San José State University Urban and Regional Planning Department URBP 223: Housing Economics and Policy Spring 2025

Course and Contact Information

Instructors: Dr. Gordon Douglas and Dr. Shishir Mathur

Office location: 76 S. First St. Studio (Dr. Douglas); WSQ 216 E (Dr. Mathur)

Telephone: please email Dr. Douglas; 408-310-7856 (Dr. Mathur) Email: gordon.douglas@sjsu.edu; shishir.mathur@sjsu.edu

Office hours: Tuesdays, Wednesday and Thursdays by appointment (Dr. Douglas);

Friday 4 pm - 6 pm and by appointment (Dr. Mathur)

Class days/time: Wednesday 3 pm to 5:45 pm

Classroom: WSQ 111 Prerequisites: None

Course Catalog Description

Overview of the housing situation in the United States; examination of the theory of housing markets and framework for analyzing housing policies; in-depth study of the problem of affordable housing and critical examination of the steps that the public, private, and non-profit sectors have taken to alleviate the problem.

Course Format

In-person course.

Course Web Page and MYSJSU Messaging

Course materials such as syllabus, lecture notes, assignment instructions, etc. are at: https://sjsu.instructure.com/courses/xxxxx

You are responsible for regularly checking your email that you provided on MySJSU to learn of any updates. For help with using CANVAS see <u>Canvas Student Resource page</u>.

Course Learning Outcomes (CLOs)

What do we mean by the term "housing"? How do housing markets work? How is the price of a home determined? What factors impact the demand, supply, and accessibility of housing? What are the social implications of housing and housing affordability, ownership, and tenancy? How do policymakers, developers, and communities understand and address the need for affordable housing? Why is housing important from a planning perspective? This course aims to discuss these and such other questions/issues related to housing in the United States.

The course begins with an overview of the housing situation in the United States. It then examines the theory of housing markets, and provides a framework for analyzing various housing policies. Finally, it examines the problem of housing affordability and other socioeconomic challenges related to how housing gets built, owned, sold, and occupied in the U.S., critically evaluating the measures public, private, and non-profit actors have taken to address them.

After completing this course, students will be able to:

- 1) Understand how market-driven, and regulatory demand and supply side policies impact housing prices;
- 2) Critically evaluate federal low-income housing policies;
- 3) Analyze a jurisdiction's housing policies, and understand how regional- and local-level planning policies impact housing markets and availability of housing; and
- 4) Suggest ways to address affordable housing shortages at the local-level
- 5) Describe the scalability of housing policy approaches across geographic and political contexts.

This course partially covers the following PAB Knowledge Components: 3B, 3D and 3E.

- 3B) Governance and Participation: appreciation of the roles of officials, stakeholders, and community members in planned change.
- 3D) Growth and Development: appreciation of economic, social, and cultural factors in urban and regional growth and change.
- 3E) Social Justice: appreciation of equity concerns in planning.

Required Texts

Schwartz, Alex. 2021. *Housing Policy in the United States (4th ed)*. Routledge, New York. (All the required chapters from this book are uploaded to the Canvas course page. See Files → Readings.)

Other Assigned Readings

Please see the Weekly Course Schedule below. Readings available directly from the course Canvas page have the word "(Canvas)" at the end of the citation; all other readings are available via the library's website, elsewhere online, or in the two required texts above.

A quick guide on how to access Canvas is at http://www.sjsu.edu/ecampus/docs/Canvas-Student-Quick-Guide.pdf. Instructor may also hand out a small number of additional articles in class, and at times may ask you to read material available on the web.

Other technology requirements / equipment / material

Personal computer and good internet connection for work done outside the in-person class sessions and for any on-line class sessions.

Library Liaison

The SJSU Liaison Librarian for the Urban and Regional Planning Department is Lauren De Celle. If you need research assistance, you can contact her at lauren.decelle@sjsu.edu or 408-808-2621.

