to meet in your companies as needed. At some time during the semester, depending on your discipline, you will present an oral report about your portion of the project at meetings attended by all MIMIC participants and by members of the college administration and the teaching staff.

Welcome to MIMIC!

MIMIC Instructors:

Dorene Perez Jim Gibson Rick Serafini

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Section

Basics of the MIMIC project

Making Industry Meaningful In College for you.

he purpose of the MIMIC project is to give you an opportunity to experience the environment of the workplace in a classroom setting. You will be assigned to a company which includes students from other fields of study. This format will give you an opportunity to work with people of different backgrounds and personalities.

Once your company is formed, you will follow procedures that mimic what would happen in typical "real world" companies:

- **1.** Your company will meet to review the product your company is assigned to make.
- 2. Your company will decide on a corporate name.
- **3.** Your company will meet weekly (or more often if necessary) to communicate ideas, solve problems and plan the project.
- 4. You will complete individual classroom assignments pertaining to the project.
- 5. You will make an oral presentation to the group concerning your part of the project.
- 6. You will participate in the production of the product.
- **7.** You will participate in the MIMIC Fair. The MIMIC fair is the ultimate goal, where you will display and sell your products to students and staff of IVCC.

What classes participate in MIMIC?

BUS 2260 – Integrated Business Operations

Integrated Business Operations offers students credit as they form and run a MIMIC company, including organization of the MIMIC Fair, accounting functions, marketing, and company correspondence. The course is required for sophomores in business and accounting Associate in Applied Science Programs.

CAD 2208 - Engineering Design Projects

Engineering Design Projects is a capstone course in engineering that enables a sophomore CAD/CAE student to use their skills to successfully design a product for production. Students produce engineering drawings for production and supervise production as project managers.

ELT 2254 – Electrical Capstone

Students get to show all they have learned in the program in this class. You have two projects, one is the award winning MIMIC project and one is an Automation project using the Basic Stamp.

Why do students from all three classes participate?

The mix of classes creates an environment of a manufacturing company. The MIMIC project explores how the various disciplines (engineering, electronics and business) work together in a simulation of a real world company.



Figure 3: A MIMIC team member advertises the MIMIC Fair by painting the fair logo on the window near the main entrance to the college.

When does MIMIC meet?

MIMIC-related classes meet on Monday and Wednesday starting at 1:00 p.m. Classes participating in MIMIC have been scheduled at a common time so that all classes can meet together when necessary.

The first team meeting (see schedule) will last for the entire class period and will include a presentation from the MIMIC instructors.

This meeting will also include a team building exercise and a question and answer period for you. If time permits, you will begin reviewing the product you will be producing for the semester. You will also discuss how to keep in communication with each other for the semester.



Figure 1. Team members discuss progress at a weekly company meeting.

At the second meeting your team will continue discussion of your product.

All company meetings will be on Wednesdays for the remainder of the semester barring unforeseen circumstances. Changes will be announced.

Individual companies will have individual needs. Circumstances or problems may arise that make it necessary for your company to meet more often than scheduled. Your company will decide on times and places to meet to resolve issues as needed.

You will communicate with your team members. You will have an email address assigned to you. An electronic discussion board will also be available for discussions between members of your company and the entire MIMIC group.

Where does MIMIC meet?

The first MIMIC meeting will be in the Fireplace Lounge. Individual company meetings will be in various assigned rooms in building D. Any room changes will be announced by your instructors.

classroom setting.

What is expected of a MIMIC student?

As a participant in MIMIC, you must meet certain requirements that are essential in being part of the "team." Knowing what is expected of you as a MIMIC student should lessen your anxiety and help you participate more effectively. The teamwork requirements you must meet include the following:

- **1.** You are expected to attend company meetings.
- **2.** You are expected to participate in discussions about the best approach to produce, market, price and produce your product. You are expected to work with all of your team members to overcome problems.
- **3.** You are expected to give an oral presentation to the MIMIC group. Depending on the size of your class, you may be giving an individual presentation or presenting as part of a team of two or three.
- **4.** You are expected to work in the production of your products. One week in the MIMIC schedule is for production.
- **5.** You are expected to facilitate at least one company meeting. As facilitator, you will set the agenda for the meeting and see that the meeting is conducted in an orderly manner. Engineering Design students will conduct the meetings during the design phase of the project. Electronics students will conduct the meetings during the prototyping phase of the project. Business and Marketing students will conduct the meetings during the meetings during the weeks before the fair.
- 6. You are expected to participate in the MIMIC Fair.
- 7. You are expected to attend the final meeting and celebration.





