Thursday Classes

Originating Department/Program	Course	Course Title	Instructor(s)	Meeting Times	Location	Notes
Asian Studies (Japanese)	JPN 1101	Elementary Japanese I	Aridome, Hiroo	R 8:00am-8:55am	Roux Ctr for the Environment-307	
Anthropology	ANTH 2170	Changing Cultures and Environ	Kaplan, Susan		Mills Hall-127	
Art History	ARTH 2440	History of Photos in America	Byrd, Dana	1	Visual Arts Center-BEAM	
Biology	BIOL 2557	Immunology	McBride, Anne	1	Druckenmiller Hall-004	
Biology	BIOL 3325	Topics in Neuroscience	Fine, Michael	1	Druckenmiller Hall-024	
Computer Science	CSCI 2330	Computer Systems	Houser, Stephen	1	Searles Science Building-126	
Economics	ECON 2238	Eatconomics	Herrera, Guillermo	1	Searles Science Building-215	
Economics	ECON 2557A	Economic Statistics	LaVoice, Jessica	1	Hubbard Hall-213	
English	ENGL 2405	Victorian Plots	Briefel, Aviva	1	Roux Ctr for the Environment-207	
English	ENGL 2582	Reading "Uncle Tom's Cabin"	Chakkalakal, Tess	1	Massachusetts Hall-MCK	
Government and Legal Studies	GOV 2006	Presidents and Civil Rights	Rudalevige, Andrew	1	Hubbard Hall-022	
Government and Legal Studies	GOV 2577	Arctic Politics	Henry, Laura	D 0:20 0:55	Visual Arts Center-NORTH	
Government and Legal Studies	GOV 2601	Human Rights (and Wrongs)	Justo, Nathalia	R 8:30am-9:55am	Visual Arts Center-SOUTH	
History	HIST 2048	The Worlds of the Middle Ages	Ransohoff, Jake	1	Hatch Science Building-212	
History	HIST 2232	Family in Early America	Carbonell, Caylin	1	Banister Hall-106	
History	HIST 2342	Modern India and Pakistan	Sturman, Rachel	1	Hatch Science Building-214	
Mathematics	MATH 2020A	Intro Mathematical Reasoning	Ben-Zvi, Michael	1	Searles Science Building-113	
Music	MUS 2305	Beethoven and Western Music	Chavez-Barcenas, Ireri		Gibson Hall-101	
Philosophy	PHIL 2223	Logic	Sehon, Scott	1	Searles Science Building-213	
Psychology	PSYC 2510	Research Design in Psychology	Armstrong, Kacie	1	Mills Hall-103	
Romance Languages and Literatures (Francophone Studies)	FRS 2410	Literature, Power & Resistance	Belkaid, Meryem		Adams Hall-406	
Sociology	SOC 2397	Globalization and Development	Zainiddinov, Hakim	1	Adams Hall-208	
Theater and Dance (Theater)	THTR 2203	Directing	Robinson, Davis	R 9:05am-11:00am	Memorial Hall-601	
Visual Arts	VART 1201	Printmaking I	Scanga, Carrie	11 01000111 111000111	Edwards Center-105	
Visual Arts	VART 1601	Sculpture I	Brown, Jackie	R 9:05am-11:30am	Edwards Center-108	
Visual Arts	VART 3800	Art and Time	Engstrom, Bethany	11 01000	Edwards Center-112	
Anthropology	ANTH 1100A	Introducing Anthropology	Lempert, Willi		Hubbard Hall-213	
Art History	ARTH 2330	Materials in Early Modern Art	DiMartino, Caitlin	†	Visual Arts Center-PICST	1-2 students max
Biology	BIOL 1099	Brains in Motion	Diaz-Rios, Manuel	†	Mills Hall-105	. L otadonio ma
Biology	BIOL 2124	Biochemistry and Cell Biology	Muscato, Jake	†	Druckenmiller Hall-004	
Biology	BIOL 2327	Ecology	Rogalski, Mary	†	Hatch Science Building-214	
Chemistry	CHEM 2100	Chemical Analysis	Stemmler, Elizabeth & Luthy, Kurt	†	Druckenmiller Hall-016	
Classics (Latin)	LATN 2203	Intermediate Latin for Reading	Boyd, Barbara Weiden	†	Mills Hall-210	
Digital and Computational Studies	DCS 1100	Intro Digital & Computation	Chown, Eric & Gomezgil, Vianney	†	Mills Hall-127	
Earth and Oceanographic Science	EOS 2585	Ocean and Climate	Roesler, Collin	†	Roux Ctr for the Environment-307	
Economics	ECON 2556A	Macroeconomics	B-Rad, Duman	+	Searles Science Building-215	
Economics	ECON 2556A ECON 3516	Econometrics	Avilova, Tatyana	+	Searles Science Building-313	
English	ENGL 2760	Asian America's Margins	Kong, Belinda	1	Visual Arts Center-SOUTH	
English	ENGL 2863	The Fractured and The Lyric	Kong, Belinda Kisner, Jordan	+	Massachusetts Hall-FAC	
English Environmental Studies	ENVS 1101	Intro to Environmental Studies	Starobin, Shana	1	Mills Hall-103	limited consoits
	EINVSTIUT	intro to Environmental Studies	Starobin, Shana	4	IVIIIIS Hall-103	limited capacity
Gender, Sexuality, and Women's Studies	GSWS 2348	Girlhood and Empire	Mitamura, Emily		Hatch Science Building-212	
German	GER 2205	Adv German Texts and Contexts	Smith, Jill		Buck Center-211	
Government and Legal Studies	GOV 1100	Intro to American Government	Saavedra Cisneros, Angel	Ī _	Roux Ctr for the Environment-207	
Government and Legal Studies	GOV 2486	Dictatorship & Democratization	Heurlin, Christopher	R 10:05am-11:30am	Searles Science Building-213	
Government and Legal Studies	GOV 2600	International Law	Springer, Allen	1	Visual Arts Center-NORTH	
History	HIST 2109	The Red Century	Herrlinger, Page		Adams Hall-406	
History	HIST 3240	A History of the Present	Mohandesi, Salar	7	Hubbard Hall-022	
Mathematics	MATH 2208	Ordinary Differ Equations	Zeeman, Mary Lou	7	Searles Science Building-217	
Mathematics	MATH 3204	Topology	Sadanand, Chandrika	7	Searles Science Building-113	
Middle Eastern and North African Studies	MENA 1101	Intro Middle Eastern Studies	Abourahme, Nasser		Adams Hall-208	
Music	MUS 2297	Afro-Latin American Music	Chavez-Barcenas, Ireri	1	Gibson Hall-101	
Philosophy	PHIL 3375	The Self	Stuart, Matthew	1	Pols House-CONF	
Physics and Astronomy	PHYS 1130B	Introductory Physics I	Msall, Madeleine	1	Searles Science Building-315	
Physics and Astronomy	PHYS 3030	Methods of Astrophysics	McBride, Felicia	1	Searles Science Building-314	
			Robison, Claire	4	Kanbar Hall-107	

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Romance Languages and Literatures (Francophone Studies)	FRS 2305A	Advanced French through Film	Daniels, Charlotte		Hatch Science Building-102	
Romance Languages and Literatures (Hispanic Studies)	HISP 2305B	Spanish Language and Culture	Wolfenzon Niego, Carolyn		Searles Science Building-117	
Sociology	SOC 1101A	Introduction to Sociology	Gow, Jamella		Druckenmiller Hall-020	
Theater and Dance (Dance)	DANC 2506	Meanings of Dance and Gesture	Jones, Adanna		Memorial Hall-108	
Anthropology	ANTH 1031	Inscribing Lives	Sreenath, Shreyas		Mills Hall-127	
Art History	ARTH 1021	Art Crime	Byrd, Dana		Visual Arts Center-PICST	
Biology	BIOL 2175	Developmental Biology	Jackman, William		Druckenmiller Hall-020	
Biology	BIOL 2481	Forest Ecology & Conservation	Douhovnikoff, Vladimir		Searles Science Building-127	
Chemistry	CHEM 3270	Biomimetic and Supramolecular	Gorske, Benjamin		Druckenmiller Hall-024	
Cinema Studies	CINE 1025	Crime Film	Welsch, Tricia		Mills Hall-129	
Classics	CLAS 1017	Ancient Supermen&Wonder Women	Nerdahl, Michael		Hatch Science Building-214	
Computer Science	CSCI 2400	Artificial Intelligence	Farias, Jeova		Searles Science Building-223	
Digital and Computational Studies	DCS 2350	Social and Economic Networks	Irfan, Mohammad		Mills Hall-210	
Earth and Oceanographic Science	EOS 2225	Structural Geology	Harrigan, Claire		Roux Ctr for the Environment-303	5 students max
Economics	ECON 1013	The Moral Economy	Meardon, Stephen		Coles Tower-16HMC	
Economics	ECON 2556B	Macroeconomics	Botsch, Matthew		Searles Science Building-126	
Economics	ECON 2557B	Economic Statistics	LaVoice, Jessica		Visual Arts Center-SOUTH	
English	ENGL 1005	Victorian Ghosts and Monsters	Briefel, Aviva		Massachusetts Hall-MCK	
English	ENGL 1026	Freedom Stories	Chakkalakal, Tess		Adams Hall-103	
English	ENGL 1027	The Real Life of Literature	Foster, Guy Mark		Massachusetts Hall-FAC	
English	ENGL 2305	Eighteenth-Century London	Kibbie, Ann	R 11:40am-1:05pm	Buck Center-211	
Environmental Studies	ENVS 1028	Water Insecurity	Tate. Brandon	Transam reception	Roux Ctr for the Environment-307	
Environmental Studies	ENVS 3917	Rebel Ecology	Guess, Allison	_	Roux Ctr for the Environment-302	
Gender, Sexuality, and Women's	GSWS 1010	Sex Work Is Work	Ervin, Keona		Adams Hall-114	
Studies	001/4044	Evereines in Delitical Theory	Lidden Mari	_	Color Tower 4CM/III	
Government and Legal Studies	GOV 1011	Exercises in Political Theory	Lykins, Max		Coles Tower-16WHI	
Government and Legal Studies	GOV 1027	Politics of Climate Change	Henry, Laura		Adams Hall-202	
History	HIST 1005	Judging History	Roberts, Strother		Searles Science Building-128	
History	HIST 2710	Crusades Northern Slavery and Memory	Ransohoff, Jake	-	Kanbar Hall-101	
History Latin American, Caribbean, and Latinx	HIST 2722 LACL 1045	Social Justice	Carbonell, Caylin Popescu, Irina		Hatch Science Building-102 MIlls Hall-105	
Studies						
Mathematics	MATH 2109	Optimization	Levy, Adam		Searles Science Building-217	
Mathematics	MATH 2805	Machine Learning	Pietraho, Thomas		Searles Science Building-213	
Physics and Astronomy	PHYS 3140	Quantum Mechanics	Naculich, Stephen		Searles Science Building-313	
Romance Languages and Literatures (Hispanic Studies)	HISP 2410	Intro Hispan Essay & Narrative	Wolfenzon Niego, Carolyn		Visual Arts Center-NORTH	
Anthropology	ANTH 2360	Ethnographic Media Production	Lempert, Willi		Mills Hall-129	
Anthropology	ANTH 2410	Anthropology of Place	Reamer, Justin	_	Mills Hall-127	
Asian Studies (Chinese)	CHIN 2205	Advanced-Intermed Chinese I	Qin, Zihan	_	Hatch Science Building-102	
Biology	BIOL 3314	Adv Genetics and Epigenetics	Bateman, Jack	_	Druckenmiller Hall-110	
Classics	CLAS 3310	Imagining Rome	Boyd, Barbara Weiden	_	Adams Hall-202	
Computer Science	CSCI 1103	Accelerated Intro	Irfan, Mohammad	\dashv	Mills Hall-210	
Digital and Computational Studies	DCS 2850	Intro to Data Science	Gomezgil, Vianney	_	Mills Hall-103	
Economics	ECON 1101A	Principles of Microeconomics	Herrera, Guillermo	_	Searles Science Building-223	
Economics	ECON 1102A	Principles of Macroeconomics	Avilova, Tatyana	_	Searles Science Building-313	
Economics	ECON 3277	Applied Economic Research	B-Rad, Duman	_	Hubbard Hall-022	
Education	EDUC 3301	Teaching and Learning	Miller, Alison Riley	_	Massachusetts Hall-FAC	
English	ENGL 1240	The Art of the Essay	Kisner, Jordan	_	Massachusetts Hall-MCK	
English	ENGL 2605	The Harlem Renaissance	Muther, Elizabeth	_	Visual Arts Center-NORTH	
German	GER 3317	German Literature since 1945	Smith, Jill		Hatch Science Building-210	
Government and Legal Studies	GOV 2466	Latin American Politics	Zille, Tulio		Hatch Science Building-214	
Government and Legal Studies	GOV 2540	U.S China Relations	Heurlin, Christopher		Searles Science Building-213	
Government and Legal Studies	GOV 2602	Ethics & Int'l Affairs	Justo, Nathalia		Searles Science Building-113	
History	HIST 2019	Transatlantic 1960s and 1970s	Mohandesi, Salar	R 1:15pm-2:40pm	Visual Arts Center-SOUTH	-
History	HIST 2145	The United States Civil War	Rael, Patrick		Hubbard Hall-213	
History	HIST 2421	Japanese History from 1800	Christmas, Sakura		Hatch Science Building-212	
Mathematics	MATH 1758	Biomathematics	Zeeman, Mary Lou		Searles Science Building-215	
Mathematics	MATH 2020B	Intro Mathematical Reasoning	Sadanand, Chandrika	1	Searles Science Building-117	