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Your grade for the course will be based on the following assignments and other activities:

Assignments	Percent of Course Grade	Course Learning Objectives Covered
Assignment 1: One discussion questions and narrative		_
per class	10%	1-4
Assignment 2: In-class discussion	15%	1-4
Assignment 3: Engagement Unit Activity 1: Attend a		
Public Meeting and Write a Reflection Paper	10%	1-4
Assignment 4: Engagement Unit Activity 2:		
Participate in One Role Playing Group with a Guest		
Lecturer & Write a Reflection Paper and a Synthesis		
Paper	15%	1-4
Assignment 5: Paper 1	25%	1-3
Assignment 6: Paper 2	25%	1-5

This class will be a combination of lecture by the instructor, in-class discussion, and presentations by the guest speakers. You have to read the assigned material *prior* to attending that week's class, and participate in class discussion.

Assignment 1: For every class marked "Discussion Seminar" in the weekly schedule, each student is required to contribute one question that they would like to see discussed in class. In addition to the question, describe the main points that you would like to see discussed as part of the discussion generated by that question. Write one or two paragraphs (75-100 words). This question will be in addition to any question you might want to ask to clarify a concept/part of the reading. The question and the description should be emailed to the instructor for that week by **Tuesday night** with the subject line "First Name Last Name: Week "x" Discussion Question and Narrative" where "x" stands for the week number. See the weekly schedule for the week number.

The weekly discussion question and narrative submissions will be graded based on completion and as well as demonstrated thoughtfulness of the reading material based on the level of insight and nuance reflected by the submission.

Assignment 2: In-class discussion requires participation, but more importantly thoughtful reflection. You will not be assessed on the amount of participation per se, but rather your contribution to the course learning objectives and class discourse through insightful questions and comments.

Assignments 3 and 4 constitute the engagement unit, for which you will have to undertake additional activities outside the class hours. These activities include attending public meetings related to housing issues; writing memos critically analyzing the issues discussed in these public meetings; providing peer responses to such memos written by fellow students; and revising your memo based upon the peer responses. Details on how to complete these activities will be provided on handouts distributed later in the semester.

Assignments 5 and 6:

Assignment 5 will be a memo characterizing the housing situation of a city or county of your choice and critically examine the affordable housing situation of that city or county. Assume that our audience is a busy policy maker who knows little about housing issues.

Assignment 6 will be a policy proposal to address affordable housing needs for the same city or county studied in Assignment 5. Students will pick one or more of the alternative housing ideas and policy innovations discussed in the course and describe how it could be put into action in their chosen city or county, how it could be scaled to state and other contexts, and what the impacts (and potential challenges) could be.

Final Examination or Evaluation

Submission of "Assignment 6" and "Course Reflection" will constitute the culminating activities for this course.

Grading Information

Grades for the course will be assigned based on your percentage of total points earned on all assignments according to the following distribution:

A plus = 100 to 98A = 97 to 93 points A minus = 92 to 90 points B plus = 89 to 87 points B = 86 to 84 points B minus = 83 to 81 points C plus = 80 to 78 points C = 77 to 73 points C minus = 72 to 70 points D plus = 69 to 67 points D = 66 to 63 points D minus = 62 to 60 points F = 59 points or lower

Other Grading and Assignment Issues

Due to the progression of the course topics and joint teaching between two instructors, late work will not be accepted, except with the instructor's prior permission.

University Policies

Per <u>University Policy S16-9</u>, relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on <u>Syllabus Information web page</u>

(https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

Academic Integrity

As a student, your commitment to learning is evidenced by your enrollment at San Jose State

University. The <u>University Academic Integrity Policy F15-7</u> requires that you be honest in your academic course work. Faculty members are required to report all infractions to the Office of Student Conduct and Ethical Development. Visit the <u>Student Conduct and Ethical Development</u> website for information.

Plagiarism and Citing Sources Properly

Plagiarism is the use of someone else's language, images, data, or ideas without proper attribution. It is a serious offense both in the university and in your professional work. In essence, plagiarism is both theft and lying you have stolen someone else's ideas, then lied by implying that they are your own.

Plagiarism will lead to grade penalties and a record filed with the Office of Student Conduct and Ethical Development. In severe cases, students may also fail the course or even be expelled from the university.

If you are unsure what constitutes plagiarism, it is your responsibility to make sure you clarify the issues before you hand in draft or final work.