Figure 2: MIMIC students celebrate the completion of the project with lunch and a presentation by a speaker.



What should you expect from MIMIC?

The goal of MIMIC is to prepare you to enter the workplace. By creating an industrial company structure within the classroom, MIMIC allows you to sharpen your technical skills and develop essential workplace skills including the following:

Oral communication skills	• Knowing how to learn
• Arithmetic/computation skills	Critical thinking skills
• Written communication skills	• Life application skills (ethics, civic responsibility)
• Responsibility/goal setting	Technological skills
• Self-management skills	Leadership skills
• Alcohol and drug free	Decision-making
Reasoning /using logic	• Teamwork skills
• Problem solving skills	Listening skills
• Reading and understanding non-technical and technical materials	• Self-esteem

These 18 skills are endorsed by Tech Prep, a federal program funded through Carl Perkins legislation. Tech Prep programs combine academic and technical education to prepare students to enter and succeed in careers.

MIMIC is sponsored by a Partnerships for College and Career Success grant provided through the Starved Rock Associates for Vocational and Technical Education and IVCC Consortium. For

2005 through 2008, some funding for the project was from a National Science Foundation grant. Under the NSF grant, MIMIC became the focal point of the two-year technical programs in engineering design and electronics.



Figure 4: Team members apply problem solving and critical thinking skills to a product problem.

Field Trip Opportunities

You are likely to have an opportunity to participate in one or more field trips, with all MIMIC students or just with students in your field. Field trips will be announced by your instructor.



Figure 5: MIMIC students board the bus to return to campus carrying samples distributed at the National Design Engineering Show in Chicago.

MIMIC Schedule

The following is a tentative schedule. Please listen to your instructor for date changes.

January 20Class meetingsJanuary 27Team meetings with entire MIMIC group in A209

There will be company meetings every Wednesday throughout the semester unless otherwise announced. Once a month before team meetings there will be either a team building or a quality training activity.

- February 3 Company meeting to discuss product and group/individual photos
- February 10 Company meetings
- February 17 Company meetings
- February 24 Edible Car Contest
- March 3 Engineering design finalized Engineering presentations given to entire MIMIC group
- March 3–18 Prototyping
- March 22-26 Spring Break
- March 31 Electronics presentation to entire MIMIC group
- April 7 14 Production week
- April 14 Quality review
- April 21 Marketing Presentations to entire MIMIC group
- April 28 MIMIC Fair
- May 5 Accounting Presentations to entire MIMIC group
- May 10 Final meeting and celebration (attendance required)

Figure 6: MIMIC instructors and college administrators attend oral presentations by student team members.



Oral Presentations

You will participate in an oral presentation.

You will present your portion of the project to the entire MIMIC group at a time in the semester determined by your discipline; for example, presentations by engineering design students are early in the semester and presentations by marketing, accounting and business students are late in the semester. Faculty, staff, administration and counselors are also invited to attend. You will be instructed in the use of software and equipment to facilitate a successful presentation.





Figure 7: MIMIC students give oral presentations about their portions of the project utilizing Power Point.

Production

You will contribute to the manufacture of your company's product.

One week in your class has been scheduled for manufacturing of products. All of your team members are expected to contribute to the manufacturing week. Each team will recommend the number of products they believe they should manufacture. Instructors will approve the number of products to be manufactured by each team.



Figure 8: Team members from all career fields participate in production.

The MIMIC Fair

The Big Day!

For 16 weeks, your team will work to meet its goal: selling your wares at the fair. At the fair, your finished product will be displayed for everyone on campus to see and purchase.





Figure 9: At left, customers admire the interesting display of the Turn On Company. All companies sold out their products at the 2001 Fair, a recordbreaking event for MIMIC. Five companies contributed 30 products each to the fair. The theme of the fair, illustrated by the logo above, was "Plug Into The Future."

Organizing and publicizing the MIMIC Fair is the primary responsibility of BUS 2260 students, but all of you are required to participate in the fair. Job duties may include setting up booths and displays, staffing the booths for sales, and tearing down displays for clean up. Teamwork is very important throughout the project, which includes the MIMIC Fair.



Figure 10: Team members await the arrival of customers as the MIMIC Fair booths open for business.

Tips from past students

"Work hard, work as a team and leave no one behind and everyone will benefit from a real-life program that truly mimics the real working world."

- Jeff Grabill

"Try to be a leader..."

- Scott Heyers

"Listen to your instructors..."

- Tiffany Saeturn

"Stay ahead of the game...if you have a deadline see if you can get it done a week ahead of time... in the long run you will be much happier."

- Derik Faber

"Start early, make decisions early...be there for the meetings and give ideas because you don't want to be locked into doing something you don't really want to do...don't pick anything too complicated..."