Mathematics	MATH 2603	Introduction to Analysis	Pietraho, Thomas]	Searles Science Building-217	
Middle Eastern and North African Studies	MENA 2610	Camp/Prison/Border	Abourahme, Nasser		Adams Hall-208	
Philosophy	PHIL 1311	Socialism Capitalism Democracy	Sehon, Scott	1	Kanbar Hall-107	
Physics and Astronomy	PHYS 1510	Introductory Astronomy	McBride, Felicia	1	Searles Science Building-315	
Religion	REL 2232	Approaches to the Qur'an	Morrison, Robert	1	Adams Hall-114	
Romance Languages and Literatures (Francophone Studies)	FRS 2305B	Advanced French through Film	Belkaid, Meryem		Adams Hall-103	
Romance Languages and Literatures (Hispanic Studies)	HISP 3231	Sor Juana and Maria de Zayas	Boyle, Margaret		Mills Hall-105	
Russian, East European, and Eurasian Studies	RUS 2302	Slavic Demonology	Johnson, Reed		Searles Science Building-115	
Sociology	SOC 2370	Migration and Exclusion	Gow, Jamella		Adams Hall-406	
Theater and Dance (Dance)	DANC 2212	Modern II: Repertory & Perform	Jones, Gwyneth		Edwards Center-210	
Theater and Dance (Theater)	THTR 2205	Musical Theater Performance	Robinson, Davis & Christmas, Jeffrey	R 1:15pm-3:40pm	Memorial Hall-108	
Visual Arts	VART 1702	Video I	Fireman, John	7	Edwards Center-115	
Africana Studies	AFRS 2201	Blk Women Politic Music Divine	Casselberry, Judith	T 1:15pm-4:15pm	Druckenmiller Hall-024	
Government and Legal Studies	GOV 2060	Campaigns and Elections	Saavedra Cisneros, Angel	1 1.15pm-4.15pm	Druckenmiller Hall-016	
Anthropology	ANTH 3320	Youth, Identity, and Agency	Van Vleet, Krista		Mills Hall-127	
Art History	ARTH 1028	Early Modern Art and Race	DiMartino, Caitlin	1	Visual Arts Center-PICST	
Asian Studies (Japanese)	JPN 2205	Advanced-Intermed Japanese I	Aridome, Hiroo	1	Hatch Science Building-210	
Biology	BIOL 1024	Neuroscience Communications	Fine, Michael	1	Mills Hall-210	
Cinema Studies	CINE 2222	Images of America in Film	Welsch, Tricia	1	Mills Hall-129	
Classics (Archaeology)	ARCH 2204	Buried by Vesuvius	Higginbotham, Jim	1	Visual Arts Center-BEAM	
Computer Science	CSCI 3485	Deep Learning	Farias, Jeova	1	Searles Science Building-128	
Earth and Oceanographic Science	EOS 1020	Archives of Earth	Harrigan, Claire		Roux Ctr for the Environment-303	2 students max
Economics	ECON 3401	Financial Economics	Botsch, Matthew		Searles Science Building-223	
Economics	ECON 3526	Trade Doctrines & Trade Deals	Meardon, Stephen	1	Mills Hall-105	
Education	EDUC 3302	Curriculum Development	Miller, Alison Riley	1	Massachusetts Hall-FAC	
English	ENGL 1017	Global Asian Fantasy Fiction	Kong, Belinda	1 _	Massachusetts Hall-MCK	
English	ENGL 1034	America in the World	Hansen, Morten	R 2:50pm-4:15pm	Coles Tower-16WHI	
English	ENGL 2029	Women/Eighteenth-Century Novel	Kibbie, Ann	1	Adams Hall-103	
Gender, Sexuality, and Women's Studies	GSWS 2240	Living a Feminist Life	Ervin, Keona		Hatch Science Building-212	
Government and Legal Studies	GOV 3440	Politics of Welfare	Laurence, Henry	1	Adams Hall-114	
History	HIST 1003	Maps, Territory, Power in Asia	Christmas, Sakura	1	Kanbar Hall-101	
History	HIST 1015	Hitler's Germany	Herrlinger, Page	1	Coles Tower-16HMC	
Music	MUS 1019	Experimental Music	Mauceri, Frank	7	Studzinski Recital Hall-202	
Physics and Astronomy	PHYS 2250	Physics of Solids	Msall, Madeleine	7	Searles Science Building-313	
Religion	REL 2221	Religious Cultures of India	Robison, Claire	1	Visual Arts Center-NORTH	
Romance Languages and Literatures (Francophone Studies)	FRS 3212	Eyes on the Prize	Daniels, Charlotte]	Hawthorne-Longfellow Hall-MCC	

Friday Classes

Originating Department/Program	Course	Course Title	Instructor(s)	Meeting Times	Location	Notes
Art History	ARTH 1220	Making Medieval Art	Perkinson, Stephen		Visual Arts Center-BEAM	
Asian Studies (Chinese)	CHIN 1103	Advanced Elementary Chinese I	Qin, Zihan		Hatch Science Building-210	
Biology	BIOL 2319	Biology of Marine Organisms	Griffin, Tyler		Druckenmiller Hall-020	
Chemistry	CHEM 1091	Introductory Chemistry QR I	Danahy, Michael		Druckenmiller Hall-024	
Chemistry	CHEM 1109	General Chemistry	Scott, Thais & Tesfa, Denny		Hatch Science Building-214	
Classics (Latin)	LATN 2206	The Roman Novel	Kosak, Jennifer Clarke		Searles Science Building-127	
Classics (Latin)	LATN 3306	The Roman Novel	Kosak, Jennifer Clarke		Searles Science Building-127	
Mathematics	MATH 2000A	Linear Algebra	Khanmohammadi, Ehssan		Searles Science Building-113	
Mathematics	MATH 2206	Probability	Maresca, Ray		Searles Science Building-215	
Middle Eastern and North African Studies (Arabic)	ARBC 1101B	Elementary Arabic I	Khattab, Batool		Roux Ctr for the Environment-302	
Middle Eastern and North African Studies (Arabic)	ARBC 2203	Intermediate Arabic I	Milligan, Paige	F 9:05am-10:00am	Hatch Science Building-102	
Music	MUS 1401	Introduction to Music Theory	Mauceri, Frank		Gibson Hall-101	
Music	MUS 2403	Songwriting & Song Analysis	Shende, Vineet		Gibson Hall-206	
Physics and Astronomy	PHYS 3000	Methods of Theoretical Physics	Baumgarte, Thomas		Searles Science Building-313	
Psychology	PSYC 1101B	Introduction to Psychology	Putnam, Samuel		Druckenmiller Hall-016	
Romance Languages and Literatures (Francophone Studies)	FRS 2203	Intermediate French I	MacDonald, lan		Banister Hall-106	
Romance Languages and Literatures (Hispanic Studies)	HISP 2203A	Intermediate Spanish I	Sawhill, Barbara		Searles Science Building-213	
Romance Languages and Literatures (Hispanic Studies)	HISP 2204A	Intermediate Spanish II	Puma Ninacuri, Christian		Adams Hall-103	
Russian, East European, and Eurasian Studies	RUS 1101	Elementary Russian I	McBean, Liz		Massachusetts Hall-FAC	
Economics	ECON 2555A	Microeconomics	Abel, Martin		Visual Arts Center-SOUTH	
Education	EDUC 2211	Education & Human Condition	Santoro, Doris		Hatch Science Building-212	
History	HIST 1047	Microhistory & the Inquisition	Cikota, Javier		Adams Hall-202	
Mathematics	MATH 1700A	Integral Calculus	Ben-Zvi, Michael	F 10:05am-11:30am	Searles Science Building-217	
Mathematics	MATH 1800C	Multivariate Calculus	Griffiths, Rhiannon		Visual Arts Center-NORTH	
Music	MUS 1051	Fundamentals of Music	Christmas, Jeffrey		Gibson Hall-101	
Psychology	PSYC 2025	Psychopathology	Collins, Kathleen		Mills Hall-103	
Classics (Latin)	LATN 1101	Elementary Latin I	Nerdahl, Michael		Searles Science Building-113	
Physics and Astronomy	PHYS 2130	Electric Fields and Circuits	Battle, Mark		Searles Science Building-315	
Romance Languages and Literatures (Italian Studies)	ITAL 1101B	Elementary Italian I	Cuadrado, Alejandro	F 10:10am-11:05am	Adams Hall-103	
Russian, East European, and Eurasian Studies	RUS 2203	Intermediate Russian I	McBean, Liz		Massachusetts Hall-FAC	
Asian Studies (Chinese)	CHIN 2203	Intermediate Chinese I	Jia, Xiaoke		Coles Tower-16WHI	
Biology	BIOL 1101	Biological Principles I	Bateman, Jack		Druckenmiller Hall-020	
Biology	BIOL 2130	Population Genomics	Carlon, David		Roux Ctr for the Environment-302	
Chemistry	CHEM 1101B	Introductory Chemistry I	Ortoll-Bloch, Amnon		Druckenmiller Hall-004	
German	GER 2203B	Intermediate German I	Jordan, Rebecca		Hatch Science Building-102	
Middle Eastern and North African Studies (Arabic)	ARBC 2305	Advanced Arabic	Khattab, Batool	F 11:40am-12:35pm	Adams Hall-103	
Physics and Astronomy	PHYS 1140	Introductory Physics II	Topp, Karen		Searles Science Building-315	
Romance Languages and Literatures (Hispanic Studies)	HISP 2204B	Intermediate Spanish II	Castillo Botello, Yoel		Kanbar Hall-101	
Russian, East European, and Eurasian Studies	RUS 3005	Adv Russian Lang/Society I	Johnson, Reed		Searles Science Building-126	
Art History	ARTH 1120	The Body in East Asian Art	Wang, Peggy		Visual Arts Center-BEAM	
Computer Science	CSCI 1101A	Intro to Computer Science	Martin, Christopher		Searles Science Building-128	
Economics	ECON 2555B	Microeconomics	Nelson, Erik	1	Searles Science Building-215	

Education	EDUC 1101	Power and Dilemmas in Educ	Santoro, Doris	F 11:40am-1:05pm	Hatch Science Building-214	
History	HIST 2402	Decolonizing Latin America	Cikota, Javier		Adams Hall-406	
Mathematics	MATH 1700B	Integral Calculus	Ben-Zvi, Michael		Searles Science Building-217	
Mathematics	MATH 1756	Data Science	O'Brien, Jack		Visual Arts Center-SOUTH	
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2024 Explore Bowdoin Course Descriptions

Africana Studies

AFRS 2201 Black Women, Politics, Music, and the Divine

Seminar. Examines the convergence of politics and spirituality in the musical work of contemporary black women singer-songwriters in the United States. Analyzes material that interrogates and articulates the intersections of gender, race, class, and sexuality generated across a range of religious and spiritual terrains with African diasporic/black Atlantic spiritual moorings, including Christianity, Islam, and Yoruba. Focuses on material that reveals a womanist (black feminist) perspective by considering the ways resistant identities shape and are shaped by artistic production. Employs an interdisciplinary approach by incorporating ethnomusicology, anthropology, literature, history, and performance and social theory. Explores the work of Shirley Caesar, the Clark Sisters, Meshell Ndegeocello, Abby Lincoln, Sweet Honey in the Rock, and Dianne Reeves, among others.

AFRS 2840 Africa and Globalization

Provides an exploration of globalization processes in sub-Saharan Africa. Delves into the impact of international forces and emerging technologies on the continent's citizens and countries, while also examining how African nations and actors contribute to global dynamics. Topics covered include technological advancements, development, immigration, art and culture, foreign aid, and China's influence in Africa. Aims to spotlight both the opportunities and challenges that African countries face in the ever-evolving global landscape. Through this exploration, students will gain a nuanced understanding of Africa's place in the globalized world, challenging stereotypes and fostering a deeper appreciation for the diversity and resilience of African societies.

Anthropology

ANTH 1031 Inscribing Lives: Reading and Writing About Others

For anthropologists, reading and writing about the lives of others is a fundamental practice. It is a powerful way to understand and challenge our social, political, ethical, and cultural common sense, notions of progress and civilization, and ideas of the good life. Rather than contemplate such questions in isolation, an anthropologist observes and analyzes details of people's everyday life, as lived in different times and places around the world. This course introduces students to the techniques anthropologists use to study everyday human existence. Students will observe people in various settings, write fieldnotes, craft narratives, and write meaningfully and responsibly about the lived realities of others.

ANTH 1100 Introducing Anthropology: What Makes Us Human?

Investigates cultural differences and connections across time and space to understand our common humanity. Introduces anthropological theories through case studies of past and contemporary cultures. Explores methods used to cultivate holistic understandings of diverse practices, worldviews, and ways of being across cultural and geographic contexts.

Students apply anthropological concepts to engage critically with vital current issues. Includes topics such as self and society, personhood and identity, power and inequity, economic and political organization, material culture, circulation of people and ideas, ecology and environment, religion and ritual, and relatedness and kin-making.

ANTH 2170 Changing Cultures and Dynamic Environments

Over the last 20,000 years the Earth's environment has changed in both subtle and dramatic ways. Some changes are attributable to natural processes and variation, some have been triggered by human activities. Referring to anthropological and archaeological studies, and research on past and contemporary local, regional, and global environments, examines the complex and diverse relationship between cultures and the Earth's dynamic environment. A previous science course is recommended.

ANTH 2360 Crafting Doubles: Ethnographic Media Production

Centers the process of making ethnographic media through the overarching framework of doubles. Described by Jean Rouch as "the art of the double," cinema unites the real and the imagined through symbolic layering and technological reproduction. Engages scholarship in anthropology and cinema studies, as well as media ranging from early ethnographic film to the contemporary avant-garde. Includes topics such as ethical co-creation, representational othering, ethno-fiction, sensory ethnography, sonic curation, and the social life of cinema. Students develop practical production skills including planning, recording, shooting, and editing. Emphasizes the power of learning through doing, with students crafting audio and visual media projects at the intersection of course themes and their own lives.

ANTH 2410 Landscapes of Power: Culture, Place, and the Built Environment

Explores spaces, landscapes, and the built environment as arenas for producing, reproducing, and contesting relationships of power and authority. Human beings transform and are transformed by their physical surroundings, and relationships between people and places are shaped by culture, history, identity, and politics. Drawing on critical theories from anthropology, cultural geography, and related fields, students examine the intersections of space, place, and power using case studies from a variety of cultural and historical contexts. Considers how relationships of inequality become embedded in the landscape and the built environment. Topics include state violence, gated communities, colonialism, borders and borderlands, racial segregation, and gendered spaces.

ANTH 3320 Youth, Identity, and Agency in Insecure Times

Explores research on youth as a window onto broader questions of identity, agency, inequity, and social transformation in the contemporary world. Youth and children move between families and nations; claim belonging to divergent communities; create and transform senses of self; and navigate power hierarchies related to age, race, gender, class, ethnicity, sexuality, and citizenship. Highlights the experiences of young people in contexts of insecurity shaped by globalization and neoliberal capitalism. Attends to culturally specific meanings of youth and childhood. Draws on theoretical approaches to agency,

subjectivity, and power in anthropology and discusses methodological and ethical issues in ethnographic research with youth. Topics may include self and personhood; labor and waithood; migration, family, and citizenship; gender, sexuality, and romance; media and activism; creativity and (re)making worlds in diverse cultural contexts including Latin America, Asia, Oceania, and Africa.

Art History

ARTH 1021 Faked, Forged, Stolen, and Repatriated: Crimes Against Art

Examines crimes against art, including acts of theft, vandalism, and forgery representing challenges to our shared heritage. Students develop skills in art historical interpretation and ethical reasoning as they engage with historical examples including the history and controversies of such noted stolen cultural artifacts including the Elgin Marbles, the Benin bronze plaques, and Chugach burial masks. Examines the billion dollar "black market" for stolen art, and the legal tools for restoring plundered goods through repatriation.

ARTH 1028 Art and Race from the Crusades to Colonization

How do ideas of race born in the past shape our present? This course investigates the construction of race from a historical perspective between roughly 1300 and 1700 in Western Europe. Considers how communities in Spain, France, England, and Italy used works of art to express religious, cultural, and ethnic diversity at critical moments in Europe's early modern history. Topics range from interactions between Christians, Jews, and Muslims in Spain and the so-called Crusader states during the late Middle Ages; the impact of trade and political interaction between Europe and Africa; the ramifications of the slave trade; and European colonization in the Americas. Major goals include understanding the long and impactful history of race and racism through works of art while honing skills in observation, descriptive and analytical writing, and critical thinking. When relevant, we will draw on the collections of Bowdoin College Museum of Art and regional museum collections.

ARTH 1120 Introduction to Art History: The Body in East Asian Art

Explores theories, pictures, and practices of the human body in art. Studies depictions of the human form as well as arts that activate the body, including calligraphy, spatial design, performance, and ritual. Focuses primarily on East Asia, ranging from early traditions to modern examples. Deliberately sets out to challenge a Western-centric understanding of art and art history by developing ideas about the body that don't make a recourse back to the idealized nude. Examines how art implicates the body in topics such as individuality, divinity, social order, interconnectedness, and pleasure. Examples of art to be studied include: shrines, handscrolls, landscapes, tea objects, and woodblock prints.

