

Q}Á&[}~[¦{āc^Á¸āc@Ác@^ÁÔāçājÁÜā\*@cゃÁŒ&cÁ[-ÁFJÎIÊÁæ•Áæ{^}åæ^ÁĒÁācÁā÷Áæ|•[Ác@^Á][jā&^Á[-ÁÓ¦^}Á⊤渦ÁÔ[j]^\*^Á}[cÁ c[Áãã•&!ā{ā}æc^Á[}Ác@^Áàæ•ã•Á[-Á•^¢Áā}Áāc•Á^å~&æcá[}æjÁ]![\*!æ{•ÊÁæ&cáçācā^•Á[!Á^{]][^{^}cá]:æ&cá&^•ÈÁÁV@^Á æå{ã••ā[}Á[-Á[]]^Á¸[{^}Áā}Ác@^ÁW}å^!\*!æå~æc^ÁÔ[j]^\*^Áā•Áā}Á&[}-[!{āc^Á¸āc@ÁæÁ]![çā•ā[}Á[-Ác@^Æ&ċĚÁQ}~~á!iā^•Á !^\*æ!åã}\*Á&[{]]áæ}&^Á¸āc@Ác@ã•Á|^\*ā•]æcā[}Áæ}åÁ[c@^!Á][jā&ā^•Á¦^\*æ!åä}\*Á}[}åå•&!å{ā}æcā[}Á{æ^Áàà!^&c^åÁc[Á c@^ÁÒ~\*æ|ÁU]][!c~}āc^ÁU~,&^!ÉÁ¸@[Áæå{ã}ā•c^!•Ac@^ÁÔ[]|^\*^q•Á]![&^å\*!^•ĒÁæcÁÎF€ĒÍGĨĒſGÏĬĖ

