Math 1C: Calculus – Winter 2021

This class will be conducted completely online.
Live class meetings will be held via Zoom Tuesdays and Thursdays 4:00 - 6:15pm.

Zoom meeting ID: 973 2334 2243
Passcode: 517343

Instructor: Cheryl Jaeger Balm
Email: balmcheryl@fhda.edu

My goals for you this quarter:
– Pass this class, despite the stresses and constraints of remote instruction
– Know the material well so you can use it successfully in your future STEM courses

Tips to get the most from office hours:

- You will usually have homework due Mondays and Thursdays at 10pm. Start these assignments **early** so you can ask questions in office hours.
- Ask questions before class! Don't assume we will have time to get to everyone's questions during our class meetings (although I will do my best to do so).
- You can always make an appointment to meet with me (virtually) if you are busy during regular office hours or want to talk one-on-one.

Office Hours: Monday-Thursday 11am-12pm
Details are in the "START HERE!!!" Canvas module.

Textbook: *Stewart, Calculus Early Transcendentals* (8th edition) with WebAssign
If you do not already have it, the eBook with WebAssign can be purchased for $60 at:
http://services.cengagebrain.com/course/site.html?id=4922575

Canvas (Class Website): All class content, assignments and announcements will be on **Canvas**, which you can access through MyPortal. It is strongly recommended that you also download the **Canvas app** if you have a smart phone.

Once you have accessed **Canvas**, please go to Account → Notifications and adjust your **Notification Preferences** so that you have selected **"Notify me right away"** for Announcement, Submission Comment, Discussion Post and Conversation Message. Other notification settings are up to you.

Calculators: A calculator will not be needed for any quizzes or exams, but you may want to use the graphing websites desmos.com or geogebra.org/3d for some homework problems.

Unless otherwise noted:
· All **Homework** and **Discussion posts** must be completed by **10:00pm** on the day they are due.
· All **Quizzes, Labs** and **Exams** must be completed by **noon** on the day they are due.

Homework: You will be given written and/or WebAssign homework after each section that we cover. **All homework assignments must be accessed through Canvas.** Pay close attention to due dates and do not wait until the last minute to start assignments. Solutions to the homework will become available the moment they are due, so there will be **no homework extensions** granted for any reason. **Your homework will account for 15% of your course grade.**

Discussions: Even though this class is online, you are expected to participate and work with your classmates. Each week there will be two discussion boards active in Canvas. One board will be a place to ask and answer homework questions and give study tips on that week's Calculus material, and on the other board you will be prompted to discuss a specific topic in math or education. **These discussions will account for 5% of your course grade.**

Group Quizzes and Labs: Each week will include a group quiz or lab in class, usually on Tuesdays. These assignments will become available in Canvas during the last 30 minutes of class and will usually be due at noon the next day. You will be given time in class to work with your classmates to start the quiz or lab. After class, you may continue to work with your classmates, or you may complete the assignment on your own. Your lowest quiz/lab score will be dropped. **This group work will account for 20% of your course grade.**

Midterm Exams: There will be **five** midterm exams. Each midterm exam will focus the material covered since the previous exam. Midterms will be done outside of class. Each midterm will become available at 6am on a Wednesday and will be due by noon on the following Friday. More details on each midterm will be available on Canvas. **Each midterm exam will account for 10% of your course grade.**

Final Exam: The final exam will cover all material from throughout the quarter. More details on the final exam will be available on Canvas. **Your final exam will account for 10% of your course grade.**

Exam dates:

- Exam 1 due Friday, January 22 at noon
- Exam 2 due Friday, February 5 at noon
- Exam 3 due Friday, February 19 at noon
- Exam 4 due Friday, March 5 at noon
- Exam 5 due Friday, March 19 at noon
- Final Exam due Thursday, March 25 at 10pm

Course Grades:

Grade	A	B	C	D
Overall percent	≥ 90	≥ 80	≥ 70	≥ 60

Homework	Discussions	9 Quizzes & Labs	5 Midterm Exams	Final Exam
15%	5%	20%	50% (10% each)	10%

Student resources:

- Your classmates: Participate in the Canvas Discussion boards and form virtual study groups to learn from one another.
- MSTRC (Math, Science and Technology Resource Center): Since campus is closed, free online tutoring via Zoom is available instead, along with Academic Skills Workshops. More details can be found here `https://www.deanza.edu/studentsuccess/`.
- Your instructor: Make use of office hours, Canvas Inbox and WebAssign "Ask My Professor". **Do not wait until you are drowning to get help!**

Disability Statement: De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Programs and Services (DSPS) if you have any physical, psychological or other disabilities, vision, hearing impairments or ADD/ADHD. DSPS is still operating remotely while campus is closed. More details can be found here `https://www.deanza.edu/dsps/`

Academic Integrity: Learning involves the pursuit of truth, which cannot be pursued by presenting someone else's work as your own. Each student must pursue their academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Any suspected instance of academic dishonesty on any assignment will be reported to the college and may result in a 0 on the assignment and/or a failing grade in the class. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to `https://www.deanza.edu/policies/academic_integrity.html`.

Tentative class schedule (subject to change):

Week	**Tuesday**	**Thursday**
Wk 1: Jan. 1-4	Introductions Sequences (11.1)	Intro to Series (11.2)
Wk 2: Jan. 11-15	Integral Test & p-series (11.3) Comparison Test (11.4)	Limit Comparison Test (11.4) Alternating Series (11.5) Ratio Test (11.6)
Wk 3: Jan. 18-22	Root Test (11.6) Review of Convergence Tests (11.7) **Exam 1 opens tomorrow**	Power Series (11.8) **Exam 1 due at noon tomorrow**
Wk 4: Jan. 25-29	Functions as Power Series (11.9)	Taylor Series (11.10)
Wk 5: Feb. 1-5	Taylor Polynomials (11.11) Review for Exam 2 **Exam 2 opens tomorrow**	Parametric Equations (10.1) Parametric Derivatives (10.2) **Exam 2 due at noon tomorrow**
Wk 6: Feb. 8-12	Parametric Area & Arc Length (10.2) Polar Graphs (10.3)	Polar Derivatives (10.3) Polar Areas (10.4)
Wk 7: Feb. 15-19	Polar Arc Length (10.4) Review for Exam 3 **Exam 3 opens tomorrow**	3D Coordinates (12.1) 3D Vectors (12.2) **Exam 3 due at noon tomorrow**
Wk 8: Feb. 22-26	Dot Product & Projections (12.3)	Cross Product (12.4) 3D Lines (12.5)
Wk 9: Mar. 1-5	Planes (12.5) Review for Exam 4 **Exam 4 opens tomorrow**	Vector Functions (13.1) **Exam 4 due at noon tomorrow**
Wk 10: Mar. 8-12	Intro to Vector Calculus (13.2) 3D Arc Length (13.3)	Curvature (13.3)
Wk 11: Mar. 15-19	Normal & Binormal Vectors (13.3) Review for Exam 5 **Exam 5 opens tomorrow**	Review for Final Exam **Exam 5 due at noon tomorrow**
Wk 12: Mar. 22-26		**Final Exam due at 10pm** **Have a great spring break!!!**

Student Learning Outcome(s):

*Graphically, analytically, numerically and verbally analyze infinite sequences and series from the perspective of convergence, using correct notation and mathematical precision.
*Apply infinite sequences and series in approximating functions.
*Synthesize and apply vectors, polar coordinate system and parametric representations in solving problems in analytic geometry, including motion in space.