ARTH 1220 Making Medieval Art

Explores the roles of the individuals responsible for creation of medieval artworks. Considers how artists, patrons, and audiences each helped to determine the ultimate form

an artwork took. To do so, examines case studies from a wide geographic and chronological range, from the fourth to the sixteenth centuries and from the British Isles to East Africa, with many stops in between. In doing so, interrogates the ways that "the medieval period" has been defined by later interpreters, exploring emerging arguments in favor of a reconsideration of what constitutes "medieval art." Topics covered include the development of a Christian imperial art in the later years of the Roman Empire; the role of monastic artisans in fashioning works for the use of monks and nuns; the development of urban markets for art in the later Middle Ages; and the exchange of techniques, materials, and motifs across the wider medieval globe.

ARTH 2330 Materializing the Self and Other in Early Modern Art

Focuses on art produced through Europe's engagement with the Americas, Africa, and Asia between 1500 and 1750. Studies the impact of trade, colonization, and enslavement on how artists, audiences, and patrons defined and reimagined intersecting forms of identity. Asks questions such as: how do materials—both natural and man-made—register ways of thinking about gender, religion, and race? How does the transformation of raw materials into aesthetic works of art reveal and conceal their origins? Class sessions are organized around materials and techniques such as ivory, metalworking, tropical woods, textiles, pigments, and cosmetics. Further examines how and why paintings, sculpture, and prints display such materials. Topics to be explored include the implications of materiality in cross-cultural exchange, visual and symbolic representations of human diversity, and art as products of pillage, exploitation, cultural syncretism, and forms of resistance. Includes visits to the Bowdoin College Museum of Art.

ARTH 2440 Shoot, Snap, Instagram: A History of Photography in America

A survey of photography made and experienced in the United States from the age of daguerreotypes until the era of digital image processing. Addresses the key photographic movements, works, practitioners, and technological and aesthetic developments while also considering the social, political, cultural, and economic contexts for individual photographs. Photographers studied include Watkins, Bourke-White, Weegee, and Weems. Readings of primary sources by photographers and critics such as Stieglitz, Sontag, Abbott, and Benjamin bolster close readings of photographs. Builds skills of discussing, writing, and seeing American photography. Incorporates study of photography collections across the Bowdoin College campus.

Asian Studies

CHIN 1101 Elementary Chinese I

A foundation course for communicative skills in modern Chinese (Mandarin). Three hours of class per week and individual tutorials by the instructor. Introduction to the sound system, essential grammar, basic vocabulary, and approximately 350 characters (simplified version). Develops rudimentary communicative skills.

CHIN 1103 Advanced Elementary Chinese I

An accelerated course for elementary Chinese designed for heritage speakers and for students who have had some background in Chinese language. Emphasis on improvement of pronunciation, consolidation of basic Chinese grammar, vocabulary enhancement, reading comprehension, and writing. Three hours of class per week and individual tutorials.

CHIN 2203 Intermediate Chinese I

An intermediate course in modern Chinese. Three hours of class per week and individual tutorials by the instructor. Consolidates and expands the knowledge of grammar and vocabulary, with 400 additional characters. Further improves students' Chinese proficiency with a focus on accuracy, fluency, and complexity.

CHIN 2205 Advanced-Intermediate Chinese I

A pre-advanced course in modern Chinese. Three hours of class per week. Upgrades students' linguistic skills and cultural knowledge to explore edited or semi-authentic materials.

JPN 1101 Elementary Japanese I

An introductory course in modern Japanese language. In addition to mastering the basics of grammar, emphasis is placed on active functional communication in the language, as well as reading and listening comprehension. Context-oriented conversation drills are complemented by audio materials. Basic cultural information also presented. The two kana syllabaries and sixty commonly used kanji are introduced.

JPN 2203 Intermediate Japanese I

An intermediate course in modern Japanese language, with introduction of advanced grammatical structures, vocabulary, and characters. Continuing emphasis on acquisition of well-balanced language skills based on an understanding of the actual use of the language in the Japanese sociocultural context. Introduces an additional 100 kanji.

JPN 2205 Advanced-Intermediate Japanese I

Building on the fundamentals of Elementary and Intermediate Japanese, students increase their proficiency in both the spoken and written language. A variety of written and audiovisual Japanese language materials (essays, movies, manga, etc.) are used to consolidate and expand mastery of more advanced grammatical structures and vocabulary. Students read or watch relevant materials, discuss in class, and then write and/or present on selected Japan-related topics.

Biology

BIOL Mind the Gap: Bridging Scientific and Creative Writing in the Neurosciences.

Serves as an introduction to the world of neuroscience and science communication through an exploration of creative works of fiction, sci-fi, nonfiction, and scientific reports. The class will explore works from Antonio Damasio, Sam Kean, Daniel Keyes, Oliver Sacks, and more as well as shorter scientific reports and research articles. Allows students, regardless of background, to compare the different writing styles necessary for scientific communication with an understanding of how different audiences drive how we shift from scientific to creative and persuasive writing. Students will learn general concepts in neuroscience by discussing both creative literature and associated scientific papers. Through practice, students will gain insights into proper citation management and concise scientific writing skills.

BIOL 1099 Brains in Motion: Exploring the Interface between Mind and Body

This course is an introductory exploration of the nervous system as it relates to bodily functions. It explores neurons as the basic building blocks of brain and behavior. Through lectures and classroom experiments, students would learn how electrochemical nerve signals control body movement, cardiovascular function, reflexes, and brain activity. Further, students explore how the nervous system can interact with machine interfaces, including prosthetics.

BIOL 1101 Biological Principles I

The first in a two-semester introductory biology sequence. Topics include fundamental principles of cellular and molecular biology with an emphasis on providing a problem-solving approach to an understanding of genes, RNA, proteins, and cell structure and communication. Focuses on developing quantitative skills, as well as critical thinking and problem-solving skills. Lecture and weekly laboratory/discussion groups.

BIOL 1109 Scientific Reasoning in Biology

Lectures examine fundamental biological principles, from the sub-cellular to the ecosystem level with an emphasis on critical thinking and the scientific method. Laboratory sessions will help develop a deeper understanding of the techniques and methods used in the biological science by requiring students to design and conduct their own experiments. Lecture and weekly laboratory/discussion groups.

BIOL 2124 Biochemistry and Cell Biology

Focuses on the structure and function of cells as we have come to know them through the interpretation of direct observations and experimental results. Emphasis is on the scientific

(thought) processes that have allowed us to understand what we know today, emphasizing the use of genetic, biochemical, and optical analysis to understand fundamental biological processes. Covers details of the organization and expression of genetic information, and the biosynthesis, sorting, and function of cellular components within the cell. Concludes with examples of how cells perceive signals from other cells within cell populations, tissues, organisms, and the environment.

BIOL 2130 Population Genomics

An exploration of the major processes that explain how genomic variation is organized within and between populations. Central topics include the molecular description of genetic variation, the organization of genetic variation within populations, mutation and gene conversion, migration, natural selection, genetic drift, using genomes to study population genetics, and the population genomics of complex traits. Lectures and discussions will develop theory and demonstrate applications of theory to a broad diversity of organisms. Laboratories will develop hands-on skills in the generation of genetic and genomic data sets and teach the analysis of genomic data sets.

BIOL 2175 Developmental Biology

An examination of current concepts of embryonic development, with an emphasis on experimental design. Topics include cell fate specification, morphogenetic movements, cell signaling, differential gene expression and regulation, organogenesis, and the evolutionary context of model systems. Project-oriented laboratory work emphasizes experimental methods.

BIOL 2319 Biology of Marine Organisms

The study of the biology and ecology of marine mammals, seabirds, fish, intertidal and subtidal invertebrates, algae, and plankton. Also considers the biogeographic consequences of global and local ocean currents on the evolution and ecology of marine organisms. Laboratories, field trips, and research projects emphasize natural history, functional morphology, and ecology. Lectures and four hours of laboratory or field trip per week. One weekend field trip included. Students have the opportunity to take an optional field trip to the Bowdoin Scientific Station on Kent Island in the Bay of Fundy.

BIOL 2327 Ecology

Ecology, the study of how organisms interact with each other and their environment, incorporates topics from how organisms cope with environmental stressors to global carbon cycling. Addresses current questions in ecology, from global change to food security to invasive species. Lectures, labs, primary and popular literature emphasize how scientists use the tenets of ecology to address current environmental issues. Labs, discussions and activities focus on practical applications of ecological theory, scientific writing and data analysis on topics such as plant-insect interactions, amphibian decline, river restoration and natural history.

BIOL 2481 Forest Ecology and Conservation

An examination of how forest ecology and the principles of silviculture inform forest ecosystem restoration and conservation. Explores ecological dynamics of forest ecosystems, the science of managing forests for tree growth and other goals, natural history and historic use of forest resources, and the state of forests today, as well as challenges and opportunities in forest restoration and conservation. Consists of lecture, discussions, field trips, and guest seminars by professionals working in the field.

BIOL 2557 Immunology

Covers the development of the immune response, the cell biology of the immune system, the nature of antigens, antibodies, B and T cells, and the complement system. The nature of natural immunity, transplantation immunology, and tumor immunology also considered.

BIOL 3314 Advanced Genetics and Epigenetics

A seminar exploring the complex relationship between genotype and phenotype, with an emphasis on emerging studies of lesser-known mechanisms of inheritance and gene regulation. Topics include dosage compensation, parental imprinting, paramutation, random monoallelic expression, gene regulation by small RNAs, DNA elimination, copy number polymorphism, and prions. Reading and discussion of articles from the primary literature.

BIOL 3325 in Neuroscience

An advanced seminar focusing on one or more aspects of neuroscience, such as neuronal regeneration and development, modulation of neuronal activity, or the neural basis of behavior. Students read and discuss original papers from the literature.

Chemistry

CHEM 1091 Introductory Chemistry and Quantitative Reasoning I

The first course in a two-semester introductory college chemistry sequence covering the same content as Chemistry 1101/1102 with additional instruction focused on developing quantitative reasoning and problem-solving skills in the context of learning chemistry. Topics include the properties of matter, atomic and molecular structure, quantum and periodic trends, chemical bonding, intermolecular forces, stoichiometry, and aqueous solutions. Three hours of lecture, mandatory one-hour problem-solving session, and three hours of laboratory work per week.

CHEM 1109 General Chemistry

A one-semester introductory chemistry course. Introduction to models of atomic structure, chemical bonding, and intermolecular forces; characterization of chemical systems at equilibrium and spontaneous processes; the rates of chemical reactions; and special topics. Lectures, review sessions, and four hours of laboratory work per week.

CHEM 2100 Chemical Analysis

Methods of separating and quantifying inorganic and organic compounds using volumetric, spectrophotometric, electrometric, and chromatographic techniques are covered. Chemical equilibria and the statistical analysis of data are addressed.

CHEM 2250 Organic Chemistry I

Introduction to the chemistry of the compounds of carbon. Describes bonding, conformations, and stereochemistry of small organic molecules. Reactions of hydrocarbons, alkyl halides, and alcohols are discussed. Kinetic and thermodynamic data are used to formulate reaction mechanisms. Lectures, review sessions, and four hours of laboratory work per week.

CHEM 3270 Biomimetic and Supramolecular Chemistry

A guided exploration of the primary scientific literature concerning weak covalent and noncovalent interactions that collectively determine the three-dimensional structures of biomimetic and foldameric molecules and that govern the aggregation of molecules into discrete multi-molecular assemblies. Surveys practical applications in biochemical investigation, catalysis, and medicine, as well as in the young but rapidly expanding sciences of molecular and nanostructural engineering.

Cinema Studies

CINE 1025 Crime Film

Considers gangster films in depth, exploring how popular narrative film manages the threat posed by the criminal's racial, ethnic, or gender difference. Examines shifts in the genre's popularity and assesses the implications of considering genre entertainment art. Weekly writing, extensive reading, and mandatory attendance at evening film screenings.

CINE 2222 Images of America in Film

Explores American culture and history by looking at studio- and independently produced films. Topics include sex and race relations, ethnicity and the American Dream, work and money and their role in self-definition, war and nostalgia, and celebrity and the role of Hollywood in the national imagination. Attendance at weekly evening screenings is required.

Classics

CLAS 1017 The Heroic Age: Ancient Supermen and Wonder Women

The modern concept of the superhero is an enduring vestige of the ancient concept of the hero, the ancient Greek word used to describe men of exceptional ability. Looks at heroes and heroines in ancient literature and culture, considering a range of sources from ancient Babylon to imperial Rome. Considers the changing definition of hero, the cultural values associated with heroism, the role played by gender and sexuality in the definition of the hero, and analogues to ancient heroes in modern cinema. Examines more nebulous and problematic models for the ancient villain and considers how contrasting definitions of hero and antihero can be used to understand ancient thought concerning human nature.

CLAS 2787 Thucydides and the Invention of Political Theory

Thucydides is arguably the classical author who speaks to our present moment most clearly. He is cited as an authority on US-China relations, on the twin crises of democratic governance and ideology, on the rise of populist politics, and is generally recognized as the founder of the study of international relations. A sustained and focused reading of the Peloponnesian War is central to this course of study. Students also read selections from other ancient Athenian authors, such as Euripides, Plato, and Aristotle, as well as modern scholarly interpretations.

CLAS 3310 Imagining Rome

The mythical fate-driven foundation of Rome and the city's subsequent self-fashioning as caput mundi (capital of the world) have made the city an idea that transcends history, and that has for millennia drawn historians, poets, artists, and, most recently, filmmakers to attempt to capture Rome's essence. As a result, the city defined by its ruins is continually created anew; this synergy between the ruins of Rome -- together with the mutability of empire that they represent -- and the city's incessant rebirth through the lives of those who visit and inhabit it offers a model for understanding the changing reception of the classical past. This research seminar explores the cycle of ancient Rome's life and afterlife in the works of writers and filmmakers such as Livy, Virgil, Tacitus, Juvenal, Petrarch, Shakespeare, Keats, Goethe, Gibbon, Hawthorne, Freud, Moravia, Rossellini, Fellini, Bertolucci, and Moretti.

ARCH 2204 Buried by Vesuvius: The Archaeology of Roman Daily Life

Destroyed by the eruption of Vesuvius in AD 79, the archaeological remains of Pompeii, Herculaneum, and the neighboring sites around the Bay of Naples are unparalleled in their range and completeness. The study of this material record reveals a great deal about the domestic, economic, religious, social, and political life in ancient Italy. Examines archaeological, literary, and documentary material ranging from architecture and sculpture to wall painting, graffiti, and the floral remains of ancient gardens, but focuses on interpreting the archaeological record for insight into the everyday life of the Romans. In

addition, explores the methods and techniques employed by archaeologists since the sites were "rediscovered" in the sixteenth century. Archaeological materials are introduced through illustrated presentations, supplementary texts, and sessions in the Bowdoin College Museum of Art.

GRK 1102 Elementary Greek II

A continuation of Greek 1101; introduces students to more complex grammar and syntax, while emphasizing the development of reading proficiency. Includes readings, both adapted and in the original, of Greek authors such as Plato and Euripides. Focuses on Attic dialect.