CE||Áā}~[¦{ æcā[}Áā}Ác@ā•Á&æcæ|[\*Áā•Á•~`àb^&cÁc[Á&@æ}\*^Á¸āc@[~cá}[cā&^È

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# H56@9'C:'7CBH9BHG

&\$%%!%&`57589A=7`75@9B85FG`	•	:99G'5B8':=B5B7=5@'5=8'	&&
7CBH57H'5B8'' kYVg]hY'=B:CFA5H=CB'	(	Ô[•c•Á[-ÁÒå~&ædi[}Á Ù&@^å~ ^Á[-ÁÚæ^{^}c•Á	GG GG
56CIH'6FMB'A5KF'7C@@9;9' V@^ÁTå••å[}Á[-ÁÓ!^}ÁTæ¸!ÁÔ[  ^*^Á V@^ÁPå•c[!^Á[-ÁÓ!^}ÁTæ¸!ÁÔ[  ^*^Á Ô[  ^*^Áæ•ÁÔ[{{*}}åc^Á Á T	) í í î	Ü^~`}åÁÚ[ ã&^Á Y@^}ÁæÁÙc`å^}cÁYãc@妿¸•Á Øã}æ}&ãæ ÁŒãÅÁ Š[æ}ÁØ`}å•Á Ù&@[ 榕@ã]ÁØ`}å•Á	GH GH GI GÏ
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Šià¦æ¦ā^•Á Ù]^&iæ ÁÜ^•^æ¦&@ÁÜ^•[~¦&^•Á	J F€	Ü^~~å¦^ { ^}c•Á~[¦Ác@^ÁŒĖÓĖÁÖ^*¦^^ÁÁ Ç]¦ā[¦Ác[ÁØæ] ÁG€FFD	ΗÎÁ
Ô[{]~ci}*Á Šæ}*~æ*^ÁŠ^æ¦}i}*ÁÔ^}c^¦Á	FF FF	Ò { ā ^ÁÓæ &@ÁÙ^ { ā}æ¦ÁÜ^~~ã¦^ { ^}cÁ Û~æ}cācæcāç^ÁÜ^~~ã¦^ { ^}cÁ	HÎ HÎ
Šæà[læc[lå^•Á	FF	Ø[!^ā*}ÁŠæ}*~æ*^ÁÜ^~~ã!^{ ^}cÁ	ΗÎ
Øæ&ājācā∧•Á~[¦Ác@∧ÁŒ¦c•Á	FH	Öiçi•i [ }æ ÁÜ^~ ĭi!^ { ^}c•Á	ΗÏ
Õ^{}æ•ã~{Á Ôæ{]~•ÁÔ^}c^¦Á	FH FH	Ü^~~ã¦^{^}c•Á~[ ¦Ác@^ÁŒÈÓÈÁÖ^*¦^^ÁÁ Ç{æc¦ã&~ æcã}*ÁØæ  ÁG€FFD	ΗÌÁ
GHI89BH'F9GDCBG=6=@=H=9G'		<ul> <li>Ò { ā   ^ AÓæ   &amp; @ AÙ ^ { ā } æ ! AÜ ^ ~ 3 i! ^ { ^ } c A</li> <li>Û ~ æ } cácæcá ç ^ Aæ } å Å Tæc@ ^ { æ cácæ æ   ÂÜ ^ æ • [ } ā } * Å Å         Ü ^ ~ ã ! ^ { ^ } c A         Ø [ ! ^ ā * } Å Šæ } * ~ æ * ^ Å Ü ^ ~ ã ! ^ { ^ } c Å         Ø i • c i à à ~ c i [ ] Å Ü ^ ~ ã ! ^ { ^ } c • Å         V@ ^ Â Tæb [ ! Å         V@ ^ Â Q å ^ ] ^ } å ^ } c Å Tæb [ ! Å Ú ! [ * ! æ { Å         V@ ^ Â Q å ^ ] ^ } å ^ } c Å Tæb [ ! Å Ú ! [ * ! æ { Å         Ú @ ^ • å &amp; æ   Å Ò å ~ &amp; æ c i [ ] Å Ü ^ ~ ĭ å ! ^ { ^ } c Å         Ü ^ • å å ^ } &amp; ^ Å Ü ^ ~ ĭ å ! ^ { ^ } c Å</li> <li>Ò φ &amp; ^ ] c i [ } • Å</li> </ul>	HÌ HÌ HÌ I€ IF IF
Ôˇ•c[{•ÁY^^\Á Œ&æå^{ā&ÁÙˇ]][¦cÁÙ^¦çã&^•Á Ôæ¦^^¦ÁÖ^ç^ []{^}cÁU~,&^Á P^æ c@ÁÔ^}c^¦Á Ùcˇå^}cÁÜ^•ãå^}&^•Á  58A=GG=CBG	FÍ FÎ FÎ FÎ	Œ&æå^{ã&ÁÜ^*` ææî[}•Á  Ü^*å•c!ææî[}Á  Ô!^ååæÞ[ÁÔ!^åäcÁ  Ô[`!•^ÁU]æî[}•Á  Pæ -Ē•^{^•c^!AÔ[`!•^•Á  Ô[[]^!ææî[}Á¸åæ@ÁÞ^â*@à[!å}*ÁQ}•œcčcã[}•Á  Ô[}å*&cÁ[-ÁÔ[`!•^•Á  Û`ä::^•ÉÅÒ¢æ{å}ææî[}•Áæ}åÅÒ¢c^}•ã[}•Á  Õ!æåå}*Áæ}åÅŒ&æå^{ã&ÁÜ^&[!åÁ  Ô[{{åcc^^Á[}ÁŒ&æå^{ã&ÁÜcæ}åå}*Á  Ô`{` ææåç^ÁÕ!æå^ÁÚ[å}cÆÇ¢!æ*^•Á	IG IG IG IH IH II II

## 57589A=7'75@9B85FG

#### &\$%%: ]fgh'GY a YghYf'

Œ`\*`•cÁGJÁ Ô|æ••^•Áà^\*ã}

U&c[à^¦ÁÏÁ Øæ||Áà¦^æ\Áà^\*á}•Áæ~c^¦Á|æ•cÁ&|æ••

U&c[à^¦ÁFÏÁ Øæ||Áà¦^æ\Á^}å•ÁæcÁÌÁæÈ{È

P[ç^{à^\AGHA V@æ}\•\*âçâ}\*Áçæ&æcî[}Áà^\*â}•Áæ~c^\AÁ

|æ•cÁ&|æ••

Þ[ç^{à^\AGÌA V@æ}\•\*āçā}\*Áçæ&æcā[}A^}å•ÁæcAÌÁæÈ{È

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Ö^&^{à^\ÁJËF€Á Ü^çã^ Á]^\ã[å

Ö^&^ { à^\\|ÁFF\|EF Î\|Á Ò¢æ { \|ã\} \@ca[ \]\|Á]^\\|ã[ \|å

#### &\$%&'GYWcbX'GY a YghYf

Ræ} \*æ¦ ^ÁF ÏÁ Ô|æ••^•Áà^\*å}

Tæl&@ÁGÁ Ù]¦ã}\*Áçæ&æcā[}Áà^\*â}•Áæ-c^¦Á|æ•cÁ&|æ••

Tæ!&@ÁFGÁ Ù]!å}\*Áçæ&æcå[}Á^}å•ÁæcÁÌÁæÈ{È

Œ]¦á|ÁGÏÁ Šæ•cÁåæ^Á[~Á&|æ••^•

Œ]¦āļÁĠÌÁËÁ⊤æ^ÁFÁ Ü^çā^¸Á]^¦ā[å

 $Tæ^{\acute{a}}G\ddot{E}FF\acute{a}$   $\grave{O}¢æ{\{i}}æci[\}\acute{a}]^{\acute{a}}[\mathring{a}$ 