Learning when to cite a source and when not to is an art, not a science. However, here are some common examples of plagiarism that you should be careful to avoid:

- Using a sentence (or even a part of a sentence) that someone else wrote without identifying the language as a quote by putting the text in quote marks and referencing the source.
- Paraphrasing somebody else's theory or idea without referencing the source.
- Using a picture or table from a webpage or book without referencing the source.
- Using data some other person or organization has collected without referencing the source.

If you still have questions, feel free to talk to the instructor. There is nothing wrong with asking for help.

Citation style

It is important to properly cite any references you use in your assignments. The Department of Urban and Regional Planning uses Kate Turabian's *A Manual for Writers of Research Papers*, *Theses, and Dissertations*, 8th edition (University of Chicago Press, 2013, ISBN 780226816388). Copies are available in the SJSU King Library. Additionally, the book is relatively inexpensive, and you may wish to purchase a copy. Please note that Turabian's book describes two systems for referencing materials: (1) "notes" (footnotes or endnotes), plus a corresponding bibliography, and (2) in-text parenthetical references, plus a corresponding reference list. The instructors prefer the latter.

URBP 223: HOUSING ECONOMICS & POLICY

SPRING 2025 WEEKLY COURSE SCHEDULE

(Subject to change with fair notice. Instructor will notify students of the changes in the class and by uploading a revised syllabus on the course webpage)

Note: Readings available directly from the course Canvas page have the word "(Canvas)" at the end of the citation; all other readings are available via the library's website or elsewhere online, as linked.

Week 1. January 29 (Drs. Douglas and Mathur)

Class type: Lecture

Course Overview, Assignments 1 and 2 reviewed

Week 2. February 5 (Dr. Mathur)

Class type: Discussion seminar

Overview of housing situation

Required reading:

The Joint Center for Housing Studies. 2024. *State of the Nation's Housing 2024*. Cambridge, MA: Harvard University.

https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_The_State_of_t he_Nations_Housing_2024.pdf (accessed January 17, 2025). (Canvas)

California Association of Realtors. 2024. C.A.R. Releases 2025 Housing Market Forecast. Los Angeles, CA: California Association of Realtors.

https://www.car.org/aboutus/mediacenter/newsreleases/2024-News-

Releases/2025forecast#:~:text=Existing%2C%20single%2Dfamily%20home%20sales,in%202024%20from%202023's%20%24814%2C000. (accessed January 17, 2025). (Canvas)

Budman, S. 2024. *Bay Area Housing Market: Looking Back at 2024 and What's Ahead in 2025*. NBC Bay Area, December 25, 2024.

https://www.nbcbayarea.com/news/local/making-it-in-the-bay/bay-area-housing-market-forecast/3744880/ (accessed January 17, 2025). (Canvas)

Santarelli, M. 2024. *San Jose Housing Market: Trends and Forecast 2025-2026*. https://www.noradarealestate.com/blog/san-jose-real-estate-market/ (accessed January 17, 2025). (Canvas)

Affordable Housing

Required reading:

Stone, Michael. 2006. What is Housing Affordability? The Case for the Residual Income Approach. *Housing Policy Debate* 17(1): 151-184. (Canvas)

Hartman, Chester. 1998. The case for a right to housing. *Housing Policy Debate* 9(2): 223-246. (Canvas)

Recommended reading:

Carr, James H. 1998. Comment on Chester Hartman's "the case for a right to housing": the right to "poverty with a roof." *Housing Policy Debate* 9(2): 247-258. (Canvas)

Salins, Peter D. 1998. Comment on Chester Hartman's "the case for a right to housing": housing is a right? Wrong! *Housing Policy Debate* 9(2): 259-266. (Canvas)

Details of Assignment 3 handed out

Week 3. February 12 (Dr. Mathur)

Class type: Lecture

Theory of Housing Markets

Required reading:

Tools of Microeconomics (Canvas)

Rothenberg, J., et al. 1991. Introduction. Chapter 1 in *The Maze of Urban Housing Markets: Theory, Evidence, and Policy.* (Canvas)

Rothenberg, J., et al. 1991. The economics of urban housing markets: Previous work and new directions. Chapter 2 in *The Maze of Urban Housing Markets: Theory, Evidence, and Policy.* (Canvas)

