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| **MAT230 SYLLABUS** [**http://web.gccaz.edu/~briag73751/index.html**](http://web.gccaz.edu/~briag73751/index.html) |  |

COURSE

MAT230 – Calculus with Analytic Geometry II – In-Person – Section 14726 – 5 Credits – Fall 2019

INSTRUCTOR

Brian Bird – Office GCC North A 122 – (623) 888-7191 – [brian.bird@gccaz.edu](mailto:brian.bird@gccaz.edu) – [www.gccaz.edu/~briag73751/](http://www.gccaz.edu/~briag73751/)

TIME and LOCATION

Mondays/Tuesdays/Wednesdays/Thursdays 8:30 – 9:35 a.m. August 19th – December 5th Classroom GCC North A 111

**Note:** No class on September 2nd due to Labor Day

No class on November 11rd due to Veterans Day

No class on November 28th due to Thanksgiving

COURSE DESCRIPTION

Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry, and the analysis of sequences and series. Note: Student may receive credit for only one of the following: MAT230 or MAT231. Prerequisites: Grade of C or better in MAT220, or MAT221, or equivalent.

**Note:** Meeting the prerequisites does not guarantee your success in this class. You need to bring arithmetic skills, algebra skills, calculus skills, and a strong work ethic to the class in order to be successful. The Federal Credit Hour Definition requires “*a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit”.* We will not have time to answer questions regarding arithmetic, algebra and basic calculus – please don’t interpret this as me being impatient, rude or uncaring.

RECOMMENDED BOOK via WebAssign (WA)

To take full advantage of this class, you will need immediate access to WA. Go to <https://www.webassign.net/> and click on “ENTER CLASS KEY” in the upper right. Enter the class key **gc.maricopa 5762 1102**, click “Enroll”, verify the class, then either “Create Account” or “Sign In” to your existing account. If you have used WA for Calc before, there might be no cost. Otherwise it will cost $100 for Calc II or $135 for the Calc sequence. “Cengage Unlimited” costs $120 per year and is good for multiple disciplines. If you go to the Bookstore you will pay $131 for access or $186.75 for access and the hardcopy text. There is a 14 day grace period so there are no excuses to not get signed up immediately. The course is based on the book: *Calculus: Early Transcendentals,* by Stewart,8th Edition.

RECOMMENDED CALCULATOR

A TI-83 Plus (or equivalent) is strongly recommended. They cost approximately $90. Graphing calculators are available for lease from the college for $20. Apps allow your smartphone to be used as a graphing calculator (Wabbitemu for Android is free and quite good for example). Calculators will be allowed on tests. Smartphones can be used on tests with many rules (silent, airplane mode, WiFi off, flat on the desk at all times) – if you break a rule, then you fail the test. Please see the instructor if you have any questions.

COMPENTENCIES (<http://aztransmac2.asu.edu/cgi-bin/WebObjects/MCCCD.woa/wa/freeForm2?id=53850>)

Generally, students will:

* Learn about vectors and the geometry of space (Chapter 12)
* Further their knowledge of integration (Chapter 7)
* Apply integrals to real world problems (Chapters 6 and 8)
* Learn about parametric equations and polar coordinates (Chapter 10)
* Study infinite sequences and series (Chapter 11)

COMMUNICATION

I will be sending emails to your official school address and the address you enter in WA. Please check these regularly as you will be responsible for the content. If you don’t want to check your school email address, then forward it to an address that you will check. Refer to <https://www2.gccaz.edu/technology-help/student-email> for further information. When you send emails to me, please include your first and last name as well as MAT230 in the subject or first line.

GRADING

ONLINE HOMEWORK 0%

Homework will be assigned via WA, but it does NOT count towards this category. Instead, homework will be used to bolster your test scores. There will be bonus points worth up to 10% of the test based on your homework score. For example, if the test is worth 50 points, there are 5 bonus points (10%x50) available. If you score 90% on the corresponding homework, you would earn 4.5 bonus points (90%x5). It is **highly recommended** to **complete and understand** the homework. **Don’t rely on the help features** to get through the homework. Homework problems will be made available via a PDF file on my website for those that choose not to use WA.