 $Tæ^{\hat{A}}FG\hat{A}$   $\hat{O}[\{\{^{\wedge}\}\&^{\wedge}\}c]$ 

#### &\$%&::]fgh'GY a YghYf'

Ù^]c^{à^¦ÁIÁ Ô|æ••^•Áà^\*ā}

U&c[à^!ÁFGÁ Øæ||Áà!^æ\Áà^\*á}•Áæ-c^!Á|æ•cÁ&|æ••

U&c[à^¦ÁGGÁ Øæ||Áà¦^æ\Á^}å•ÁæcÁÌÁæÈ{È

Þ[ç^{à^!ÁGFÁ V@æ}\•\*āçã}\*Áçæ&æcã[}Áà^\*â}•Áæ-c^!ÁÁ

Á |æ•cÁ&|æ••

Þ[ç^{à^¦ÁGÎÁ V@æ}\•\*āçã}\*Áçæ&ææî[}Á^}å•ÁæcÁÌÁæÈ{È

Ö^&^ { à^¦ÁFHÁ Šæ•cÁåæ^Á[~Á&|æ••^•

Ö^&^ { à^\ÁFIËF ÍÁ Ü^çã^ \_Á]^\â[å

Ö^&^ {  $a^{\hat{b}}$   $\hat{b}$   $\hat{c}$   $\hat{c$ 

#### &\$%''GYWcbX'GYaYghYf

Ræ} \*æ¦ ^ÁGGÁ Ô|æ••^•Áà^\*å}

Tæ!&@ÁÌÁ Ù]!ä}\*Áçæ&æci[}Áà^\*ä}•Áæ-c^!Á|æ•cÁ&|æ••

Tæ!&@ÁFÌÁ Ù];ä}\*Áçæ&æci;}Á^}å•ÁæcÁÌÁæÈ{È

Tæ^ÁHÁ Šæ•cÁåæ^Á[~Á&|æ••^•

Tæ^ÁIËÏÁ Ü^çã^ Á]^¦ã[å

Tæ^ÁÌËFÏÁ Ò¢æ {ã}æcã[}Á]^¦ã[å

 $Tæ^{\hat{A}}F^{\hat{A}}$   $\hat{O}[\{\{^{\wedge}\}\&^{\wedge}\}c]$ 

# 7CBH57H'5B8' kYVg]hY'=B:CFA5H=CB

#### AU] ]b['5XXfYgg.

Ó!^}Á⊤渦ÁÔ[||^\*^Á F€FÁÞÈÁ⊤^¦á[}ÁŒç^} \*^Á Ó!^}Á⊤渦ÉÁÚŒÁFJ€F€ËGÌJJ

Ø[¦Ái}-[¦{æcá[}Ái^\*æ¦åá}\*Á&[`¦•^Á•&@^å`|^•ÉÁ
'^\*á•c¦æcá[}ÉÅ]¦[&^å`¦^•ÉÁ^¢æ{•Áæ}åÁ•c`å^}cÁ!^&[¦å•ÉÁ
çã•ácÁc@^ÁÜ^\*á•c¦æ¦q•ÁU-,&^Á¸^à•ác^ÁæcÁ@cc]KĐи¸¸È
àl^}{æ¸!È^å°Ð!^\*á•c¦æ¦É

Ø[¦Áå}-[¦{æci[}Áæà[ˇchæ]]|^â}\*h-[¦h,}æ}&åæ|ÁæååÁ[¦h &[}ci}ˇá}\*h,}æ}&åæ|ÁæååĚÁçã•āchc@^hÙcˇå^}chØá}æ}&åæ|Á Ù^¦çå&^•h¸^à•āc^Áæch@cc]kDb¸¸¸Èà¦^}{æ¸!È^åˇb•-•È

Ø[¦Ái}-[¦{æci[}Áæà[˘cÁ¦^•åå^}cáæ|Ájā-^ÈÁçā•ācÁc@^ÁÙc˘å^}cÁ Šā-^ÁU-,&^Á¸^à•āc^ÁæcÁ@cc]KĐи¸¸Èà¦^}{渦È^å˘Đ ¦^•åå^}cāæ|lā-^È

#### Gk]hW\VcUfX.

ÎF€ËÍGÎËÍ€€€

#### 7c"Y[Y'kYVg]hY.

@cc]KDD,,,Èà¦^}{æ,'È^å\*

Ø[¦Áå}-[¦{æcā[}Áæà[`chc@^Áļàà|æ¦å^•Áæ}åÁc@^ā¦Á•]^&æ|Á &[||^&cā[}•Éhçā•āchc@^ÁŠàà|æ¦ā^•Á¸^à•āc^Áæch@cc]KĐи¸¸È àl^}{æ,!É^å\*Dļià|榰È