LATN 1101 Elementary Latin I

A thorough presentation of the elements of Latin grammar. Emphasis is placed on achieving a reading proficiency.

LATN 2203 Intermediate Latin for Reading

A review of the essentials of Latin grammar and syntax and an introduction to the reading of Latin prose and poetry.

LATN 2206 The Roman Novel

All that remains of the Roman novel comes from two texts: Petronius's Satyrica and the Metamorphoses by Apuleius. Petronius's fragmentary, funny, and often bizarre Satyrica (probably late first century CE) follows a same-sex love triangle slumming its way around ancient Italy. Apuleius's Metamorphoses or The Golden Ass (late second century CE) tells the story of a young man who dabbles in magic and accidentally transforms himself into an ass. The ass's quest for salvation is the frame for several sub-narratives illuminating the larger story's themes. Focuses on selections from one or both novels in Latin and complements these with the remainder in translation. Focus is also on a precise understanding of the Latin text and an appreciation of the author's style, but also examines what the novels reveal about the social, historical, economic, religious, linguistic, and literary contexts in which they were produced.

LATN 3306 The Roman Novel

All that remains of the Roman novel comes from two texts. Petronius's fragmentary, funny, and often bizarre "Satyrica" (probably late first century CE) follows a same-sex love triangle slumming its way around ancient Italy. Apuleius's "Metamorphoses" or "The Golden Ass" (late second century CE) tells the story of a young man who dabbles in magic and accidentally transforms himself into an ass. The ass quest for salvation is the frame for several sub-narratives illuminating the larger story's themes. Focuses on selections from one or both novels in Latin and complements these with the remainder in translation.

Focus is also on a precise understanding of the Latin text and an appreciation of the author's style, but also examines what the novels reveal about the social, historical, economic, religious, linguistic, and literary contexts in which they were produced. Research seminar.

Computer Science

CSCI 1101 Introduction to Computer Science

What is computer science, what are its applications in other disciplines, and what is its impact in society? A step-by-step introduction to the art of problem solving using the computer and programming. Provides a broad introduction to computer science and programming through real-life applications. Weekly labs provide experience with the concepts presented in class. Assumes no prior knowledge of computers or programming.

CSCI 1103 Accelerated Introduction to Computer Science

Covers the same introductory material as <u>CSCI 1101</u>, but at an accelerated pace and without an associated lab section. Appropriate for students with prior programming experience, though not necessarily in any specific programming language.

CSCI 2101 Data Structures and Advanced Programming I

Builds on the computational and programming skills acquired in the introductory course, focusing on efficient ways of storing and accessing data using essential data structures. Explores the design of linear data structures such as dynamic arrays, linked lists, stacks, and queues as well as their practical applications within complex computer programs. Also emphasizes object-oriented program design and the development of clear, modular programs that are easy to read, modify, and debug. Regular and significant programming assignments in Java provide the opportunity to apply the principles studied. Prior experience in a high-level programming language such as Python or Java is assumed, but no experience with Java specifically is required.

CSCI 2330 Foundations of Computer Systems

A broad introduction to how modern computer systems execute programs, store information, and communicate. Examines the hardware and software components required to go from a program expressed in a high-level programming language like C to the computer actually running the program. Topics include concepts of program compilation and assembly, machine code, data representation and computer arithmetic, basic microarchitecture, the memory hierarchy, processes, and system-level I/O. Regular, programming-intensive projects provide hands-on experience with the key components of computer systems.

CSCI 2400 Artificial Intelligence

Explores the principles and techniques involved in programming computers to do tasks that would require intelligence if people did them. State-space and heuristic search techniques, logic and other knowledge representations, reinforcement learning, neural networks, and other approaches are applied to a variety of problems with an emphasis on agent-based approaches.

CSCI 3485 Deep Learning for Computer Vision

Computer vision has become ubiquitous in our society, from image searches to self-driving cars. On the other hand, deep learning has shaken the world of artificial intelligence in recent years. Most of these developments greatly advanced the performance of state-of-the-art visual recognition systems, which put computer vision at the epicenter of most technological progress from the past decade. In this context, this course aims at providing a consistent exploration of how deep learning began to its most recent achievements, always using computer vision tasks as their main application, historically or practically. During the course, we'll also understand many of the main computer vision problems and use them as cases for the introduction of various deep learning-related problems. Finally, this course hopes to give students working knowledge of one of the main deep learning frameworks, such as PyTorch, and prepare them for future industrial and academic careers in the field.

CSCI 3725 (a) Computational Creativity

Introduces theoretical foundations of modeling and evaluating creativity. Students learn techniques to assess creative systems and implement, analyze, and extend algorithms relevant to the latest state of the art. Special topics may include augmented creativity, hybrid systems, narrative intelligence, and algorithmic composition. Culminates in a final report that describes a novel creative technique or framework.

<u>Digital & Computational Studies</u>

DCS 1100 Introduction to Digital and Computational Studies

Examines the impact of digital artifacts, networked interaction, and computational analysis on the ways in which we establish new knowledge, engage in creative and social practices, and understand the self. Studies how the combination of large-scale digital data and computational modeling methods shape our agency as decision-makers. Emphasis on how the Liberal Arts shape and are shaped by these processes. Coursework includes quantitative analysis, machine learning, text and network analysis, critical readings in the field, and short, exploratory projects. Assumes no knowledge of programming or any software that will be used.

DCS 2350 Social and Economic Networks

Examines the social and economic aspects of today's connected world from a multitude of perspectives; namely, network science, computer science, sociology, and economics. The fundamental questions to be addressed are: What are the properties of real-world networks? What are the effects of networks on our behavioral choices like quitting smoking or eating healthy? How do cascades in networks lead to outcomes like videos going viral? How does Google search the Internet and make money doing so? Debates issues around centrality in networks. Uses game theory to study strategic interactions in networks and markets.

DCS 2850 Introduction to Data Science

Introduces students to the fundamental statistical concepts and computational tools for analyzing data and making data-driven decisions. Topics include data acquisition, wrangling, exploratory analysis, visualization, statistical modeling, and communicating results. Emphasis is placed on helping students become critical consumers of statistical studies. Through hands-on projects, students will learn how to formulate questions, collect and process relevant data, build models, evaluate assumptions and limitations, and interpret findings. Ethics surrounding data privacy, bias, and transparency are also examined.

Earth & Oceanographic Studies

EOS 1020 Archives of Earth: Past and Future

An introduction to the evolution of Earth and a glimpse into Earth's future. We will examine pivotal moments in Earth's history, from the formation of Earth's moon, to the rise of oxygen, to colliding continents, and the explosion of life on Earth. What differentiates Earth from other rocky planets? What events have shaped the evolution of Earth? What will future Earth look like? What role are we playing in shaping this future world? These questions are explored through readings, discussions, presentations, and writing.

EOS 1105 Introducing Earth

The Earth is a dynamic system that has been shaped in part by geologic processes such as earthquakes, volcanic activity, and mountain building. During classes and weekly laboratories, students are introduced to Earth and plate tectonics through accessible field experiences along the Maine coast, rock and mineral specimens, images, and models. Students practice making observations, collecting data, and communicating interpretations, and then synthesize the course curriculum and their laboratory findings through a final project.

EOS 2225 Structural Geology and Analysis

Geologic structures provide evidence of the dynamic deformation and evolution of the Earth's crust. Analysis of these structures yields insight into the processes and products of

deformation. This course explores: the mechanics of rock deformation, qualitative and quantitative analysis of structural features, techniques of strain analysis, and synthesis of geologic data in a spatial and temporal context. We examine evidence of deformation at scales that range from the plate-tectonic scale to the microscopic scale of individual minerals. Weekly laboratories focus on problem solving through the use of geologic maps, cross-sections, stereographic projections, strain analysis, virtual field trips, and an array of software applications designed for visualizing and interrogating spatial datasets. Students complete a final project involving the techniques of structural geology and analysis.

EOS 2550 Satellite Remote Sensing of the Ocean

In the 1980s, NASA's satellite program turned some of its space-viewing sensors towards the earth to better understand its processes. Since that time, NASA's Earth Observatory mission has yielded a fleet of satellites bearing an array of sensors that provide a global view of the earth each day. Global-scale Ocean properties, including bathymetry, temperature, salinity, wave height, currents, primary productivity, sea ice distribution, and sea level, are revealed through satellite-detection of ultraviolet, visible, infrared and microwave energy emanating from the ocean. These satellite data records currently exceed thirty years in length and therefore can be used to interpret climate-scale ocean responses from space. A semester-long research project, targeted on a student-selected oceanic region, focuses on building both quantitative skills through data analysis and writing skills through iterative writing assignments that focus on communicating data interpretation and synthesis.

EOS 2585 Ocean and Climate

The ocean covers more than 70 percent of Earth's surface. It has a vast capacity to modulate variations in global heat and carbon dioxide, thereby regulating climate and ultimately life on Earth. Beginning with an investigation of paleo-climate records preserved in deep-sea sediment cores and in Antarctic and Greenland glacial ice cores, the patterns of natural climate variations are explored with the goal of understanding historic climate change observations. Predictions of polar glacial and sea ice, sea level, ocean temperatures, and ocean acidity investigated through readings and discussions of scientific literature. Weekly laboratory sessions devoted to field trips, laboratory experiments, and computer-based data analysis and modeling to provide hands-on experiences for understanding the time and space scales of processes governing oceans, climate, and ecosystems. Laboratory exercises form the basis for student research projects.

Economics

ECON 1013 The Moral Economy

An examination of the moral questions arising from economic analysis during the industrial revolution. Readings include original texts by Adam Smith, Karl Marx, and Henry George, and historical treatments of their lives and circumstances; also the late nineteenth century fictional treatment of novelist and editor William Dean Howells. The authors' rhetorical strategies as well as their moral premises and political-economic ideas will be studied.

ECON 1101 Principles of Microeconomics

An introduction to economic analysis and institutions, with special emphasis on the allocation of resources through markets. The theory of demand, supply, cost, and market structure is developed and then applied to problems in antitrust policy, environmental quality, energy, education, health, the role of the corporation in society, income distribution, and poverty.

ECON 1102 Principles of Macroeconomics

An introduction to economic analysis and institutions, with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed. Attention is given to the sources and consequences of economic growth and to the nature and significance of international linkages through goods and capital markets.

ECON 2238 Eatconomics: The Economic Analysis of the Food Industry

We eat food to live (we "need" it), but we also use food to express the values of variety and aesthetics. Using applied microeconomic tools, this course will study the production, storage, distribution, and consumption of food by individuals, firms, government, and nongovernmental organizations. Economic models will be developed to analyze why some people experience food scarcity and hunger while others have access to plentiful food; food technologies (e.g., organic vs "conventional" farming); food distribution (grocery stores, restaurants, food trucks, the "gig economy"; fair trade); the diet industry; the environmental impacts of food production (water use and climate impacts); food security and international trade of food products; and other topics as student demand dictates.

ECON 2555 Microeconomics

An intermediate-level study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution, with major emphasis on systems of markets and prices as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice and demand, the theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics.

ECON 2556 Macroeconomics

An intermediate-level study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis.

ECON 2557 Economic Statistics

An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both micro- and macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed.

ECON 3277 Applied Data Analysis for Economic Research

Highlights applied research methods in economics. Students will acquire the skills needed to conduct a comprehensive empirical research project in economics. Skills learned include data cleaning, data summary and interpretation, developing hypotheses, building empirical models to test the hypotheses, estimating models with data, and using estimated results to assess hypotheses. Students learn and apply methods for drawing causal inferences from non-experimental data. Other topics that could be covered include spatial econometrics, fixed effects with panel data, machine learning, and randomized controlled trials. Datasets and estimation methods used will vary depending on the instructor. Students will use the statistical programming language R.

ECON 3401 Financial Economics

An introduction to the economics of finance using the tools of intermediate microeconomic theory. Explores the economic role of financial markets in determining the price of risk, allocating capital across space, and moving economic value through time. Particular emphasis on questions of market efficiency and social usefulness. Topics likely to include choice under uncertainty, the time value of money, portfolio optimization, the Capital Asset Pricing Model, the Efficient Market Hypothesis, options and derivatives, and the Modigliani-Miller Theorem.

ECON 3516 Econometrics

Seminar. A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions. Applications to both micro- and macroeconomics are considered. Though most of the course deals with single-equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required.

ECON 3526 Trade Doctrines and Trade Deals

Seminar. An inquiry into the consequences of theory meeting practice in international trade negotiations. The historical relationship between economic ideas and the bilateral trade treaties, multilateral trade arrangements, and retaliatory tariff laws of Great Britain and the United States considered. The timeline extends from the eighteenth century to the present, from the Treaty of Methuen (1703) to the World Trade Organization.

Education

EDUC 1101 Power and Dilemmas in U.S. Education

What are the purposes of public education and what makes it public? Do schools serve an individual good or a collective good? Is the U.S. system of public education organized to serve these purposes? What is the public's responsibility towards public education? Do schools promote social justice or reproduce inequality in a diverse society? Which theories and purposes of education motivate current reform efforts? Who shapes public discourse about public education and by what strategies? This course employs a mixed approach of reading, discussion, and class-based activities to explore important educational issues, including school reform, multicultural education, finance, charter schools, vouchers, segregation, accountability, and standardization. Students will participate in a short-term field placement in a local public school.

EDUC 2211 Education and the Human Condition

Explores the relationship between education and being/becoming human. Topics may be guided by the questions: What does it mean to be an educated person? How can education lead to emancipation? How might teaching and learning lead to the good life? What is our responsibility to teach the next generation? Readings may include works by Hannah Arendt, John Dewey, W. E. B. Du Bois, Plato, Jacques Rancière, among others.

EDUC 3301 Teaching and Learning

A study of what takes place in classrooms: the methods and purposes of teachers, the response of students, and the organizational context. Readings and discussions help inform students' direct observations and written accounts of local classrooms. Peer teaching is an integral part of the course experience. Requires a minimum of thirty-six hours of observation in a local secondary school. Education 3302 must be taken concurrently with this course. In order to qualify for this course students must have Education 1101 and 2203; junior or senior standing; a concentration in a core secondary school subject area (English: four courses in English; foreign language: four courses in the language; life science: four courses in biology; mathematics: four courses in mathematics; physical science: three courses in chemistry, earth and oceanographic science, or physics and one course in one of the other departments listed; or social studies: two courses in history and two courses in anthropology, economics, government, history, psychology or sociology.

EDUC 3302 Curriculum Development

A study of the knowledge taught in schools; its selection and the rationale by which one course of study rather than another is included; its adaptation for different disciplines and for different categories of students; its cognitive and social purposes; the organization and integration of its various components. Education 3301 must be taken concurrently with this course. In order to qualify for this course, students must have Education 1101 and 2203; junior or senior standing; and a concentration in a core secondary school subject area (English: four courses in English; foreign language: four courses in the language; life science: four courses in biology; mathematics: four courses in mathematics; physical science: three courses in chemistry, earth and oceanographic science, or physics and one course in one of the other departments listed; or social studies: two courses in history and two courses in anthropology, economics, government, history, psychology, or sociology).

English

ENGL 1005 Victorian Ghosts and Monsters

Examines the ghosts and monsters that emerge from the pages of Victorian narratives. What do these strange beings tell us about literary form, cultural fantasies, and anxieties, or about conceptions of selfhood and the body? How do they embody (or disembody) identities that subvert sexual, racial, social, and gendered norms? Authors may include Charles Dickens, Elizabeth Gaskell, Robert Louis Stevenson, and Oscar Wilde.