Rothenberg, J., et al. 1991. Summary of the theoretical models. Chapter 7 in *The Maze of Urban Housing Markets: Theory, Evidence, and Policy*. (Canvas)

Details of Assignment 5 handed out

Week 4. February 19 (Dr. Mathur)

Class type: Lecture

Theoretical Analysis of Urban Housing Policies

Required reading:

Rothenberg, J., et al. 1991. Urban housing policy: demand-side approaches. Chapter 10 in The Maze of Urban Housing Markets: Theory, Evidence, and Policy. (Canvas)

Rothenberg, J., et al. 1991. Urban housing policy: supply-side approaches. Chapter 11 in *The Maze* of Urban Housing Markets: Theory, Evidence, and Policy. (Canvas)

Rothenberg, J., et al. 1991. Urban housing policy: market-regulation approaches. Chapter 12 in The Maze of Urban Housing Markets: Theory, Evidence, and Policy. (Canvas)

Week 5. February 26 (Dr. Mathur)

Class type: Discussion seminar

Federal Low-Income Housing Policy

Required reading:

Congressional Research Service. 2019. Overview of Federal Housing Assistance Programs and Policy: Updated March 27, 2019.

https://crsreports.congress.gov/product/pdf/RL/RL34591 (accessed January 17, 2025). (Canvas)

Vale, Lawrence, and Freemark, Yonah. 2012. From Public Housing to Public-Private Housing: 75 Years of American Social Experimentation. Journal of the American Planning Association 78(4): 379-402. (Canvas)

Goetz, Edward. 2012. The Transformation of Public Housing Policy, 1985–2011. Journal of the American Planning Association 78(4): 452-463. (Canvas)

Public Housing Timeline, 1933–1993. 2006. Journal of the American Planning Association, 78(4): 359. (Canvas)

Week 6. March 5 (Dr. Douglas)

Class type: Discussion Seminar

The Legacy of Racism and White Supremacy in Housing

Casey J. Dawkins (2021). "Chapter 1" (pp. 3-11) in his Just Housing: The Moral Foundations of American Housing Policy. Boston: MIT Press. doi.org/10.7551/mitpress/13587.001.0001. Open access: https://direct.mit.edu/books/oa-monograph/5181/Just-HousingThe-Moral-Foundations-of-American

Eli Moore, Nicole Montojo, and Nicole Mauri (2019). "Introduction" (pp. 7-15) and "Exclusionary Zoning" (pp. 29-34) in their Roots, Race & Place: A History of Racially Exclusionary Housing in

the San Francisco Bay Area. Berkeley, CA: Haas Institute for a Fair and Inclusive Society. https://belonging.berkeley.edu/rootsraceplace

Mindy Thompson Fullilove (2001) "Root Shock: The Consequences of African American Dispossession," *Journal of Urban Health* vol. 78: pp. 72–80. https://link.springer.com/article/10.1093/jurban/78.1.72

Listen online to the 2017 interview with Richard Rothstein about his book *The Color of Law* from Fresh Air with Terry Gross (35 mins). Online at: https://www.npr.org/2017/05/03/526655831/a-forgotten-history-of-how-the-u-s-government-segregated-america

Week 7. March 12 (Dr. Douglas) Class type: Discussion Seminar

Gentrification, Displacement, and Homelessness

Neil Smith (1987). "Gentrification and the Rent Gap," *Annals of the Association of American Geographers* Vol. 77, No. 3. https://www-jstor-org.libaccess.sjlibrary.org/stable/2563279?seq=1#metadata info tab contents

George Carter III (2011). "From Exclusion to Destitution: Race, Affordable Housing, and Homelessness." *Cityscape*, 13(1): 33-70. https://csu-sjsu.primo.exlibrisgroup.com/permalink/01CALS_SJO/1nj5q0c/cdi_proquest_journals_916789281

Listen online to an episode from WNYC's *There Goes the Neighborhood* podcast: "They Want My House" (Oct. 10, 2017). Available at: https://www.npr.org/podcasts/555340969/there-goes-the-neighborhood;

Erin McElroy et al. (2021) Parts of "Chapter 1. Evictions and Rootshock" (read pp. 3-50) in McElroy et al. *Counterpoints: A San Francisco Bay Area Atlas of Displacement and Resistance*. (Canvas.)

