MATH 221: Calculus for Technology I Course Syllabus Fall 2009

Section 16279 MW: 1:30-2:45 pm IT 073

Instructor: Matt McBride

Office: LD 257

Office Phone: 274-1272

Office Hours: MW: 3:00 – 4:00 pm or by appointment

Email Address: <u>mmcbride@math.iupui.edu</u>

Textbook: Peter Kuhfittig, Technical Calculus with Analytic Geometry, 4th Edition

Prerequisites: Math 159 or Math 153 and Math 154 with a grade of C- or better

Objective: The purpose of this course is to get a solid foundation of calculus; specifically, learning a practical working knowledge and seeing how calculus can apply to various scientific, engineering, and technical fields.

Withdraw Date: Tuesday, November 17th with a grade of W or F. The instructor's signature is required.

IUPUI Policy on Religious Holidays: IUPUI respects the right of all students to observe their religious holidays and will make reasonable accommodations, upon request, for such observances. Students seeking accommodation for religious observances must make a request in writing by the end of the <u>second</u> week of the semester to the course instructor and should use the <u>Request for Course Accommodation Due to Religious Observance Form.</u> This form may be downloaded from the Registrar's web site. For the statement of this policy and the dates of the applicable religious holidays see the Registrar's web site: <u>http://registrar.iupui.edu/religious.html</u>

Academic Honesty: IUPUI takes great pride in academic honesty, thus cheating of any kind will not be tolerated. If cheating is suspected, bad actions will be taken.

Homework: As with any math course, homework is a vital component. One must practice newly learned facts, theorems, etc. through the assigned homework. Homework will be assigned daily, however it will not be collected. See quizzes section below for details. Even though homework will not be collected it is expected to be completed, as this is necessary to excel in this course.

Quizzes: There will be weekly in-class quizzes with the exception during the weeks the exams will be administered. As mentioned above, homework will be assigned daily, but not collected. Instead the quizzes will come directly from the previous week's homework. Students, who have completed the homework will be able to use it on the quiz, however no in-class notes or books will be allowed. This is an incentive to do the assigned homework. Plus in order master mathematics one needs to practice it, hence homework. This can never be stressed enough.

Exams: There will be three closed book, closed notes, and closed homework in-class exams. Students will have the full class period to take the exams. All three exams will cover eight lessons each. This may be modified due to time and is left up to the discretion of the instructor. Students who are eligible to take the exams with AES should fill out the proper forms and inform the instructor.

Final Exam: The final exam is a departmental comprehensive exam, and will be held on <u>Saturday, December 12th</u> in the LE building at 3:30-5:30 pm. This date can not be modified, so make sure one's calendar is free. This exam is written by the course coordinator from a pool of problems submitted from all the instructors in this course plus the course coordinator's own problems. More details will be given when more information becomes available.

Make-up Policy: Make-up exams and quizzes will be given <u>only</u> for reasons deemed acceptable by the instructor, and <u>only</u> with written documentation. Make-up exams and quizzes must be taken within one week of the original date, and no make-ups may be taken after the final exam. There will be <u>no</u> make-up exam for the final. Make-up exams and quizzes are never easier than the original.

Calculator Policy: Graphing calculators will <u>not</u> be allowed on any exam, including the final exam or quizzes. One may use a single lined calculator; however, most of the exam problems will **usually** be written in such a way that a calculator will not be needed.

Matlab Projects: Along with being able to do calculus by hand, it is useful to know how to use computers to perform calculus calculations and estimates. Thus, there will be six Matlab projects assigned throughout the semester. Do not worry if you are not familiar with Matlab as the instructions are very detailed. Most on-campus computer labs have Matlab installed. The due dates of each of these projects is on the schedule, however one may always turn them in earlier, see below for details. The project instructions can be downloaded from the math department's web site at http://www.math.iupui.edu/courses/

Grade Distribution:

Quizzes	.15%
Matlab Projects	.10%
Exams	40%
Final Exam	.35%
Total	.100%

Grading Scale:

A: 100% - 90% B: 89% - 80% C: 79% - 70% D: 69% - 60% F: 59% or lower

This is only a guideline to follow; at the end of the course, the actual scale **could** vary. But, it will never be curved in such a way that the cut-offs for each grade will be raised. For example, the cut-off for the lowest A will never be 93%.