Ø[¦Ái}-[¦{æci[}Áæà[`ch&[{]`c^!•Éh|æà•Áæ}åAc^&@}[|[\*i&æ|Á !^•[`!&^•Éhçi•ichc@^hÔ[{]`ci}\*ÁÙ^¦çi&^•Á¸^à•ic^Áæch @cc]KDD¸¸¸Èà!^}{æ¸!È^å°B&[{]`ci}\*È

Ø[¦Åi}-[¦{æci[}Åæà[`cÁæ&&[{{[åæci[}•Á-[¦Å•cˇå^}c•Á¸ic@Á å䕿àijāci^•ÉAçã•ācÁc@^ÁŒ&&^•ÁÙ^¦çã&^•Á¸^à•āc^ÁæcÁ@cc]KBD ,¸Éà!^}{æ¸!É^å`Dæ&&^••´•^¦çã&^•É

Ø[¦Áā}-[¦{æcā[}Áæà[`cÁ&æ¦^^!Áå^ç^|[]{^}cÁ•^¦çå&^•ÉÁ ā}&|`åá}\*Á]!^Ē|æ ,Áæåçā•ā}\*Áæ}åÁc@^ÁÒ¢c^!}•@i]ÁÚ![\*!æ{ÊÁ

# 56CIH'H<9'7C@@9;9

#### H\Y'A]gg]cb'cZ'6fmb'AUkf'7c"Y[Y

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Šāçā}\*Áæ}åÁ, [!\ā}\*Ác[\*^c@^!Áā}ÁæÁ&[{ { `}āc^Ààæ•^åÁ[}Á
 { `c`æ|Á!^•]^&cÉÁ]^!•[}æ|Áā}c^\*!āc^Áæ&@Á\*^A•cæ}åæ!å•Á[-Á
æÁ•[&āæ|Áæ}åÁæ&æå^{ i&AP[}!!ÅÔ[å^ÉÁ^æ&@Á\*^}^!æci[]Á
 [-Á•c`ă^}c•A^¢]^!ā{^}c•Á¸āc@Á&!^æci}\*Áæ}åÁ•`•cæã}ā}\*ÁæÁ

•^!-Ē\*[ç^!}ā}\*Á•[&ārc^Á¸āc@á}Ác@^ÁÔ[||^\*^ÉÁV@^Áæ&æå^{ i&A
æ}åÁ&[&`!!ā&`|æ!Á^¢]^!ā^}&^•Á-[•c^!^åÁà^ÁÓ!^}ATæ\_!ÉÁ
a[c@Á[]Á&æ{]`•Áæ}åÁi}Ác@^ÁÔ[||^\*^q•Á¸āa^!Á•^cci}\*ÉÁ
^}&[`!æ\*^Á•c\*ā^}c•Ác[Áà^Á!^•][]•āa|^Á&āci.^}•Á¸@[Á]![Ē
çiā^Á•^!çi&^Áæ}åÁ|^æå^!•@i]Á-[!Áæ}Ái}&!^æ•ā}\*|^Ái}c^!å^Ē
]^}å^}cÁ,[!|åÈ

#### H\Y'<]ghcfm'cZ'6fmb'AUkf'7c"Y[Y

Y@^}AÓ!^}A⊤æ¸!AÔ[||^\*^A[]^}^åAäc•Aå[[!•Aá}AFÌÌÍÉAàcA [~^!^åŸ[{^}AæÁ{[!^Aæ{ààca[~•Aæ&æå^{á&A];[\*!æ{Á Ö'ià}\*kc@^h]!^•åa^}&^h[-hTæ!ā[}hÒå,æ!å•hÚæ!\Éh-![{h FJGGAc[AFJ|GÉAc@^hÔ[||^\*^hà^\*æ}hc[h, [!\hc[,æ!åh&[[]Ë ^!æciq^h]![\*!æ{•h,āc@h}^æ!à^hâ}•cicčci[}•h·hPæç^!-[!åh Ô[||^\*^EhÙ,æ!c@{[!^hÔ[||^\*^hæ}åhc@^hW}āc^!•āc^h[-h Ú^}}•^|çæ}āæh·hc@ceh,[`|åh|æc^!h\*!^æc|^h^¢]æ}åhc@^hæ&æĒ å^{i&hæ}åh•[&iæ|h!æ}\*^h[-hÓ!^}hTæ,!h•c\*å^}c•EhQ}hFJHFh Ó!^}hTæ,!q•h\*!æå\*æc^h•&@[[|hà^\*æ}hc[hæ&&^]ch{æ}hfJHFh •c\*å^}c•EhÖ\*iā}\*hc@^hå^&æå^•h[-hc@^hDæ:āh!ā•^hc[h][,^!h i3}hÖ\*J[]^hæ}åhY[!]åhYæ!hQEhÓ!^}hTæ,!hà^&æ{^hc[h][,^!h cPh\*®}OhàPcih\*\*P\$@%ah®\*QI+æ@{QPPOh,®Pl\*SOPh}p•H[W!^~\*\*^^•h.![{hDæ:āh]^!•^&\*ci[}È