QUIZZES/ATTENDANCE/GROUP WORK 10%

Occasionally quizzes will be given to assess important topics. Quiz problems will be similar to problems presented in class and homework assignments. The will be a strong correlation between quiz frequency/difficulty and student effort/attitude. Occasionally there will be attendance quizzes. Occasionally there will be group work assignments. There will be no makeup in-class work. Extra Credit will be offered and included in this category. It is strongly suggested to take advantage of Extra Credit opportunities. Extra Credit will be capped at 5% of Semester Grade.

TESTS 70%

There will be seven “chapter” tests consisting of problems similar to problems presented in class, quizzes and homework assignments. There will be no formal test reviews so pay attention in class and take good notes. Cheat sheets and calculators will be allowed. There will be no makeup tests.

FINAL 20%

The final will be Monday December 9th **8:00** – 9:50 a.m. There will be no makeup final. The final will be cumulative. There will be no formal final review, so keep your old tests and quizzes to study from. A cheat sheet and calculator will be allowed.

INDIVIDUAL PROBLEMS

To earn points, you must show the work. I cannot read your mind and can only grade your knowledge by what I see on paper. Show the set-up, work and units as appropriate. Box or circle your answers.

SEMESTER GRADE

**Grades are earned and are not awarded.** The following scale can be used to determine your grade:

A = 90 – 100% B = 78 – 89% C = **66** – 77% D = 50 – 65% F = 0 – 49%

NOTES and DISCUSSION ITEMS

1. Course content may vary from this outline to meet the needs of this particular group
2. Syllabus may be changed at any time at the discretion of the instructor with verbal notice
3. Withdrawals are not automatic – see instructor. You will be withdrawn with a “Y” (withdrawn failing which is counted as an “F” toward your GPA) after the deadline **(Sunday October 6th – last day to withdraw without the instructor’s signature)** unless you reach an agreement with the instructor.
4. College Catalog <https://www.gccaz.edu/gcc-catalog> and Student Handbook <https://www.gccaz.edu/student-life/office-student-life/student-handbook> Policies
5. Food and Drink Policy
6. Grievance (i.e. complaining) Policy
7. Behavior Policy (respect, one person talking at a time, **smartphones quiet and away**, etc.). If you are disrupting the learning environment (based on my discretion), you may be asked to leave class and reported to the appropriate Dean.
8. Classroom Atmosphere Policy (engage, ask questions, share ideas, etc.). Be prepared for my sense of humor which includes math jokes and sarcasm.
9. Cheating and Plagiarism Policy (1st offense assessment failure, 2nd offense course withdrawal with grade of “Y”)
10. Special Needs. If you have a documented disability, including a learning disability, and would like to discuss possible accommodations, please contact the GCC Disabilities Resources and Services office at 623.845.3080 or email drsfrontdesk@gccaz.edu.
11. Getting Help

SUGGESTIONS FOR SUCCESS

1. Come to class every day, prepared and ready to go
2. Have 2 notebooks – 1 for notes and 1 for HW
3. Take good notes and review often
4. Make a good faith effort on your HW
5. Take the tests seriously and prepare – know how to use your calculator – have a good cheat sheet
6. Get help early and often
7. Take advantage of extra credit opportunities

ATTENDANCE POLICY

**Attendance is very important**. Quiz, test and final questions will be based on what we cover in class. If you are unable to make class, please e-mail me (in advance if possible). **If you have excessive absences (based on my discretion), you will be withdrawn with a “Y”** (withdrawn failing which is counted as an “F” toward your GPA).

**Note:** Coming in late or leaving early counts as an absence. Missing the first week, missing 4 classes, missing two exams, and missing the Final are examples of what is considered excessive.

