

# Course Syllabus

## Advanced CAD/CAM Applications

### MANT 256

### 3 Credit Hours

**Semester:** Spring 2013

**Instructor:** Ben Hamlett

**E-mail:** [bhamlett@csi.edu](mailto:bhamlett@csi.edu)

**Class Time:** Tue and Thur 4:30pm-6:20pm

**Location:** CRHS Mfg Lab RM 313

**Office Location:** 122A Canyon/ CRHS Mfg Lab

**Office Hours:** M-F 1-2pm@CNYN 122 or by appt

**Office Phone:** (208) 732-6374

#### Course Description:

This course expands on the knowledge gained in CAD/CAM Applications. Students will use new techniques and skills to create advanced parts and projects in the lab. Topics will include surfaces, jigs and fixtures, feed and speeds, and CNC optimization. CNC mills and lathes as well as software such as MasterCAM and Solidworks will also be utilized.

PreRequisites: MANT 155 or Instructor's Permission.

#### Required Textbooks and Supplies:

1-2 inch binder for notes/portfolio

Jump-drive for program storage. (1Gb recommended)

#### Outcomes and Assessment:

##### Outcomes:

- Students will apply skills learned in basic CADD to draw basic parts.
- Students will identify basic machining aspects to successfully build products.
- Students will demonstrate proper safety, setup, and operation of a computer automated manufacturing (CAM) systems.
- Students will draw parts, design toolpaths, postprocess, and successfully machine parts to given specifications.
- Students will explain how 3D solid modeling can be used to increase production and improve efficiency in CAM systems.

**Assignments:** There will be periodic assignments either in-class or homework.

**Portfolio:** Students will keep a notebook containing their notes, assignments, and handouts for reference during the course and future use. The notebook will not be graded, but will be very helpful when working on projects and assignments.

**Projects:** There will be various hands-on activities to reinforce concepts. Learning by doing and demonstrating is needed to not only know, but accomplish.

**Quizzes:** There will be quizzes to check for conceptual understanding during the course.

**Attendance:** Attendance is a very important part of having a job. Class is considered to be your job. If you are unable to attend class please inform the instructor ASAP. Attendance is 10% of your grade.

Topic	Percent of Grade
Assignments	30%
Projects/Labs	30%
Quizzes/Exams	30%
Attendance	10%
Total	100%

## **Policies and Procedures:**

Students will abide by all rules and policies presented in the student handbook

**Attendance policy:** It is the student's responsibility to catch up on any missed assignments, projects or lectures.

**Late policy:** Assignments will be due at the start of class. Late assignments will not be accepted unless prior approval or an emergency.

**Plagiarism statement:** It is expected that students will not plagiarize any work. This means no copying answers. Students can assist each other, but are expected to do their own work.

## **Grading Practices:**

### **Grading Scale:**

A = > 90

B = 80-90

C = 70-80

D = 60-70

F = <60

### ***It is the student's responsibility to drop the course.***

*A student may drop a course or all courses prior to the end of late registration (first Friday of the term) without it being recorded on the student's official transcript. A student initiated drop after the late registration period is considered a withdrawal, and results in the grade of W.*

*(Students may drop courses online until the end of the late registration period. In order to withdraw from one or more courses following late registration, a completed registration form is required. Instructions on the form indicate when a signature of instructor and/or Financial Aid advisor is required. The completed form may be submitted to Admissions & Records or any off-campus center.)*

**NOTE:** *Students may withdraw from courses until 75% of the course meetings have elapsed. No course may be withdrawn from after 75% of the course has elapsed.*

## **CSI E-mail**

*Since email is the primary source of written communication with students, all registered CSI students get a college email account. Student e-mail addresses have the following format: <address>@eaglemail.csi.edu where <address> is a name selected by the student as a part of activating his/her account. Students activate their accounts and check their CSI e-mail online at <http://eaglemail.csi.edu>. Instructors and various offices send messages to these student accounts. Students must check their **CSI e-mail accounts regularly to avoid** missing important messages and deadlines. At the beginning of each semester free training sessions are offered to students who need help in using their accounts.*

**On-line course evaluation statement:**

*To help instructors continually improve courses, students are strongly encouraged to go online to <http://evaluation.csi.edu> and complete anonymous evaluations which open two weeks before the end of the course and close the last day of class. When students enter the site, they find evaluations for their enrolled courses. Thank you for this valuable input!*

**Disabilities:**

*Any student with a documented disability may be eligible for reasonable accommodations. To determine eligibility and secure services, students should contact Student Disability Services at their first opportunity after registration for a class(es). Student Disability Services is located on the second floor of the Taylor Building on the Twin Falls Campus. 208.732.6260 or e-mail Tara Williams, [twilliams@csi.edu](mailto:twilliams@csi.edu).*

**CSI CAMPUS SECURITY**

*The College of Southern Idaho is committed to providing safe campuses for all students. Currently in place is an Emergency Notification System (RAVE) that provides information relating to an emergency on any CSI campus. This information is delivered electronically and can be received by all phone numbers and internet-equipped computers identified by the student. Registration is automatic when students register and contact information can be customized online (<http://www.csi.edu/alert/>) as necessary. The Twin Falls campus is also equipped with an Emergency Warning "Siren" that can be heard outside of buildings across campus. In the event of a signal, students arriving on campus should leave, and others should proceed with caution to avoid the emergency area. Students are encouraged to report any emergency (medical, criminal, behavioral, etc.) that is cause for action. Do this by calling 911 regardless of which campus you are on. If you are on the Twin Falls campus also calling CSI Campus Security at 732-6605 after placing the 911 call (the Twin Falls campus has security personnel available 24/7).*