ENGL 1017 Global Asian Fantasy Fiction

Focuses on contemporary anglophone fantasy fiction of Asian-inspired worlds by writers of East and Southeast Asian descent. Examines how authors draw on diverse Asian genres such as the Chinese martial arts and magic cultivation epic, Hong Kong triad and gangster film, Korean fox and tiger myth, Singaporean and Malaysian ghost tale, and broadly Asian imperial court drama to address issues of gender and sexual identity, racial and class politics, empire and geopolitics, nationhood and state power, and historiography and literary representation. Authors may include Kat Cho, Zen Cho, Rebecca Kuang, Fonda Lee, Russell Lee, Yoon Lee, Ken Liu, Shelley Parker-Chan, Nghi Vo, Neon Yang, and Xiran Jay Zhao

ENGL 1026 Freedom Stories

Explores the ways in which the idea of American freedom has been defined both with and against slavery through readings of legal and literary texts. Students come to terms with the intersections between the political, literary, and historical concept of freedom and its relation to competing definitions of American citizenship.

ENGL 1027 The Real Life of Literature

Examines literary fiction set against the backdrop of actual historical events, such as wars, social protest events, terrorist attacks, earthquakes, the HIV/AIDS pandemic, the Holocaust, and political assassinations. Students not only analyze the literary strategies writers employ to fictionalize history and to historicize fiction, but also explore the methodological and philosophical implications of such creative gestures. In the end, this two-fold process transforms both categories in ways that permanently unsettle the status of fiction as merely imaginative and the historical as merely fact. Potential authors: Virginia Woolf, Octavia Butler, Yasmina Khadra, David Mura, Nicole Krause, Andrew Holleran, among others.

ENGL 1034 America in the World

Examines America as it is seen in literature from home and abroad. How have American authors described America's place in the world? How has America's present role as the sole global superpower affected how we view its past? What does America look like today from the perspective of the third world? Explores the way literature represents space and time,

from current events to world history. Authors include Henry James, James Baldwin, Toni Morrison, Jamaica Kincaid, and Chimamanda Ngozi Adichie.

ENGL 1240 The Art of the Essay

An introduction to creative nonfiction writing through an examination of traditional and experimental forms of the essay, including narrative, lyric, and persuasive. Students will read and discuss a range of published works to gain an understanding of the form and its techniques -- voice, tone, structure, pacing -- and will write and revise a series of essays. All are expected to fully participate in weekly workshop discussions.

ENGL 2019 Fictions of Global English

Intermediate seminar. Explores modern and contemporary literature from around the world, considering modes of writing that have developed with the global spread of the English language and other languages' collision with English. Attention given to vernacular writing and the embrace of so-called non-standard, weird, or rotten English. Examines ways writers have engaged with the history of colonialism and the forces of globalization as well as their attempts to forge a new cosmopolitan literature.

ENGL 2029 Women and the Eighteenth-Century Novel

Intermediate Seminar. Explores how women are represented in eighteenth-century fiction, and the impact of women writers and readers on the development of the novel. Readings may include Eliza Haywood's Love in Excess, Samuel Richardson's Pamela, Henry Fielding's Shamela, and Mary Wollstonecraft's The Wrongs of Woman, and Jane Austen's Lady Susan and Pride and Prejudice. Note: Fulfills the pre-1800 requirement for English majors.

ENGL 2305 Imagining London in Eighteenth-Century Literature

Focuses on journals, plays, poems, and novels in which London itself plays a vital role, including James Boswell's "London Journal," Daniel Defoe's "Moll Flanders," John Gay's "Trivia"; or the "Art of Walking the Streets of London," and Frances Burney's "Evelina." In addition to engaging in critical analysis of these literary texts, students learn how to use digital mapping, spatial analysis, and image markup to imagine eighteenth-century London and work collaboratively to create maps charting the movements of real people (such as Boswell) and fictional characters (such as Moll Flanders) within the city. Theaters, coffeehouses, shops, prisons, hospitals, and parks are among the public spaces explored in order to contextualize, enrich, and question the literature.

ENGL 2405 Victorian Plots

Focusing primarily on the novel, examines Victorian narrative form. Considers whether there are certain types of plots that are peculiar to the period; the ways in which characters develop (or not) as stories unravel; and how literary elements such as description, dialogue, and setting emerge in Victorian texts. Along the way, analyzes the economic, social, and

cultural factors that determine aspects of the novel. Authors may include Emily Bronte, Wilkie Collins, Charles Dickens, George Eliot, Elizabeth Gaskell, and Anthony Trollope.

ENGL 2582 Reading "Uncle Tom's Cabin"

Introduces students to the controversial history of reader responses to Harriet Beecher Stowe's 1852 antislavery novel, Uncle Tom's Cabin. Students engage with various theoretical approaches—reader response theory, feminist, African Americanist, and historicist—to the novel, then turn to the novel itself and produce their own literary interpretation. In order to do so, students examine the conditions of the novel's original production. By visiting various historic locations, the Stowe House on Federal Street, the First Parish on Maine Street, Special Collections of the Hawthorne-Longfellow Library, students compare the novel's original historical context to the history that the novel produced. Aside from reading Stowe's antislavery fiction, students also read works produced with and against Uncle Tom's Cabin.

ENGL 2605 The Harlem Renaissance

Focuses on the African American literary and cultural call-to-arms of the 1920s. Modernist resistance languages; alliances and betrayals on the left; gender, sexuality, and cultural images; activism and literary journalism; and music and visual culture are of special interest.

ENGL 2760 Asian America's Margins

Explores the margins of Asian America through literary perspectives of queerness, mixed-race identities, transnational and transracial adoption, disability, and mental illness. Examines the ways authors contest dominant white discourses of Asianness as well as the stigmatized zones within Asian American life. Authors may include K-Ming Chang, Alexander Chee, Nicole Chung, Thanh-Thao Sue Do, Velina Hasu Houston, Yiyun Li, Leah Lakshmi Piepzna-Samarasinha, Matthew Salesses, Jane Jeong Trenka, Ocean Vuong, Esmé Weijun Wang, and Alice Wong. Note: Beginning with the Class of 2025, this class will fulfill the African American, Asian American, Indigenous, Latinx, multiethnic American, or global literature requirement for English majors.

ENGL 2863 The Fractured and The Lyric: Advanced Forms of Creative Nonfiction

Examines the relationship between form and content in contemporary creative nonfiction, and how formal experimentation is used to evoke risky, unconventional, or suppressed narratives, from the traumatic to the ecstatic. Students read a wide range of essays, memoir, and hybrid work that uses lyricism and fragmentation. Authors may include Gloria Anzaldúa, Eula Biss, Jenny Boully, Anne Carson, Jamaica Kincaid, Kiese Laymon, Maggie Nelson, Andrés Neuman, Lia Purpura, Claudia Rankine, and others. Students write and substantially revise their own narratively daring work, with an emphasis on structure and voice. All students are expected to fully participate in weekly workshop discussions.

Environmental Studies

ENVS 1028 Water Insecurity: Emerging Threats to a Vital Natural Resource

Explores integrative approaches to address critical threats to the global water supply, drawing on principles of environmental science, sustainable development, and green technology. Through scientific inquiry, policy analysis, and creative problem solving, students develop critical multidisciplinary research and writing skills while investigating a selection of case studies in groundwater depletion, wetland habitat destruction, wastewater remediation, and other emerging sustainability challenges surrounding one of the world's most vital and most threatened natural resources.

ENVS 1101 Introduction to Environmental Studies: Interdisciplinary Approaches

An interdisciplinary introduction to the environment framed by perspectives from the natural sciences, social sciences, and arts and humanities. Surveys past and present status of scientific knowledge about major global and regional problems, explores both successes and inadequacies of environmental ideas to address specific crises, and assesses potential responses of governments, corporations, and individuals. Topics include food and agriculture, pollution, fisheries, and climate change and energy. Other subjects include biodiversity, population, urbanization, consumption, environmental justice, human and ecological health, and sustainability.

ENVS 3917 Rebel Ecology: Black and Native Struggles for Land and Life Against Extraction

Considers Dr. Guess's (2021) concept and theory of a "rebel ecology" by asking, more broadly, what other socioecological models exist? Weaves together a study of differing, yet often converging or synergistic traditions of Black/Womanist eco-feminism that often confront the social constructions of race, gender, class and sexuality, dominant religion as a means of social control, imperialism, capitalism and colonialism; Indigenous ecologies and perspectives on resistance to capitalist extraction, genocide, imperialism and colonialism; as well as eco-socialism, which often frames ecology in terms of a mode of production beyond or outside of capitalism and the prison industrial complex. Given ongoing struggles against the extraction of land and labor, the urgent calls raised in the "climate strike," the COVID-19 pandemic, Black-led pandemic rebellions, and long(er) histories of land-based peoples, globally, opposing environmental degradation, broadly defined.

Gender, Sexuality, & Women's Studies

GSWS 1010 Sex Work Is Work

Studies the lives and labors of sex workers in the US through study of historical and contemporary contexts. Explores the sex industry through the lenses of race, class, gender,

sexuality, and disability. Uses memoirs, poetry, scholarly essays, film, music, zines, and fiction to center the voices of sex workers. Focuses on the conditions of sex work, health and safety, labor organizing, worker justice, mutual aid, and abolitionist feminism. Uses feminist and queer theory to examine pleasure, consent, and critiques of capitalism, policing, and incarceration.

GSWS 2240 Living a Feminist Life

Engages students in the critical study of intersectional and anticolonial feminist perspectives of the late twentieth and twenty-first century. Focuses on the ways that feminist theory is grounded in everyday life and highlights resistance, refusal, and the creation of alternative ways of being in the world. Develops an understanding of the social and political contexts out of which feminist ideas emerged. Topics include reproductive justice, bodily autonomy, abolition, intimacy, care, political economy, and solidarity. Involves the construction of one's own feminist theory and perspective.

GSWS 2348 Girlhood and Empire: Girls, Power, and Resistance in Global Perspectives

Investigates the construction of girlhood through the lens of global feminist resistance, centering the writings and struggles of young women and femmes in the experience and practice of colonized, transnational, and refugee girlhood. With groundings in race, class, gender, ability, and sexuality, the course will engage with not only academic writing but also media and cultural production by and concerning girls. The work of this course is to interrogate (neo)colonial histories by centering not only what empire wants and takes from girls (how their images are deployed, how their reproductive labor is extracted), but also what girls want and do in the course of their living with, under, and against colonial power(s).

<u>German</u>

GER 1101 Beginning German I: Self-Expression and Cultural Comparison

German 1101 is the first course in German language and culture and is open to all students without prerequisite. Facilitates an understanding of German-speaking culture through language and enables students to speak and write about themselves and their interests. Active use of listening, reading, speaking, and writing skills. Three hours per week, plus one hour of conversation practice with learning assistant.

GER 2203 Intermediate German I: Tradition and Innovation

Continued emphasis on the understanding of German culture through language. Focus on social and cultural topics through history, literature, politics, popular culture, and the arts. Increased complexity in listening, reading, speaking, and writing. Three hours per week, with one hour of discussion and practice with learning assistant.

GER 2205 Advanced German Texts and Contexts

Designed to explore aspects of German culture in depth, to deepen the understanding of culture through language, and to increase facility in speaking, writing, reading, and comprehension. Topics include post-war and/or post-unification themes in historical and cross-cultural contexts. Particular emphasis on post-1990 German youth culture and language. Includes fiction writing, film, music, and various news media. Weekly individual sessions with the teaching fellow from the Johannes-Gutenberg-Universität-Mainz.

GER 3317 German Literature and Culture since 1945

An exploration of how successive generations have expressed their relationship to the catastrophe of the Nazi past. Examines representative texts of East and West German writers/filmmakers in Cold War and post-unification contexts. A discussion of German identity from several critical perspectives, including Vergangenheitsbewältigung, the political and cultural influence of the United States and the Soviet Union, gender in the two Germanys, and the politics of migration and citizenship. Authors may include Grass, Böll, Borchert, Brussig, Özdamar, Schlink, and Wolf. Films by Fassbinder, von Trotta, Schlöndorff, Akin, and Levy. Taught in German.

Government & Legal Studies

GOV 1001 Representation, Participation, and Power in American Politics

An introductory seminar in American national politics. Readings, papers, and discussion explore the changing nature of power and participation in the American polity, with a focus on the interaction between individuals (non-voters, voters, party leaders, members of Congress, the president) and political institutions (parties, Congress, the executive branch, the judiciary).

GOV 1011 Fundamental Questions: Exercises in Political Theory

Explores the fundamental questions in political life: What is justice? What is happiness? Are human beings equal or unequal by nature? Do they even have a nature, or are they "socially constructed"? Are there ethical standards for political action that exist prior to law and, if so, where do they come from? Nature? God? History? Readings may include Plato, Aristotle, the Bible, Machiavelli, Locke, Rousseau, Shakespeare, the American Founders, Tocqueville, and Nietzsche.

GOV 1027 The Politics of Climate Change

Provides an overview of the major actors engaged in climate politics, ranging from governments to NGOs and corporations. Examines the politics of climate change at

multiple levels—from the individual to global governance—and reviews climate policy in different countries. Pays particular attention to cases where active policy making or public mobilization around climate is occurring, asking why we see initiative and innovation in climate policy in these venues and less action in other spaces. Considers themes such as how climate policy is developed differently in democracies and authoritarian regimes, how climate policy may affect economic development, the role of non-state actors such as citizens, social movements, and industry in climate politics, and the ethical implications of different climate policy options.

GOV 1100 Introduction to American Government

Provides a comprehensive overview of the American political process. Specifically, traces the foundations of American government (the Constitution, federalism, civil rights, and civil liberties), its political institutions (Congress, presidency, courts, and bureaucracy), and its electoral processes (elections, voting, and political parties). Also examines other influences, such as public opinion and the mass media, which fall outside the traditional institutional boundaries, but have an increasingly large effect on political outcomes.

GOV 2006 Presidents and Civil Rights

American history displays the gap between the ideals of liberty and equality and real-life institutions and practices—as well as the struggle by numerous groups to attain civil rights in both law and fact. Presidents have sometimes been key players in working "to fulfill these rights" (as Lyndon Johnson put it), sometimes in undermining them. Focusing primarily on racial equality, this class fuses questions of political history and presidential power to explore (1) when and why presidents have been leaders or laggards in protecting civil rights, and (2) what capacity they have to seek and cement change through their rhetorical, legislative, and administrative roles and their relationship with "bottom-up" social movements. The class tracks these questions by considering key periods and longstanding debates, with emphasis on material from the 1850s to the present. Topics include abolition and "states' rights," immigration, the post-Civil War Reconstruction period, voting rights, segregation and lynching, the World War II internment of Japanese-Americans, the midtwentieth-century civil rights movement, and the legacy of (and backlash to) the first Black president.

GOV 2010 United States Congress

An examination of the United States Congress, with a focus on members, leaders, constituent relations, the congressional role in the policy-making process, congressional procedures and their impact on policy outcomes, the budget process, and executive-congressional relations.