OUTLINE

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| **Monday** | **Tuesday** | **Wednesday** | **Thursday** |
| 8/19  Syllabus Review  Introductions | 8/20  Start Chap 12 | 8/21 | 8/22 |
| 8/26 | 8/27 | 8/28\* | 8/29  Start Chap 6 |
| 9/2 No School  Labor Day | 9/3 | 9/4 | 9/5 |
| 9/9 | 9/10 | 9/11 | 9/12 |
| 9/16\* | 9/17  Start Chap 7 | 9/18 | 9/19 |
| 9/23 | 9/24 | 9/25 | 9/26 |
| 9/30 | 10/1 | 10/2 | 10/3 |
| 10/7 | 10/8\* | 10/9  Start Chap 8 | 10/10 |
| 10/14 | 10/15 | 10/16 | 10/17\* |
| 10/21  Start Chap 11 Part 1 of 2 | 10/22 | 10/23 | 10/24 |
| 10/28 | 10/29 | 10/30 | 10/31\*  Happy Halloween |
| 11/4  Start Chap 11 Part 2 of 2 | 11/5 | 11/6 | 11/7 |
| 11/11 No School  Veterans Day | 11/12 | 11/13 | 11/14 |
| 11/18 | 11/19\* | 11/20  Start Chap 10 | 11/21 |
| 11/25 | 11/26 | 11/27 | 11/28 No School  Happy Thanksgiving |
| 12/2 | 12/3\* | 12/4  Review – Study!!! | 12/5  Review – Study!!! |
| 12/9\*  Final 8:00 – 9:50 a.m.  Good Luck!!! |  |  |  |

\* indicates planned test day

BRIAN BIRD'S SCHEDULE

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| **Time** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday\*** |
| **7:00** |  |  |  |  |  |
|  |  |  |  |  |  |
| **7:30** |  |  |  |  | **GCC North Hiking Club and Dual Enrollment Evaluations** |
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| **8:00** | **Office Hours\***  *A 122 My Office* | **Office Hours\***  *A 122 My Office* | **Office Hours\***  *A 122 My Office* | **Office Hours\***  *A 122 My Office* |
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| **8:30** | **MAT230**  *14726*  *A 111* | **MAT230**  *14726*  *A 111* | **MAT230**  *14726*  *A 111* | **MAT230**  *14726*  *A 111* |
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| **9:00** |
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| **9:30** |
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| **10:00** | **MAT150**  *37678*  *A 111* | **MAT150**  *37678*  *A 111* | **MAT150**  *37678*  *A 111* | **MAT150**  *37678*  *A 111* |
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| **10:30** |
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| **11:00** |
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| **11:30** |  | **MAT142**  *14669*  *A 111* |  | **MAT142**  *38168*  *A 111* |
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| **12:00** | **Office Hours\***  *A 122 My Office* | **Office Hours\***  *A 122 My Office* |
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| **12:30** |
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| **1:00** | **MAT120**  *38001*  *A 111* | **MAT120**  *38001*  *A 111* | **MAT120**  *38001*  *A 111* | **MAT120**  *38001*  *A 111* |
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| **1:30** |
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| **2:00** |
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| **2:30** |  |  |  |  |  |

**\* Additional Office Hours Available by Appointment**

Sexual Harassment Statement

Sexual harassment is any unwelcome, verbal or physical conduct of a sexual nature that is sufficiently severe, persistent or pervasive that it alters working conditions and creates a hostile environment or reasonably interferes with, limits, or deprives a student of the ability to participate in or benefit from any educational program or activity.

Sexual harassment and discrimination in any college education program or activity are prohibited. Sexual Harassment may include hostile environment harassment, sexual assault, inducing incapacitation for sexual purposes, sexual exploitation or dating violence and stalking.

Students should report any discrimination and/or harassment they experience and/or observe to the [GCC Office of Student Life](http://www2.gccaz.edu/node/20647) in the Student Union. Phone (623) 845-3525.

To view the full Sexual Harassment Policy refer to the Student Handbook,  [Sexual Harassment Policy for Students (AR 2.4.4) (see also 5.1.8)](http://chancellor.maricopa.edu/public-stewardship/governance/administrative-regulations/2-students/2.4-college-environment/2.4.4-sexual-harassment-policy-for-employees-and).