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Ö`¡ā}\*ÁT&Ó;åâ^q•Ác^}`!^Ékc@^ÁÔ[||^\*^Ác\_jā&^hæ&^âk&@æ|Ē
|^}\*^•Åc[Áàc•ÁÛ`æ\^\ło@^Áô[||^\*^Ac\_jā&^hæ&^âk&@æ|Ē
|^}\*^•Åc[Áàc•ÁÛ`æ\^\ło@^ÁT&Ôæ\*^A[-Å-!^^Áā}``ĭā!^Áæ}åÅ-!^^å[{Á
[-Á&[}\*&â\*]&^EKÖ`¦ā}\*Ác@^ÁT&Ôæ\*c@^Á^;æĒÁÔ[}\*!^••Å
!^`ĭā!^åÁ•c`å^}c•Áæ]]]^ā}\*Á-[¦Á|[æ}•Ác[Á•ā\*}Áæk|[^æ|c^Á
[æc@Ac[Ác@^ÁW}āc^åÁÛcæc^•Áæ}åÁæ}Áæ-,åæçācÁ!^\*æ!åä}\*Á
{^{à^!•@i]Åi}Åc@^ÁÔ[{{`}ā•ck]æ!c^ÉÁŠæc^!ÉÁæcÁc@^Á@^i\*@cÁ
[-Á•c`å^}cÁ]![c^•cÁæ\*æâ}•cÁc@^ÁXâ^c}æ{ÁYæ!ÉÁâ}•cāc`cā[}•Å
[-Á@ā\*@^!Á^å`&æcā[}Á\_^!^A!^~ĭā!^åÁc[Á!^][!cd•c`å^}cÁ
];[c^•c^!•Áæ•ÁæÁ&[}åāċā[}Á[-Á^]ā\*āàājāc^Á-[!Á\*[ç^!}{^}cÅ
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U}\da\_[c@\[&&æ•i[]\*\documents[]\*\documents[]\*\dagger]\*\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]\dagger]

Ö'ià}\*Ác@^ÁFJ΀•ÊÁÓ!^}ÁTæ¸!Á•c!^}\*c@^}^åÁāc•Ácā^•Á
c[ÁPæç^!-[!åÉÁܸæ!c@{[!^Áæ}åÁÚ^}}Á¸@^}Áācáà}ācäĒ
æc^åÁ{`c`æ|Á&![••Ë!^\*å•c!æci[}Á-[!Áæ|Á\*}å^!\*!æå\*æc^Á
&[`!•^•ÈÁO}ÁFJÎJÉÁācÁæ\*\*{^}c^åÁāc•Á•]^&āæ|Á!^|æci[}•@ā]Á
¸āc@ÁPæç^!-[!åÁà^Á^•cæà|ā•@ā}\*ÁæÁ!^•åa^}cäæ|Á^¢&@æ}\*^Á
]![\*!æ{Ác@æcÁ[]^}^åÁ&^!cæá}Áā[!{āc[!ā^•ÁæcÁ^æ&@Á&[||^\*^Á
c[Á•c\*å^}c•Á[-Ác@^Á[c@^!Á&[||^\*^È

Tæ¦^ÁÚæcc^!•[}ÁT&Ú@^!•[}Á|^åÁc@^ÁÔ[||^\*^Á-¦[{ÁFJĨÌÁ
c[ÁFJJĨĒÁæÅ]^¦ā[åÁ[-Ác!^{^}å[`•Á\*![¸c@Áā}Ác@^Á}`{Ē
à^!Áæ}åÅäāç^!•āc^Á[-Á•c`å^}c•Á·Á}[¸Á{[!^Ác@æ}ÁFĒG€€Á
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[-Á&[|[!ĒÁÖ`¦ā}\*ÁT&Ú@^!•[}q•Ác^}`!^Áā}Á[~,&^ĒÁÓ!^}ÁTæ¸!Á
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#### GiaaUfm

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#### BiologyÁ

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#### Chemistry

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## **Physics** A

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\*Test of English as a Foreign Language http://www.toef.org

\*\*IELTS www.ielts.org

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V@^Á { ā}ā { ~ { Á•cæ} 忦åā: ^åÁc^•cā} \*Á¦^~~ã¦^ { ^}cÁ~[¦Á

# :99G'5B8':=B5B7=5@'5=8

# 7cghg'cZ'9XiWUh]cb

V@^Ac`àcà[}Áæ}åÁ-^^•Áå}ÁG€FFËFGÁ-[¦Áæ||Á^}¦[||^åÁ`}å^!Ë
\*!æå`æc^Á•c`å^}c•ÉÁ¦^•ãå^}cÁæ}åÁ}[}¦^•äå^}cÉÁå•ÁÅI€ÉÌGIÁ
æÁ^æ¦È