GOV 2060 Campaigns and Elections

Addresses current theories and controversies concerning political campaigns and elections in the United States. Takes advantage of the fact that the class meets during the heart of the next presidential and congressional campaigns. Uses concepts from the political science literature on elections to explore general trends in electoral choice at the legislative and

presidential level. Students will be expected to follow journalistic accounts of the fall campaigns closely. A second set of readings introduces political science literature on campaigns and elections. These readings touch upon a wide range of themes, including voting behavior (e.g., economic voting and issue voting), campaign finance, media strategy, the role of incumbency, presidential primaries, the Electoral College, and trends in partisan realignment.

GOV 2466 Latin American Politics

This course provides a broad exploration of contemporary Latin American politics, emphasizing critical themes, which may include but are not limited to: environment and climate change; race, gender, and identity; colonial legacies; indigeneity; challenges to democracy; social movements and human rights; political economy; and South-South relations. The course will approach these key topics from interdisciplinary perspectives in addition to those of political science, such as anthropology, environmental studies, and history. It will also use various source formats, including academic articles, ethnography, film and artwork. Focuses on in-class discussions.

GOV 2486 The Politics of Dictatorship: Authoritarian Resilience and Democratization

Despite the end of the Cold War, dictatorship has persisted, even thrived. At least 40 percent of states in the world remain authoritarian. Introduces students to the social and political logic of dictatorship. Explores questions such as: Where do dictatorships come from? Why might people support dictatorships? What effect does dictatorship have on political, economic, and social outcomes? How do dictatorships differ from one another? Why are some dictatorships resilient and stand the test of time while some quickly collapse? When dictatorships collapse, why are some dictatorships replaced by other dictatorships, while others democratize? Concentrates on the post-World War II era and explores the dynamics of dictatorship in regions throughout the world, including the Middle East, Latin America, Asia, Europe, and Africa.

GOV 2540 U.S. - China Relations

Examines the development of United States relations with China. Begins with a brief historical examination of the Opium War, then examines United States policy towards the Nationalists and the Communists during the Chinese Civil War. In the aftermath of the civil war and subsequent revolution, the role of China in the Cold War will be discussed. Then focuses on more contemporary issues in United States-China relations, drawing links between the domestic politics of both countries and how they influence the formulation of foreign policy. Contemporary issues addressed include human rights, trade, the Taiwanese independence movement, nationalism, and China's growing economic influence in the world.

GOV 2577 Arctic Politics

The Arctic looms in our political imagination as the region most directly affected by a changing global climate that threatens the displacement of northern communities and

cultures. It is also a site of fierce competition for state control and economic development. This course investigates the Arctic as a political space that encapsulates elements of comparative politics and international relations. It examines cross-national variation in policies toward Arctic regions in states such as the United States, Canada, Russia, Iceland, and Norway. It also explores dynamic international engagement around the Arctic by state officials, corporations, indigenous communities, and activists. The course will address governance issues such as indigenous rights, economic development and natural resource exploitation, environmental issues and climate change, the potential militarization of the region, international law, and the role of the Arctic Council.

GOV 2600 International Law

The modern state system, the role of law in its operation, the principles and practices that have developed, and the problems involved in their application.

GOV 2601 Human Rights (and Wrongs): The International Politics of Human Rights

Human rights have long been a key concern of international relations as a marker of the world's highest aspirations for equality and progress. What are their potential, and their limits? Should we be hopeful, or skeptical? This course addresses competing conceptions of human rights, the problems in enforcing them, and how human rights have featured in global politics over time – both in pushing for change and in perpetuating the status quo. It analyzes the modern formation of the human rights regime at the United Nations; traces the adoption and implementation of key human rights conventions; and explores historical and contemporary cases portraying how different actors and organizations (states, corporations, and non-state actors) are involved in the promotion of human rights around the globe. Readings draw from diverse approaches to human rights and international relations, including realist, liberal, constructivist, feminist, postcolonial, and other critical perspectives.

GOV 2602 Ethics and International Affairs

This course challenges students to critically engage with the role of ethics in international affairs. Students learn about different approaches to the relationship between ethics and global politics informed by realist, liberal, constructivist, and critical perspectives. Students grapple with individual and structural notions of ethics to reflect on responsibility in global politics. Topics may include war and the use of force, corruption, distributive justice, environmental justice, health, and immigration policy. Students will be invited to reflect on how ethics influence their lived experiences living in a powerful state, the tragic choices that shape possibilities of conflict and cooperation in international affairs, and the potentiality and limits of making ethical claims based on humanity and/or citizenship.

GOV 3440 In Sickness and in Health: The Comparative Politics of Health and Welfare

Who should care for the young, the sick, the elderly, and others who are unable to provide for themselves? Is care the responsibility of the individual, the family, or society? Should it

be provided by the government or private markets? This course examines how and why countries adopt different policies regarding health care, childcare, old age pensions, unemployment, disability, etc. Readings and discussions explore the moral foundations of welfare as well as the political and economic aspects of provision, with a particular focus on inequities in access to care. Cases drawn primarily from the USA, Great Britain, and Japan, while students may choose to research other countries.

History

HIST 1003 Maps, Territory, and Power in Asia

What and where is Asia? Maps have constructed the borders of and within "Asia" as much as they have reflected their realities on the ground. In questioning the objectivity of maps, this seminar examines how various conceptions of space and cartographic practices have legitimized colonial, national, and imperial claims in the region from the seventeenth century to the present. Topics include the Mercator projection, Jesuit Atlas of China, Great Trigonometric Survey of India, aerial photography in Japan and Vietnam, postcolonial partition in India and Korea, and the global positioning system (GPS). Multiple sessions involve working with original specimens in the College's Department of Special Collections.

HIST 1005 Judging History: The Era of the American Revolution

Offers an introductory history of the American Revolution while considering why the founding era persists as a crucial touchstone for modern US politics. Students will work extensively with a selection of primary sources to address such questions as: How are twenty-first-century students to judge figures who lived 250 years ago? Is it appropriate to judge historical figures by modern standards? Or can they only be judged within the cultural norms of their own times? How can we expand our study of "the founders" beyond the experience of elite, white men to embrace the history of a diverse American population? How can we create a "usable past" (a sense of history capable of informing modern events) that encompasses questions of gender, race, and class?

HIST 1015 Hitler's Germany

Examines the German experience of Nazism from its origins in WWI through twelve years of Hitler's rule (1933–1945). Working with a diverse set of primary sources, including film, photography, art, posters, letters, diaries, and memoirs, students will explore: the rise of the National Socialist movement under Hitler's "charismatic" leadership; the use of propaganda and terror in the Nazi Revolution; race, gender, class, and disability in the transformation of everyday life; forms of collaboration and possibilities of resistance; the waging of war and the "Final Solution"; and the Nazi era in German collective memory. While placing the Third Reich in historical context, this course will also encourage reflection on the ways that "Nazism" continues to resonate today, and the many lessons the German experience can offer.

HIST 1047 Witches, Heretics, and other Microhistories from the Inquisition

First-Year writing seminar. Delves into the lives of everyday people facing the Inquisition. They were accused of witchcraft, heresies, sexual deviance, and other offenses. The stories they left behind through court records offer a unique insight into the lives of everyday people who do not make it into historical records otherwise. These "microhistories" make a single individual the center of the story, placing them in their historical context, to understand social and cultural structures. Microhistories are particularly well-suited to showing how non-elite individuals understood their own place in society, how they contested existing power structures, and how their own identities were constructed in relation to those structures. Assignments include critical essays, revisions, an exploration of microhistories in the College, and a student portfolio. The course is focused on Latin America but does not require any prior knowledge of the region.

HIST 2019 The Transatlantic Sixties and Seventies

From Berkeley to Berlin, social movements in the 1960s and 1970s pushed democracy in new directions, overturned social roles, and redefined the meaning of politics. Investigates that wave of transatlantic social, political, and cultural contestation, exploring such themes as youth protest, anti-racism, anti-imperialism, feminism, and the counterculture. Taking a transnational approach, considers not only how these decades unfolded in different countries, but also unearths the many flows—of ideas, objects, and people that wove diverse movements together. Focuses on developments in North America and Europe and situates them in a fully global context.

HIST 2048 The Worlds of the Middle Ages

Charts the different trajectories taken by societies stretching from Iceland to Iran during the "Middle Ages," a millennium stretching from the fall of Rome in 476 to the fall of New Rome (Constantinople) in 1453. We will meet Northern barbarians, Arab armies, Vikings, Mongols, and the Ottomans; we will witness the birth of Islam and Charlemagne's revival of a Western Roman empire; we will study the formation of institutions such as banks and universities, the invention of new alphabets and art forms, and the growth of state-sponsored persecution of minorities, whose baleful legacy lives on today. Class sessions will involve a variety of activities, such as seeing medieval manuscripts from the Bowdoin Department of Special Collections & Archives, engaging in role-playing debates, and using a range of historical sources (including texts, objects, and art) to unlock the medieval past.

HIST 2109 The Red Century

The Russian Revolution ushered in the world's first socialist society. This course explores the origins, evolution, and eventual collapse of the Soviet experiment. Topics include: the Russian Revolutions of 1917 and Civil War; the "building of socialism" under Lenin and Stalin; the origins of the Terror and Gulag system; the Great Patriotic War (WWII); the Soviet Union's influence in Eastern Europe and the Cold War; the unraveling of the Soviet system under Gorbachev; the challenges of post-Soviet society in the 1990s; and the Soviet past in Russian memory today. By engaging closely with visual and written texts produced by and for the peoples of Russia and the Soviet Union, the course seeks to understand the

experience of lived socialism from diverse perspectives. It is designed for all students; no background is necessary.

HIST 2145 The United States Civil War

This course explores the United States Civil War. Beginning with an overview of causes and ending with prospects for Reconstruction, it focuses on the key issues raised by the war: the relationship between military and political factors, the social changes wrought by war, and the crucial issues of slavery and emancipation.

HIST 2232 The Many Families of Early America

Explores the rich and diverse landscape of early American families from sixteenth- and seventeenth-century Atlantic exchanges through the early Republican era. Over the course of the semester, we will survey contested claims to family by people of European, African, and Indigenous backgrounds as they shaped diplomacy, cultural exchange, and nation building in what came to be the United States. There is no textbook on the history of families in early America—instead, we will bring these stories together ourselves, working with primary and secondary readings from diverse individuals. Some class periods will be spent on "history labs": opportunities to learn about and practice skills of transcribing, analyzing, and making arguments about primary sources. Course topics will include the relationship between family and the state, family economies, gender and sexuality, and race and citizenship.

HIST 2342 The Making of Modern India and Pakistan

Traces the history of India and Pakistan from the rise of British imperial power in the mideighteenth century to the present. Topics include the formation of a colonial economy and society; religious and social reform; the emergence of anti-colonial nationalism; the road to independence and partition; and issues of secularism, democracy, and inequality that have shaped post-colonial Indian and Pakistani society.

HIST 2402 Decolonizing Latin America: A (long) Century of War, 1770-1910

This course surveys the "long nineteenth century" in Latin America. This is a period characterized by conflict, racist policies, and indigenous dispossession, but it is also a period of radical political imaginings, of economic development, and profound social change. Topics covered include the efforts by Spain and Portugal to reform their colonies in the Americas; the independence movements of the 1810s-1820s & the ensuing "post-colonial Blues"; the end of slavery & campaigns against independent indigenous peoples; the development of export-led economic models; the implementation of social policies to "whiten" the population; the US invasion of Mexico, the destruction of Paraguay by its neighbors, and a war between Peru and Chile over guano; the triumph of liberalism and the Mexican Revolution of 1910. This is the second in a series of three surveys of Latin American history, but no prior knowledge or prerequisites necessary.

HIST 2421 Empire and Nation in Japan

In 1853, Commodore Matthew Perry sailed to Japan with four naval warships and issued an ultimatum: open up to trade or face foreign invasion. Charts Japan's swift emergence from its feudal origins to become the world's first non-Western, modern imperial power out of its feudal origins. Lectures introduce the origins, course, and consequences of building a modern state from the perspective of various actors that shaped its past: rebellious samurai, anarchist activists, the modern girl, imperial fascists, and office salarymen. Readings complicate dichotomies of East and West, modern and feudal, nation and empire through the lens of ethnicity, class, and gender.

HIST 2710 The Crusades in History and Memory

Studies the Crusades as both historical event and object of memory. We will trace the development of crusading in the medieval world, starting with its origins and continuing through the fortunes of crusader states and Islamic empires, and assess how crusading changed in its practices and beliefs. We will move beyond lists of battles and kings to explore the cultural, economic, colonial, gendered, and spiritual dimensions of the Crusades. Later weeks will also consider modern appropriations of crusading, to ask why this medieval event remains so relevant—and so contested—today. Topics include the Protestant Reformation, European colonization of Indigenous peoples in the Americas, nationalist and pan-Arabist movements in the Middle East and Africa, and the use of crusader rhetoric and imagery by right-wing extremists in the twenty-first century. The course culminates in a final project that uses historical forgery as a way to engage with the mentality of people of the past.

HIST 2722 A New England Reckoning: Slavery and Memory in the North

The American North—and New England especially—has long been associated with freedom and free labor, held in stark contrast to the "slave South." Tides are changing, and a spate of reinterpretation projects from academic historians and public humanities organizations have fueled a conversation about how slavery and unfreedom profoundly shaped the North's early history. This course will explore the North's ties to slavery, beginning with early colonial development and concluding in the late eighteenth century as a revolutionary generation grappled with questions of freedom and abolition. We will also survey local and regional efforts by public historians to bring these stories to a wider audience in museums, digital projects, and other public forums. Topics will include Native dispossession and enslavement, New England's ties to the Caribbean, the Atlantic slave trade, household slavery, microhistory and biography, and freedom and emancipation.

HIST 3240 A History of the Present

In 1989, the fall of the Berlin Wall put an end to the bloody ideological battles of the twentieth century, promising a new era of liberty, peace, and prosperity. Thirty years later, we live in a world of economic uncertainty, political instability, climate catastrophe, and violent social conflict. How did we get here? This course tells the history of the present by exploring three questions. First, how do you write the history of your own time? We reflect on the challenges of handling new sources and living the history one seeks to understand.

Second, who can write this history? We discuss the problems of authorship and the possibility of collective research. Third, what is our time? We will collectively map our present by tracing the history of Europe and North America from 1989 to 2020, synthesizing transnational trends into a coherent narrative. We conclude by considering whether historicizing the present might help predict the future.

Latin American, Caribbean, and Latinx Studies

LACL 1045 Social Justice Warriors of the Americas

What is social justice? What are human rights? Where did they begin and why? How do literature, art, history, and other methods of cultural production in North and South America engage with social justice and human rights discourses? How do different genres of cultural production document social justice, power, and inequity in the Americas? This course explores the concepts of social justice and human rights within the Americas. In this course we will read historical accounts, novels, poems, short stories, and critical race and gender scholarly articles, as well as view visual performances, photographs, and films. Students will learn how struggles of culture, gender, and race work to shape human rights discourse in the Americas, from colonialism to present-day immigration issues. The major goals for this seminar are to improve students' skills in close reading, critical thinking, communication, and analytical writing and to explore the relationships between the four skills.

Mathematics

MATH 1300 Introduction to Statistics and Computation

An introduction to statistical methods used across the social and natural sciences with an emphasis on computational techniques. Covers conceptual understanding and includes topics from exploratory data analysis, the experimental design, probability, and statistical inference. Computational skills form a core element of the course, used throughout the semester both to explore data and to execute statistical tests.