Gregg Colburn & Clayton P. Aldern (2022). "Ch. 2 Evidence" (pp. 32-68) in their *Homelessness is a Housing Problem: How Structural Factors Explain U.S. Patterns*. Oakland: University of California Press. (Canvas)

Week 8. March 19 (Dr. Mathur) Class type: Discussion seminar

Public housing programs: Housing Choice Vouchers (Section 8) and HOME

Required reading:

Schwartz, Alex. 2021. Vouchers. Chapter 8 in *Housing Policy in the United States*. Routledge, New This syllabus is the intellectual property of Drs. Douglas and Mathur and should not be used in part or entirety by any other instructor without Drs. Douglas and Mathur's prior permission.

York. (Canvas)

Ellen, Ingrid. 2020. What do we know about housing choice vouchers? *Regional Science and Urban Economics* 80: 103380. (Canvas)

U.S. Department of Housing and Urban Development. n.d. Housing choice vouchers factsheet. https://www.hud.gov/topics/housing_choice_voucher_program_section_8 (accessed January 17, 2025). (Canvas)

U.S. Department of Housing and Urban Development. 2022. *HOME Investment Partnerships Program*.

https://www.hud.gov/program_offices/comm_planning/home (accessed, January 17, 2025). (Canvas)

Details of Assignment 4 handed out

Week 9. March 26 (Dr. Mathur)

Class type: Guest Lecture + Readings

Guest Speaker: TBD

Dan Schoenholz, Housing Director,

City of Fremont

Public Housing Programs: Low Income Housing Tax Credit (LIHTC)

Required reading:

Schwartz, Alex. 2021. The Low-Income Housing Tax Credit. Chapter 5 in *Housing Policy in the United States*. Routledge, New York. (Canvas)

California Tax Credit Allocation Committee. 2019. *California Tax Credit Allocation Committee*: http://www.treasurer.ca.gov/ctcac/program.pdf (accessed, January 10, 2023). (Canvas)

Voith, Richard, Jing Liu, Sean Zielenbach, Andrew Jakabovics, Brian An, Seva Rodnyansky, Anthony W. Orlando, and Raphael W. Bostic. 2022. Effects of concentrated LIHTC development on surrounding house prices. *Journal of Housing Economics* 56:101838. (Canvas)

Week 10. April 2– no class (Spring Recess)

Week 11. April 9 (Dr. Douglas) Class type: Discussion Seminar

Critiques of Mainstream Policy

Eva Rosen (2020). "Introduction" (pp. 1-27) in her *The Voucher Promise*. Princeton: Princeton University Press. eBook via library: https://www-degruyter-com.libaccess.sjlibrary.org/document/doi/10.1515/9780691189505/html#contents

Edward Glaeser (2011). "Rethinking the Federal Bias Toward Homeownership." *Cityscape*, 13(2): 5-37. https://csu-

sjsu.primo.exlibrisgroup.com/permalink/01CALS SJO/1nj5q0c/cdi proquest journals 896957774

Brendan O'Flaherty (2011). "Rental Housing Assistance for the 21st Century." *Cityscape*, 13(2):127-145. <a href="https://csu-pubmed/https://csu-p

sjsu.primo.exlibrisgroup.com/permalink/01CALS SJO/1nj5q0c/cdi proquest journals 896957665

Samuel Stein (2018). "Progress for whom, toward what? Progressive politics and New York City's Mandatory Inclusionary Housing." *Journal of urban affairs*, 40(6): 770-81. https://csu-sjsu.primo.exlibrisgroup.com/permalink/01CALS_SJO/1nj5q0c/cdi_informaworld_taylorfrancis_3 10 1080 07352166 2017 1403854

Week 12. April 16 (Dr. Mathur)

Class type: Guest Lecture + Readings

Guest Speaker: TBD

Vince Cantore, Vice President

Core Companies

Housing Finance and Real Estate Development Process

Required reading:

Schwartz, Alex. 2021. Housing Finance. Chapter 3 in *Housing Policy in the United States*. Routledge, New York.