 $\label{eq:GiaaUfmcZ':YYg'UbX'9IdYbgYg'Zcf'&$\%!\%& GiaaUfm'cZ':YYg'UbX'9IdYbgYg'Zcf'&$\%!\%& \\$ 

# :=B5B7=5@'5=8

ŒIJÁÁ

{ ācÁc@^ÁÔÙÙÁÞ[}&`•c[åāæ|ÁÚæ¦^}cÁŮcæc^{^}cÁœçæā|æà|^Á -:[{ Ác@^ÁÓ!^}Á⊤æ¸;Á¸^àÁ]æ\*^Ác[Ác@^ÁÔ[||^\*^ÁÓ[æ¦åq•Á 0{æ\*ā}\*ÁÖ[&`{^}cÁÙ^!çå&^ÁÇQÖUÔDÈÁV@^ÁÓ;^}Á⊤æ¸;ÁÔ[|Ē |^\*^ÁÔÙÙÁ&[å^Á}`{à^!Áå•ÁG€IJÈÁ

FYbYkU`: fYY'5dd`]WUh]cb'Zcf': YXYfU`'GhiXYbh'5]X'
fl:5:G5ŁÂÙ`à { áchc@^AÜ^}^, æ|AØŒØÙŒkæ•Å•[[}Aæ•Å][•Ë
•ãà|^Ac[Á {^^chc@^Aå^æá|ā}^ÈÁà`ch}[chà^-[!^ARæ}`æ!^ÁF•cÈÅ
Œ]]|ã&æ}c•Áæ!^Á^}&[`!æ\*^åhc[Áæ]]|^Á[}|ā}^Aæch, È-æ-•æÈ
^åÈ\*[chc[h^¢]^åác^A]![&^••ā}\*ÈŒA]æ]^!Åç^!•ā[}Á[-Ac@^A
ØŒØÙŒkå•Åæçæä|æà|^Aà^Á&æ||ā}\*FĒÌ€ĒIHHĒHGIHĖAV@^AÓ!^}Å
Tæ;!ÅÔ[||^\*^A-^å^!æ|A&[åA^}`{ à^!Åã•Á€€HGHÏÈ

:YXYfU`HUI`FYhifbg.kÔ[}câ} ã}\*A•c`å^}c•kæ}åkc@^âlÅ
]æ!^}c•Å { \*•ch• à {āch•ā\*}^âh&[]ā^•h[-h-^å^!æ]kÇ}[h•cæc^dh
ā}&[ {^hcæ¢h!^c`!}•Êhâ}&[\*ăâ}\*hæ]h•&@^å`|^•hæ}åhæcæ&@Ē
{^}c•Éhà[c@hà`•ā}^••hæ}åh]·•[}æ]Éhæ[[]\*h¸āc@hæ]lhYGh
-[!{•hc[hc@^hÔ[]|^\*^hÓ[æ!åhQ}•cāc`cā[}æ]hÖ[&`{^}chÙ^!Ē
çã&^hQOÖUÔĐÉhÙc`å^}c•hæ}äh]æ!^}c•h, @[hæ!^h}[ch!^`ĭā!^åh
c[h,|^hæh-^å^!æ]hå}&[ {^hcæ¢h!^c`!}h(`c\*a^}chE]āhæ[]\*h-h[-h
æ]lhYĒGh-[!{•hæ][]\*h¸āc@hæhÜæ!^}ch[]ihŪc`å^}chP[]ĒVæ¢Ē
Øā|^!hØ[!{hc[hOÖUÔĒhŒ]|hā[&`{^}ch@}åh{{`•ch@æç^hæ}h
c[hOÖUÔhæ•h[]^h&[{]|^c^h]æ&\^chæ}åh{{`•ch@æç^hæ}h
OÖUÔh&[ç^!h•@^^cĒh

FYe i ]fYX': cf a g'UbX'=bghf i Wh]cbg''
Zcf'=bhYfbUh]cbU''Gh i XYbhg.