MATH 1600 Differential Calculus

Functions, including the trigonometric, exponential, and logarithmic functions; the derivative and the rules for differentiation; the anti-derivative; applications of the derivative and the anti-derivative. Four to five hours of class meetings and computer laboratory sessions per week, on average.

MATH 1700 Integral Calculus

The definite integral; the Fundamental theorems; improper integrals; applications of the definite integral; differential equations; and approximations including Taylor polynomials and Fourier series. An average of four to five hours of class meetings and computer laboratory sessions per week.

MATH 1750 Intermediate Integral Calculus

A review of the exponential and logarithmic functions, techniques of integration, and numerical integration. Improper integrals. Approximations using Taylor polynomials and infinite series. Emphasis on differential equation models and their solutions.

MATH 1756 Data Science

An introduction to data science through computer programming. Emphasis on the use of computational methods to explore, visualize, and contextualize data using a variety of statistical and probability models. Readings from scientific literature are paired with techniques to interpret data in a variety of contexts. Topics include computer programming, data organization, exploratory data analysis, probability, random variables, statistical tests, regression, the use (and misuse) of p-values, and scientific argumentation.

MATH 1758 Biomathematics

A study of mathematical modeling in biology, with a focus on translating back and forth between biological questions and their mathematical representation. Biological questions are drawn from a broad range of topics, including disease, ecology, genetics, population dynamics, and neurobiology. Mathematical methods include discrete and continuous (ODE) models and simulation, box models, linearization, stability analysis, attractors, oscillations, limiting behavior, feedback, and multiple timescales.

MATH 1800 Multivariate Calculus

Multivariate calculus in two and three dimensions. Vectors and curves in two and three dimensions; partial and directional derivatives; the gradient; the chain rule in higher dimensions; double and triple integration; polar, cylindrical, and spherical coordinates; line integration; conservative vector fields; and Green's theorem. An average of four to five hours of class meetings and computer laboratory sessions per week.

MATH 2000 Linear Algebra

A study of linear algebra in the context of Euclidean spaces and their subspaces, with selected examples drawn from more general vector spaces. Topics will include vectors, linear independence and span, linear transformations, matrices and their inverses, bases, dimension and rank, determinants, eigenvalues and eigenvectors, diagonalization and change of basis, and orthogonality. Applications drawn from linear systems of equations, discrete dynamical systems, Markov chains, computer graphics, and least-squares approximation.

MATH 2020 Introduction to Mathematical Reasoning

An introduction to logical deductive reasoning and mathematical proof through diverse topics in higher mathematics. Specific topics include set and function theory, modular arithmetic, proof by induction, and the cardinality of infinite sets. May also consider additional topics such as graph theory, number theory, and finite state automata.

MATH 2109 Optimization

A study of optimization problems arising in a variety of situations in the social and natural sciences. Analytic and numerical methods are used to study problems in mathematical programming, including linear models, but with an emphasis on modern nonlinear models. Issues of duality and sensitivity to data perturbations are covered, and there are extensive applications to real-world problems.

MATH 2206 Probability

A study of the mathematical models used to formalize nondeterministic or "chance" phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities, such as the binomial, Poisson, exponential, and normal, are discussed in depth.

MATH 2208 Ordinary Differential Equations

A study of some of the ordinary differential equations that model a variety of systems in the physical, natural and social sciences. Classical methods for solving differential equations with an emphasis on modern, qualitative techniques for studying the behavior of solutions to differential equations. Applications to the analysis of a broad set of topics, including population dynamics, oscillators and economic markets. Computer software is used as an important tool, but no prior programming background is assumed.

MATH 2603 Introduction to Analysis

Building on the theoretical underpinnings of calculus, develops the rudiments of mathematical analysis. Concepts such as limits and convergence from calculus are made rigorous and extended to other contexts, such as spaces of functions. Specific topics include metric spaces, point-set topology, sequences and series, continuity, differentiability, the theory of Riemann integration, and functional approximation and convergence.

MATH 2805 Mathematical principles of machine learning

An introduction to the mathematical theory and practice of machine learning. Supervised and unsupervised learning problems, including regression, classification, clustering, and component analysis, focusing on techniques most relevant to the study and applications of neural networks. Additional topics may include dimension reduction, data visualization, denoising, norms and loss functions, optimization, universal approximation theorems, and

algorithmic fairness. Class will include computer lab and projects, but no formal programming experience is necessary.

MATH 3204 Topology

A mathematical study of shape. Examination of surfaces, knots, and manifolds with or without boundary. Topics drawn from point-set topology, algebraic topology, knot theory, and computational topology, with possible applications to differential equations, graph theory, topological data analysis, and the sciences.

Middle Eastern & North African Studies

MENA 1101 Introduction to Middle Eastern and North African Studies

Introduces students to current debates in the study of the Middle East and North Africa through multiple disciplinary and inter-disciplinary approaches. Familiarizes students with key terms and concepts such as nationalism, imperialism, feminism, and religion. Explores how studying the region shapes our understanding of topics such as migration, displacement, refugees, revolution, and the nation-state. Course modules include social identities, empires and imperialism, knowledge and power, citizenship, and resources and the environment. Emphasizes how the study of the Middle East and North Africa informs answers to big questions.

MENA 2610 Camp/Prison/Border

Today, camps and prisons are thought of as distinct and separate forms. How might we think of mass incarceration and mass migration together? What might a region like the Middle East and North Africa add to such an inquiry? Situates the region within wider global regimes of movement control by tracking the entangled history of camps and prisons. Centers the struggles and modes of expression of the detained and encamped. Topics include the emergence of camp and penal forms, humanitarianism and refugeehood, migrant workers and dispossession, environmental history and urbanization, partition and race. Engages prison writing and memoir, aesthetic practices, and film making.

ARBC 1101 Elementary Arabic I

An introductory course that presumes no previous knowledge of Arabic. Students begin to acquire an integrated command of speaking, reading, writing, and listening skills in Modern Standard Arabic. Some exposure to Egyptian Colloquial Arabic as well. Class sessions conducted primarily in Arabic.

ARBC 2203 Intermediate Arabic I

A continuation of first-year Arabic, aiming to enhance proficiency in listening, speaking, reading, and writing through the study of more elaborate grammar structures and exposure to more sophisticated, authentic texts.

Music

MUS 1019 Experimental Music and Musical Experiment

The term "experimental music" is broadly applied across a range of genres to indicate adventurous music that breaks with tradition and defies expectations. In this seminar, we discuss experimentation as a creative disposition and investigate why musicians and audiences might embrace or reject this approach. Our discussions will be informed by listening assignments, and by our own collective experiments with sound. We will also examine and practice writing about music by interrogating the term "experimental." The way critics and musicians talk about experimental music not only reveals their preferences but also has important consequences for how music is understood and valued. Music does not speak for itself, and so what we say and write about music is essentially part of its meaning.

MUS 1051 Fundamentals of Music

For the entry-level student. Explores the fundamental elements of music -- form, harmony, melody, pitch, rhythm, texture, timbre -- and teaches basic skills in reading and writing Western music notation for the purposes of reading, analyzing, and creating musical works.

MUS 1401 Introduction to Music Theory

Designed for students with some beginning experience in music theory and an ability to read music. Covers scales, keys, modes, intervals, and basic tonal harmony.

MUS 2297 African Legacies in Latin American Music(s)

How "African" is Latin American music? Although the size, nature, and significance of the Black population in Spanish America is often dismissed, the massive, forced migration of African peoples to transatlantic Portuguese and Spanish dominions changed not only the soundscape but also tastes and musical practices in the entire Western Hemisphere. This course explores the legacies of Western African traditions in the music of Latin America. The scope and diversity of Afro-Latin, Afro-Caribbean, and Afro-Latinx musical traditions is immense, but we will explore specific historical narratives, regions, music genres, and sources and will engage with diverse scholarly approaches for the study of African roots in Latin American music(s). Some examples include seventeenth-century negrillas, eighteenth-century songs and dances for the Luso-Brazilian viola, Afro-Dominican salves, Mexican spirituals, Colombian vallenato, Brazilian samba, Cuban timba, Puerto Rican bomba, and Caribbean reggae, reggaetón, rap, and hip-hop.

MUS 2305 Beethoven and the Invention of Western Music

Introduces the music, the life, and the influence of Beethoven on the history of western music. The main objective is to broaden students' familiarity with Beethoven's work and to recognize and analyze the principal styles, forms, and genres used during this period. Expands students' experience with research tools, methods, and sources that are useful for the study of music history. Provides a critical perspective on the social construction of genius and the ideologies that lead to the institutional origins of "classical" music.

MUS 2403 Songwriting and Song Analysis

An intensive project-oriented course in which students learn skills such as melodic and rhythmic writing, arranging, studio production, text-setting, and basic chromatic harmony, and how those elements combine to affect listeners on an emotional level. Repertoire studied largely chosen by students, but also includes songs by the Beatles, various Motown artists, Joni Mitchell, Prince, and Radiohead. Small-group and individual lab sessions scheduled separately.

MUS 2551 Introduction to Electronic Music

Examination of the history and techniques of electronic and computer music. Topics include compositional aesthetics, recording technology, digital and analog synthesis, sampling, MIDI (Musical Instrument Digital Interface), and computer-assisted composition. Ends with a concert of student compositions.

Philosophy

PHIL 1311 Socialism, Capitalism, and Democracy

Explores and critically evaluates philosophical arguments for and against socialism. Questions include: What does the word "socialism" mean? Does socialism violate individual rights? What is the relationship between socialism and capitalism? Between socialism and democracy? Readings from mostly contemporary sources, including work by philosophers, economists, and politicians.

PHIL 2233 Advanced Logic

Investigates several philosophically important results of modern logic, including Gödel's incompleteness theorems, the Church-Turing Theorem (that there is no decision procedure for quantificational validity), and Tarski's theorem (the indefinability of truth for formal languages). Also includes an introduction to modal logic and the logic of necessity and possibility.

PHIL 3375 The Self

Explores philosophical questions about the self. Are selves real or fictions generated by our neural hardware? Do selves persist over time? What are their persistence conditions? What

is our relation to past and future selves? Can we have adequate grounds for making choices on behalf of future selves? Is it irrational to care less about the distant future? Do we have moral obligations to ourselves?

<u>Physics</u>

PHYS 1130 Introductory Physics I

An introduction to the conservation laws, forces, and interactions that govern the dynamics of particles and systems. Shows how a small set of fundamental principles and interactions allow us to model a wide variety of physical situations, using both classical and modern concepts. A prime goal of the course is to have the participants learn to actively connect the concepts with the modeling process.

PHYS 1140 Introductory Physics II

An introduction to the interactions of matter and radiation. Topics include the classical and quantum physics of electromagnetic radiation and its interaction with matter, quantum properties of atoms, and atomic and nuclear spectra.

PHYS 1510 Introductory Astronomy

A quantitative introduction to astronomy with emphasis on stars and the structures they form, from binaries to galaxies. Topics include the night sky, the solar system, stellar structure and evolution, white dwarfs, neutron stars, black holes, and the expansion of the universe. Several nighttime observing sessions required.

PHYS 2130 Electric Fields and Circuits

The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear circuit theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement with basic circuit components such as resistors, capacitors, inductors, diodes, and transistors.

PHYS 2250 Physics of Solids

Solid state physics describes the microscopic origin of the thermal, mechanical, electrical and magnetic properties of solids. Examines trends in the behavior of materials and evaluates the success of classical and semi-classical solid-state models in explaining these trends and in predicting material properties. Applications include solid state lasers, semiconductor devices, and superconductivity. Intended for physics, chemistry, or earth and oceanographic science majors with an interest in materials physics or electrical engineering.

PHYS 3000 Methods of Theoretical Physics

Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

PHYS 3030 Methods of Observational Astrophysics

Intended to provide advanced students with skills and experience in observational astrophysics, including the design, execution, and analysis of observations with both optical and non-optical telescopes. Observational techniques will range from those employing oncampus telescopes to the analysis of modern satellite data. Several nighttime observing sessions are required.

PHYS 3140 Quantum Mechanics

A mathematically rigorous development of quantum mechanics, emphasizing the vector space structure of the theory through the use of Dirac bracket notation. Linear algebra developed as needed.

Psychology

PSYC 1101 Introduction to Psychology

A general introduction to the major concerns of contemporary psychology, including physiological psychology, perception, learning, cognition, language, development, personality, intelligence, and abnormal and social behavior.

PSYC 2010 Infant and Child Development

A survey of major changes in psychological functioning from conception through childhood. Several theoretical perspectives are used to consider how physical, personality, social, and cognitive changes jointly influence the developing child's interactions with the environment.

PSYC 2025 Psychopathology

An introduction to the phenomenology, etiology, and treatment of mental disorders. Major topics include trauma, anxiety, obsessive-compulsive disorder, depression, bipolar disorder, suicide, and the psychotic disorders. Current paradigms for understanding psychopathology, diagnosis and assessment, research methods specific to clinical psychology, and the legal and ethical challenges associated with mental health care are also a focus.

PSYC 3025 Psychotherapy and Behavior Change

An in-depth study of the theory, research, and practice of contemporary psychotherapy. Major topics may include theoretical approaches to therapy, methods for studying its efficacy, processes of change, the role of the client-therapist relationship, and challenges to disseminating effective psychological treatments to the general public. Readings and discussion supplemented with video of psychotherapy sessions.

Religion

REL 1101 Introduction to the Study of Religion

Basic concepts, methods, and issues in the study of religion, with special reference to examples comparing and contrasting Asian and Western religions. Lectures, films, discussions, and readings in a variety of texts such as scriptures, novels, and autobiographies, along with modern interpretations of religion in ancient and contemporary Asian and Western contexts.

REL 2221 Religious Cultures of India

A view of the religious cultures of India "from the ground up," focused on studies of lived religion beyond texts and institutional orthodoxies. With more than 1.3 billion people, India is home to an incredible diversity of religious cultures, including Hindu, Jain, Muslim, Christian, and Buddhist traditions. Readings examine traditions of pilgrimage, temple worship, yoga, goddess possession, healing practices, and rites of passage, including the ordination of monks and nuns. Themes include women's lived authority in contrast to patriarchal structures and contemporary intersections between religion, class, and modernity. Religious cultures of India also exist beyond the modern nation's borders, as diaspora populations have grown around the world and traditions of yoga, gurus, and mantra meditation are popular globally. The course explores these religious cultures in relation to new media and transnational networks, including debates about the practice of Indian religions in Asia and beyond.

REL 2232 Approaches to the Qur'an

Explores a variety of approaches to and interpretations of the Qur'an, the foundational text of Islam. Special attention will be paid to the Qur'an's doctrines, its role in Islamic law, its relationship to the Bible, and its historical context. While the Qur'an will be read entirely in English translation, explores the role of the Arabic Qur'an in the lives of Muslims worldwide.

Romance Languages & Literatures

FRS 1101 Elementary French I

A study of the basic forms, structures, and vocabulary in the context of the French-speaking world. Emphasis on the four communicative skills: reading, writing, listening, and

speaking. Three class hours per week and one weekly conversation session with teaching assistants, plus regular language laboratory assignments.

FRS 2203 Intermediate French I

Vocabulary development and review of basic grammar, which are integrated into more complex patterns of written and spoken French. Active use of French in class discussions and conversation sessions with French teaching fellows. Three class hours per week and one weekly conversation session.