Housing Policy at the State and Local Level

Required reading:

Schwartz, Alex. 2021. State and Local Housing Policy and the Non-profit Sector. Chapter 9 in *Housing Policy in the United States*. Routledge, New York.

Week 13. April 23 (Dr. Douglas)

Class type: Discussion seminar

Resisting Gentrification and Displacement

Diane Levy, et al. (2006). "In the Face of Gentrification: Case Studies of Local Efforts to Mitigate Displacement." Washington, DC: Urban Institute.

http://www.urban.org/UploadedPDF/411294 gentrification.pdf

Causa Justa: Just Cause (2016). "Development without Displacement: Resisting Gentrification in the Bay Area" policy report (skim): https://cjjc.org/publication/development-without-displacement-resisting-gentrification-in-the-bay-area/

[A selection of new research on anti-gentrification and anti-displacement toolkits from AAG 2025]

Assignment 5 due on Canvas

Week 14. April 30 (Dr. Douglas)

Class type: Guest Lecture + Discussion Seminar

Guest Speaker (TBD)

New (and Old) Ideas for Increasing the Housing Supply

Read and watch the recordings from this SJSU Institute for Metropolitan Studies discussions series on "Social Housing in America," April 2022.

https://www.sjsu.edu/metropolitanstudies/housing-in-california/index.php

Alex Schafran (2022). "Housing Justice on a Small Lot," *Where We Go From Here* (Substack). https://alexschafran.substack.com/p/housing-justice-on-a-small-lot

Jeffrey S. Lowe, Natalie Prochaska, W. Dennis Keating (2022). "Bringing permanent affordable housing and community control to scale: The potential of community land trust and land bank collaboration." *Cities*, 126 https://csu-

sjsu.primo.exlibrisgroup.com/permalink/01CALS SJO/1nj5q0c/cdi gale infotracacademiconefile A704970365

Amir Hamja (2024). "How an American Dream of Housing Became a Reality in Sweden." *The New York Times*. https://www.nytimes.com/2024/06/08/headway/how-an-american-dream-of-housing-became-a-reality-in-sweden.html

Gerhard W. Mayer & Lindsay Sturman (2025). "A Radical (and Totally Practical) Rethinking of U.S. Housing Construction." *Common Edge*. https://commonedge.org/a-radical-and-totally-practical-rethinking-of-u-s-housing-construction/

Week 15. May 7 (Dr. Douglas) Class type: Discussion Seminar

Supportive Housing and the Fight Against Homelessness

Linda Gibbs et al. (2021). "Supportive Housing to Target Complex Needs" (pp. 86-103) in their *How Ten Global Cities Take on Homelessness: Innovations That Work*. Oakland: University of California Press. (Canvas)

Gregg Colburn & Clayton P. Aldern (2022). "Ch. 5 Market" (pp. 121-44) in their *Homelessness is a Housing Problem: How Structural Factors Explain U.S. Patterns*. Oakland: University of California Press. (Canvas)

Dan Rinzler et al. / Urban Institute (2022). Evaluation of the Homes for the Homeless Fund: Analysis of Development Costs and Timeline for Tahanan (833 Bryant Street), a Permanent Supportive Housing Development in San Francisco, Urban Institute report. https://www.urban.org/research/publication/evaluation-homes-homeless-fund

Listen online to this episode from the KZSU podcast *The Henry George Program*: "2022-09-15: Theresa O'Conner on Fighting Homelessness in Chico" https://seethecat.org/ep/2022-09-15.html

Week 16. May 14 (Dr. Douglas) Final Exam Week--Class meets from 1 pm to 3 pm

Culminating Activities and Course Reflection

David Madden & Peter Marcuse (2016). "Conclusion: For a Radical Right to Housing" (pp. 191-218) in their *In Defense of Housing*. London: Verso. (Canvas)

Casey J. Dawkins (2021). Chapters 7 and 8 (pp. 193-213, 215-41) in his *Just Housing: The Moral Foundations of American Housing Policy*. Boston: MIT Press. doi.org/10.7551/mitpress/13587.001.0001. Open access: https://direct.mit.edu/books/oa-monograph/5181/Just-HousingThe-Moral-Foundations-of-American

Assignment 6 due May 16 on Canvas