: ]fgh'MYUf'UbX'HfUbgZYf

GhUhY a Ybh cz DUfYbhU '9Ufb]b [gkÁÒæ&@Á [-Ác@^Áæ]] jiĒ
&æ}cq•Á]æ!^}c•Á { `•cÁ•`à { ācÁ|^cc^!•Áçã}ÁÒ}\*jā•@DÁ-! [ { Ác@^á!Á
^{ ]|[^^!•Á•cæcã}\*Ác@^Á]æ!^}c•qÁ\*! [••Áã}&[ { ^Áæ} åÁçæ|^^Á
[-Áæ}^Á]^! `ă•āc^•ÉÁ•`à•āáå^•Áæ}åÁà^}^, c•Ác [Ác@^ÁÔ[]|^\*^Á
Ó[æ!åÁQ}•cão`cã [}æ|ÁÖ [& ~{ ^}cÁÛ^!çã&^ÁçÖÜÛÔĒÁŒ||Áå [& ~Ĕ
{ ^}c•Á•@[ `jáÁà^Á•`à { ācc^åÁc [ÁQÖÛÔÁæ•Á [ }^Á& [ { ] ]^c^Á
]æ&\^cÁæ}åÁ { ~•cÁ@æç^Áæ}ÁQÖÛÔÁ&[ç^!Á•@^^cÉÁ

#### FYh i fb]b['Gh i XYbhg

Ô[}ci} ~ i} ~ ii} ~ c^{} æci[}æci[}æci] @ i^e c~å^}c•hæ\^h} [ch!^~~i!^åh^ahc[h '^Ē•~à { āchæh, }æ}&āæ|hæāāhæ]]ii&æci[}hæ}} ~ æ||^ÈhÔ[||^\*^h \*!æ}c•hæ}åh|[æ}•hæ!^hæ~c[{æci&æ||^h!^}^,^åÈhU}|^hä}c^!Ë }æci[}ælh•o~å^}c•h \_@ [h\_^!^hæ,æ!a^ahæāah][}h^>c!æ}&^h c[hc@^hÔ[||^\*^hæ!^h^|i\*āa|^h-[!h&[||^\*^h\*!æ}chæ}āh][æ}h •~]][!chā}h•~à•^~~^^}ch^^æ!•hæchÓ!^}hTæ¸!Ë

Ø[iÁæÁià•cÁ[-Á•&@[|æi•@i]Á-ˇ}å•Áæ}åÁ]ià:^•Ác@æcÁ•ˇ]][ich
c@^Áæ¸æiå•Á{æå^ÉÁ•^^Ác@^Á•&@[|æi•@ā]Á-ˇ}å•Á]æ\*^ÉÁ
V@^•^Á-ˇ}å•Áæi^Áˇ•^åÁc[Á^}@æ}&^ÁÓi^}ATæ¸iq•Á}^^åË
àæ•^åÁ,}æ}&āæ|ÁæåáÅ];[\*!æ{ËÁV@^^Áæi^Á}[cÁæ¸æiå^åÁ
•^]æiæc^|^ÉAØ[iÁa}-[;{æcā[}Á[}Á][æ}Á-ˇ}å•ĒÁ•^^Ác@^Á|[æ}Á
c^;&c^;}æð∰•∱1æ\*^È ^ ^

: YYg'UbX': ]bUbW]U\`5]X\&+

#### @C5B: IB8G

# :YXYfU`8]fYWhGhUZZcfX@cUbg

V@^ÁØ^å^\æ|ÁÖã\^&cÁÙcæ~[\åÁÙc~å^}cÁŠ[æ}ÁÚ\[\*\æ{Á ^} $a^-$ ^ $a^$ `}āc•DÁc[Áà[¦¦[¸Á~¦[{Á^|ā\*āà|^Á|^}&^¦•ÁæcÁæÁ|[¸Áā}c^¦^•cÁ ¦æc^Ác[Á@^|]Á { ^^cÁ^å ~&æcā[}æ|Á^¢]^}•^•ÈÁV@^Áā}c^¦^•cÁ [}Ác@^ÁØ^å^¦æ|ÁÖä¦^&cÁÙcæ~[¦åÁŠ[æ}Á { æ^Áà^Á•~à•ãåi:^åÁ Ø;^^ÁŒ]]|i&æci[}Á~[;ÁØ^å^;æ|ÁÙc~å^}cÁŒiåÁÇØŒØÙŒDÈÁQ-Á  $a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-1}a^{-$ \* [Ç^!} { ^}cÁ]æ^•Ác@^Áā}c^!^•cÁ^}cā|Á!^]æ^ { ^}cÁà^\*ā}•ÈÁQ-Á æA•c~å^}cAå[^•A} [cA~~æ|ā~^A~[!Ac@^Aā}c^!^•cA•~à•āå^ÊA•@^A { æ^Áà[!![ ,Á`}å^!Ác@^Á`}•`à•ãåā:^åÁ]![\*læ{Áæ}åÁ,ã||Á  $\dot{a}^{-1} - \frac{1}{4} = \dot{a}^{-1} + \dot{a}^{-1} + \dot{a}^{-1} + \dot{a}^{-1} = \dot{a}^{-1} + \dot{a}^$ \* | æ { • ÊÁc@^Á] | iā}&ā] æ|Áā•Áå^~^| | ^ åÁæ•Á| [ } \* Áæ•Ác@^Á•c~å^}cÁā•Á 