FRS 2305 Advanced French through Film

An introduction to film analysis. Conversation and composition based on a variety of contemporary films from French-speaking regions. Grammar review and frequent short papers. Emphasis on student participation including a variety of oral activities. Three hours per week plus regular viewing sessions for films and a weekly conversation session with French teaching fellows.

FRS 2410 Literature, Power, and Resistance

Examines questions of power and resistance as addressed in the literary production of the French-speaking world from the nineteenth through the twenty-first centuries. Examines how language and literature serve as tools for both oppression and liberation during periods of turmoil: political and social revolutions, colonization and decolonization, the first and second world wars. Authors may include Hugo, Sand, Sartre, Fanon, Senghor, Yacine, Beauvoir, Condé, Césaire, Djebar, Camus, Modiano, Perec, and Piketty. Students gain familiarity with a range of genres and artistic movements and explore the myriad ways that literature and language reinforce boundaries and register dissent. Taught in French.

FRS 3212 Eyes on the Prize: Promoting French Culture in the Age of the New Millennium

Since the eighteenth century, France has developed a seemingly endless list of literary prizes, the Prix Goncourt being the most famous. There are over 3,000 prizes awarded every year -- being awarded one of these prizes represents an official consecration meant to underline the writer's unquestionable worth. Who serves on the juries for all of these prizes? Is it really the best works that are acknowledged? In recent years, scandals have erupted with accusations of influence peddling by publishers. What does this teach us about French culture and society? What is the relation between literary prizes and the promotion of French culture more broadly? In the context of globalization, what political statement is being made? What is exactly the type of culture, themes, and discourse promoted via this literature given the new makeup of the French population? Immigration has considerably changed the face of France. How does the culture of literary prizes take this into account? Students read four recent prizewinners. Each of these prizewinners created controversy that directly addresses the questions above. Primary readings include works by: Houellbecq, Le Clezio, Paule Constant, Alain Mabanckou.

HISP 1100 Elementary Spanish

This course offers an introduction to the language and cultures of the Spanish-speaking world. Students will learn general forms, structures, and vocabulary based on project-based learning where students acquire language through a rich content environment. As an entry-level course, this class is designed for students with little or no prior Spanish language experience. Three class hours per week, plus a required weekly conversation session with a learning assistant.

HISP 2203 Intermediate Spanish I

This course is designed to develop student's language skills based on project-based activities and to build cultural understanding of the diversity in various regions of the Spanish-Speaking world. The course practices specific grammar problems, multi-paragraph writing in Spanish, and discussions on increasingly complex topics through readings, audio and short-subject films, both fiction and non-fiction.

HISP 2204 Intermediate Spanish II

This course is designed to develop student's language skills based on project-based activities and building cultural understanding of the diversity in various regions of the Spanish-Speaking world. The course practices specific grammar problems, written compositions and discussions on increasingly complex topics through readings, audio and short-subject films, both fiction and non-fiction.

HISP 2305 Advanced Spanish: Language, Culture, and Politics

This course examines the history, politics, and cultures of the Hispanic World, from the 20th century to the present. Key moments include the Mexican Revolution, the Spanish Civil War, the Cuban Revolution, dictatorships in Chile and Argentina, and Latinx movements in the US. Through the study of a wide variety of literary and cultural icons from La Malinche and Octavio Paz, Pedro Almodóvar and Carmen Laforet, to Nancy Morejón, Julio Cortazár and Luís Valdez, students will reflect on individual experiences and collective movements. The course provides students with advanced practice in grammar, reading, speaking, listening, writing and research in Spanish.

HISP 2410 Introduction to Hispanic Studies: Essay and Narrative

Examines narrative forms and essays in Spain and Latin America from pre-Conquest times until the twentieth century works of Nobel Prize winners. Through class discussions and critical analysis, students will discover how the structure, form, and content of narratives and essays relate to a work's aesthetic movement, historical context, and contemporary trends in Hispanic cultures. Topics include religious conflicts and their influence in literary forms; the cultural and political implications of the colonization of the Americas, its legacy, and the resistance to it; the aesthetic and social renovation of Early Modern Spain, including the first modern novel, Don Quixote; the mechanisms used by writers to subvert discourses of patriarchy; the importance of Indigenous cultures in the development of Latin American nations and cultural traditions; and the political and artistic relationships with the US and other European avant-garde movements. Conducted in Spanish.

HISP 3231 Sor Juana and María de Zayas: Early Modern Feminisms

Did feminism exist in the early modern period? Examines key women authors from the early Hispanic World, considering the representation of gender, sexuality, race, and identity in distinct political and social contexts. Focuses on Mexican author Sor Juana Inés de la Cruz (1651-1695) and Spanish author María de Zayas (1590-1661), alongside other prominent women writers from the period. Students read short stories, essays, poems, and personal letters. Conducted in Spanish.

ITAL 1101 Elementary Italian I

This course is an introduction to the Italian language through the context of Italian geography and society. Students master basic grammar constructions and vocabulary and communicate about their lives, Italy, and the world. Students access numerous forms of media from literature to news feeds, music, visual art, film, and television. Three class hours per week and weekly conversation session in small groups with teaching assistants.

ITAL 2203 Intermediate Italian I

The intermediate sequence develops communicative proficiency of Italian language and culture by improving upon the skills of speaking, listening, reading, writing, and cultural competency. Building on existing skills in Italian, it introduces students to new and more complex grammar and communicative structures. Students continue to study Italian culture, geography, and literature and explore crosscultural similarities and differences between Italy and the United States using a variety of digital, literary, and visual texts. The goal of third-semester Italian is to further improve students' ability to speak and understand Italian, to become familiar with the use of different tenses and moods (compound tenses, imperative, conditional, subjunctive), to increase their writing skills as they begin to read different kinds of texts, from informal to literary.

Russian, East European, & Eurasian Studies

RUS 1101 Elementary Russian I

Introduction to the Cyrillic writing system and to the fundamentals of the Russian language. Emphasis on the gradual acquisition of active language skills: speaking, understanding, reading and writing. Students will learn to introduce family members and explain what they do for a living; describe their room, possessions, city, and culinary preferences; discuss their daily activities and travels; talk about their studies and what languages they speak; ask simple questions, voice opinions, make invitations, and engage in basic everyday conversations. Authentic multimedia cultural materials (cartoons, songs, poems, videos) supplement the textbook and serve as a window onto the vibrant reality of Russian culture today.

RUS 2203 Intermediate Russian I

Continuation of Elementary Russian. Emphasis on the continuing acquisition of active language skills: speaking, understanding, reading and writing. Students will improve their facility in speaking and understanding normal conversational Russian and will read increasingly sophisticated texts on a variety of topics. Authentic multimedia cultural materials (cartoons, songs, poems, videos, websites, short stories, newspaper articles) supplement the textbook and serve as a window onto the vibrant reality of Russian culture today.

RUS 2302 Slavic Demonology

Restless corpses, forest demons, and giant talking black cats: Russian and Eastern European storytelling is suffused with the uncanny light of black magic, from popular superstitions to vampires at the modern-day multiplex. In this course, we'll investigate this abiding interest in the demonic, starting with Slavic folk beliefs and tracing how these traditions were transformed by nineteenth-century writers like Dostoevsky and Gogol in their explorations of the darker recesses of the human heart. We'll also look at how fictional portrayals of Satan in twentieth-century Soviet works convey the existential terror of life in Stalin's Moscow and how contemporary horror reflects cultural anxieties around nation and self in the region today. Course themes include fears of otherness and gendered depictions of supernatural evil, the dread of death and the undead, the seductiveness of sin, and the complex mechanisms of redemption.

RUS 3005 Advanced Russian Language and Society I

Building on the language skills developed in the Intermediate Russian I and II sequence, this course allows students to move beyond everyday language use to develop advanced lexical, grammatical and cultural knowledge on a variety of topics relevant to Russian speakers today. Within the context of a four-skills approach to language acquisition (writing, speaking, listening, reading), students engage with a wide variety of course materials in the target language, including Russian mass media, film, music, and literature. Individual units focus on specific issues or problems in modern Russian society, such as politics, art, health, identity and belonging, youth culture, economic development, technology and society. By the end of the course, students will be able to summarize and analyze different viewpoints on complex issues and articulate their own arguments both orally and in written Russian, from formulating clear theses to providing logical reasoning and evidence for their ideas.

Sociology

SOC 1101 Introduction to Sociology

Critically examines familiar, taken-for-granted, and routine social interactions, identities, and institutions, to reveal how experiences, behaviors, practices, and ideas are socially and culturally constructed. Provides a broad orientation to the discipline through the lens of the "sociological imagination," the connection between individual biographies and larger structures. Topics include: culture and socialization; social interaction; social control and

deviance; stratification including class, gender, race, ethnicity, and sexuality; institutional contexts such as: family, education, economy, and religion; resistance, social movements, and change.

SOC 2370 Immigration and the Politics of Exclusion

Looks at comparative lessons in global immigration to understand the political, economic, and social causes of migration--the politics of immigrant inclusion/exclusion--and the making of diaspora communities. Specific topics will include: the politics of citizenship and the condition of illegality; the global migrant workforce; and how class, gender, race, and sexuality influence the migrant experience.

SOC 2385 Muslims in American Society

This course explores Muslim Americans' experiences in the US and is intended to enhance students' knowledge about Islam and Muslims to overcome common myths and misconceptions associated with this racial /ethnic and religious minority group. Some of the topics covered during the course include the history of Muslims on American soil, disassociating Islam from the Abrahamic triad of Judaism-Christianity-Islam, diversity aspect of the Muslim American population, assimilation of Muslims to larger society, gender issues ("saving" Muslim women), discrimination and prejudice, Islamophobia, Islam and terrorism (meaning of jihad), depiction of Muslims in American media, and sharia (Islamic law) myth. To gain a better understanding of the historical and contemporary social integration of Muslims in the US, students will explore several key theories, such as orientalism, labeling theory, Muslim feminism, the Blauner hypothesis, and the Noel hypothesis.

SOC 2397 Globalization and Development

Globalization remains as one of the controversial terms that has created both positive and negative connotations. For some, globalization is viewed as a force that wrecks local economies, challenges nation states' sovereignty, disrupts cultures and identities, and creates regional and global conflicts. For others, it is an engine of a new model of development that brings fundamental transformations in the world economy, society, and politics by holding the promise of increased economic well-being and enhanced political empowerment and personal freedom. The course will start with the exploration of historical contexts associated with the emergence of globalization and its major components. Benefits and drawbacks of globalization, including new forms of risks, challenges, and inequalities will be identified. Neoliberalism and its structural adjustment policies will be scrutinized. Students will also learn about major theories of global inequality, to outline the systematic differences in wealth and power.

Theater & Dance

DANC 1101 Making Dances in the Digital Age

Making Dances in the Digital Age is an introduction to dance-on-screen as art, as activism—specifically as an expression and document of the movement of Black Lives Matter—and as popular culture. We will explore and analyze dances on a variety of digital platforms—TikTok, Instagram, You Tube and Vimeo—including video documentation of live performances. We will learn and apply movement compositional tools toward the unique creative possibilities offered by digital mediums, exploring dance film, as well as considering sound, location, lighting, costume, and more in the process of creating our own dances for the screen. This is primarily a movement-based class drawing on Yoga, and postmodern dance techniques and improvisation.

DANC 2212 Modern II: Repertory and Performance

Builds on the beginning level performances in DANC 1212: Modern I: Repertory and Performance. This course deepens students' work in creative process, rehearsal and performance through the creation of original choreography for the Department Dance Concert. Students will be provided with a clearly defined grading rubric as well as course goals and expectations. Students may be involved in generating movement material as well as engaging in improvisational structures for performance. The course may also feature guest artists and opportunities for student choreography.

DANC 2506 Gesturing Towards Meaning: Dance as a Meaning-Making Praxis

An introduction to dance as a meaning-making, cultural practice. Using embodiment/performance, writing, and discussion, students will use the gestures embedded within dance cultures as critical tools necessary for analyzing and theorizing aspects of race, sexuality, gender, and nationalism. Accordingly, students will understand the meanings and roles of dance and gesture within larger historical, cultural, social, and theatrical contexts. In sum, this class examines dance forms and dancing bodies, such as Indian classical dance, Puerto Rican bomba, and blackface minstrelsy, to better understand how cultures throughout the globe come to know and understand both themselves and the world at large.

DANC 3211 Advanced Modern Dance

An advanced level dance technique class. Students are expected to have prior training and/or have received full credit in Modern II. The course is a continuation of the processes of 2211, with more challenging and complex phrase-work and more in-depth physical explorations. In addition, the course will emphasize artistry and performance. Partnering/hands-on work may be included.

THTR 2203 Directing

Introduces students to the major principles of play direction, including conceiving a production, script analysis, staging, casting, and rehearsing with actors. Students actively engage directing theories and techniques through collaborative class projects and complete

the course by conceiving, casting, rehearsing, and presenting short plays of their choosing. A final research and rehearsal portfolio is required.

THTR 2205 Musical Theater Performance

Musical theater is a popular performance form that challenges students to work in multiple disciplines, combining dance, acting, music, and design. This course will give students with experience in acting, singing, and dancing an opportunity to hone their skills together through the performance of songs and scenes from a variety of musical theater styles. Students will do projects in ballad singing, choral numbers, group dances, and acting the song. Actors, singers, choreographers, and musicians will be encouraged to work together in class and in evening rehearsals toward a public performance and a cabaret performance at the end of the semester. Performances will be grounded in historical readings and research that contextualizes the origins of the pieces being performed.

Visual Arts

VART 1201 Printmaking I

How do we design images that visually express what we want to communicate? This question is at the heart of the printmaking discipline, which originated in the book and news printing industries and was later adopted as a tool by visual artists. Offers an exploration of image making through traditional and digital craft. Basic printmaking strategies and materials are introduced, such as ink, pressure, stencils, and multiples. Practices fine art print processes (digital, relief, and intaglio) using contemporary formats such as zines, stenciling, found objects, and collaboration. Exposure to historical and contemporary examples of printmaking through library special collections and museum visits, trips to local print shops and artists' studios, demonstrations, visiting artist projects, and critiques supplement learning in the printmaking studio. Prior experience with other methods of image making, such as drawing or photography, is not required.

VART 1601 Sculpture I

An introduction to sculpture with an emphasis on experimentation, discovery, and problem-solving. Hands-on projects in clay, wood, and other media are supported by technical demonstrations, images, videos, group discussions, and critiques. By approaching sculpture through multiple formats, students develop an informed awareness of the medium while expanding skills, challenging perceptions, and engaging in creative expression.

VART 1702 Video I

A course in beginning video production with an emphasis on the expressive potentials of the recording, editing, and sequencing of sound and the moving image. Studio projects are supported by technical demonstrations, readings, viewings, group discussions, and critiques. By approaching video and sound through multiple formats, students will develop a facility with a range of digital imaging and editing tools along with the basics of lighting

and audio recording. Students will be encouraged to challenge conventional ways of conveying information and seek new ways to communicate ideas and tell stories.

VART 3800 Art and Time

Guided Independent Studio Practice. An exploration of the role of time in the visual arts. Through class assignments and independent projects, examines how artists can invoke and transform time. Attention given to historical and contemporary precedents. Seminar discussions, field trips, and class critiques.