- Matt Stickel

"Be prepared; expect the unexpected."

- Nolan Carey

"...the hardest thing is getting everything done, lined up in order and what steps to do it in..."

- Chad Votaw



Figure 11: MIMIC students train in teamwork

Visit the MIMIC Web Site: http://www.ivcc.edu/mimic

Sample forms

The following pages include sample forms. These or similar forms will be utilized by some members of your team during the project.







Figure 12: MIMIC Fair products (on left above) at a table at the 2001 Fair and in a display case in the main lobby (above). At left, therapeutic massage students provide chair massages at the 2005 Fair.



AGENDA

Team Name:

Meeting Date:

AGENDA ITEM	PERSON	TIME	RESULTS NEEDED
Attendance		min.	
		min.	
Agenda items for next meeting		min.	

P:/MIMIC/Agenda1_07.doc

WORKSHEET FOR TEAM MEETING NOTES

The list below suggests information that should be recorded about a meeting. Use this information to prepare a summary for team members, your instructor and team records.

Date	Time	Place
Attending:		
Absent:		
1. Major decisions group	reached:	
 Major issues discussed Other topics of discuss 	with no decision made:	

- 4. Responsibilities assigned or assumed (or reminders announced):
- 5. Deadlines or times assigned (or reminders announced):
- 6. News on progress (or lack of it) on project(s): Use person's name and report what progress they have made or not made on their responsibilities. Be specific.

_____ reported....

- 7. Problems encountered:
- 8. Next meeting scheduled:
- 9. Agenda items for that meeting:

	Nan	ne			
	Mee	eting Da	te		
	Company Number				
	Con	npany N	ame		
Meeting Administration	Not at all		To a	great e	<u>xtent</u>
Was the room adequate?	1	2	3	4	5
Did the meeting start on time?	1	2	3	4	5
Who was late?					
Were the appropriate people present?	1	2	3	4	5
If not who was absent:					
Was the agenda followed?		2	3	4	5
Did the meeting end on time? Comments:	1	2	3	4	5
<u>Group Spirit</u>					
Did everyone participate?	1	2	3	4	5
Was the meeting free from disruptions?	1	2	3	4	5
Was there a healthy group spirit?	1	2	3	4	5
Comments:					
Effectiveness					
Was the meeting a good use of time?	1	2	3	4	5
Did you accomplish your goals?	1	2	3	4	5
Comments:					
Give a brief synopsis of the meeting:					

Meeting Evaluation

Name of Facilitator _____

- ---,

Peer Performance Review

Employee Information

Review Guidelines

Name Of Team Member Being Reviewed: Date:

Your name (optional) Review Period:

to

Complete this peer review, using the following scale:

NA = Not Applicable
1 = Unsatisfactory

2 = Marginal

- **3** = *Meets Requirements*
- **4** = *Exceeds Requirements*
- **5** = *Exceptional*

		Evaluation			
	(5) = Exceptional	(4) = Exceeds Requirements	(3) = Meets Requirements	(2) = Marginal	(1) = Unsatisfactory
Demonstrates Required Job Skills And Knowledge					
Has The Ability To Learn And Use New Skills					
Uses Resources Available In An Effective Manner					
Responds Effectively To Assigned Responsibilities					
Meets Attendance Requirements					
Listens To Direction From Management					
Takes Responsibility For Actions					
Honors Commitments					
Demonstrates Problem Solving Skills					
Offers Constructive Suggestions For Improvement					
Generates Creative Ideas And Solutions					
Meets Challenges Head On					
Demonstrates Innovative Thinking					
Additional Comments:				Provided by HF	R.com

MIMIC Agreement

I have read the MIMIC Guidebook, understand the requirements of the project, agree to be punctual and to attend company meetings and other MIMIC events, and will abide by the other terms and conditions of the project.

Signature

Date

Intellectual Property Agreement

I hereby give my consent to Illinois Valley Community College to document my MIMIC project work and to utilize that documentation for educational or promotional purposes, without compensation, in perpetuity. Documentation may include photographs, diagrams, or videos in print or electronic format.

I also hereby give my consent to Illinois Valley Community College to retain samples of products and components which I develop or assist in developing for the MIMIC project and to utilize those products or components for educational or promotional purposes, without compensation, in perpetuity.

Signature_____ Date_____

Printed Name

	Photo/Video Statement Release		
V	I hereby release rights to photographs statements taken by Illinois Valley Co use in possible promotional or educat including IVCC's Web site.	mmunity College to	
ILLINOIS VALLEY community college	Signature	_Date	