Ü^]æ^{^}chà^\*ā}•Á•ā¢Á{[}c@•Áæ·c^!Ac@^Á•c\*å^}chā•Á}[Á |[]}\*^!A^}![||^åAæch|^æ•ch@æ|-Eci{^Aæchæ}Aæ&&!^åic^åhā}•cic\*Ë ci[}EAV@^A!^]æ^{^}chc^!{A!æ}\*^•A-![{AF€Ac[AGÍA^æ!•A

V@^AÓæ¦àæ¦æÁUc}[¸ÁÓæ~{æ}}A£ÍIÁÙ&@[|æ!•@i]ÁØ~}åA

æ•Á^•cæà|ā•@^åAc@![~\*@ÁæÁà^~~^•cÁ-![{ÁÓæ¦àæ¦æÁUc}[¸Á

Óæ~{æ}}A£ÍIÁc[Á]![çāå^Á~}å^!\*!æå~æc^Á,}æ}&äæ|ÁæååÁ

¸āc@Á]!^-^!^}&^Á\*āç^}Ac[ÁæÁ•c~å^}cÁ-![{Ac@^ÁÞ^¸ÁŸ[!\Á
{^c![][|ācæ}Áæ!^æ£ÁÇG€€ÎD

V@^ÁÙ~•æ}}æÁÒĖÁÓ^â^||ÁØ~}åÁ]¦[çãå^•Á~}å^!\*¦æå~æc^Á ,}æ}&àæ|ÁæiāĖÁçG€€ÏD

V@^ÁÓ^^\^^ÂÙ&@[|æ!•@i]ÁØ`}åÁ¸æ•Á^•cæà|i•@^åÁà^ÁŠ[i•Á ÒĖÁÓ^^\^^ÈÁŒĖÓĖÁFJÍÍĖÁÙæ¦æÁÓ^^\^^ÂÚ~^-^}![c@ĒÁŒĖÓĖÁ FJÎHĖÁæ}åÁc@^å¦Á{[c@^¦EÁT¦•ÈÁÔ^!`•ÁÒĖÁÓ^^\^^ÈÁV@^Á~`}åÁ

Í€c@ÁÜ^`}ā[}ĚÁV@^Á~`}åÁ•@æ||Áà^Á`•^åÁc[Á]¦[çãå^Á`}å^¦Ё\*¦æå`æc^Á,}æ}&ãæ|ÁæãåĚÁÇG€€ÏD

 $\label{eq:continuity} $$ V@^A\hat{O}[\varpi^\bullet A^- A^- B] \hat{A} & \tilde{O} A^- B \hat{O} A^-$ 

 $$$ V@^AT\varpi_{*}^* : AR_{\infty} \cdot [A\hat{O}_{[, ^\bullet \hat{A}]}^* : AR_{\infty}^* \cdot [A\hat{O}_{\infty}^* : AR_{\infty}^* \cdot AR_{\infty}^* : AR_{\infty}^* \cdot AR_{\infty}^* : AR_{\infty}^* \cdot AR_{\infty}^* : AR_{\infty}^* \cdot AR_{\infty}^* : AR_{\infty}^* : AR_{\infty}^* \cdot AR_{\infty}^* : AR_{\infty}$ 

V@^ÁÒç^|^}ÁØ|[¸^!ÁT[!!ã•ÁÔ[]^Áæ}åÁRæ&~~^|ā}^ÁÚæ•&æ|Á
T[!!ã•ÁÒçæ}•ÁT^{[!āæ|ÁÙ&@[|æ!•@ā]ÁØ~}åÁ¸æ•Á^•œàË
|ã•@^åÅà^ÁÒ叿!äÁYÈÁÒçæ}•Áæ}äÁ[c@^!Á-æ{ā]^Á{^{à^!•Á}
ā}Á{^{[!^Á[-ÁÒç^|^}}ÁØ][¸^!ÁT[!!ã•ÁÔ[]^ÁFJ€HÁæ}åÁ
Ræ&~~^|ā}^ÁÚæ•&æ|ÁT[!!ã•ÁÒçæ}•ÁFJ€ÌÈAV@^Á-~}åÁ•@æ||Áà^Á
~•^åÁc[Á]![çåå^Á~}å^!\*!æå~æc^Á,}æ}&åæ|ÁæåĚÁÇFJÍÌD

V@^AÜ^\*i}æASæc@æ!i}^AÔ!æ}åæ||ÁÙ&@[|æ!•@i]AØ`}åA¸æ•A &œ`���j;•@AV@A`a^[;##\*ÖA;c^]Ä];^A|ÖA##;}æABæc@@##}^A@`!#E}åæ||(•Á •c`å^}c•Aæ}åA-!i^}å•EAÙ@^A¸æ•AæA{^{à^!A[-Ac@^Ac^æ&@i}\*A  $\begin{array}{ll} & \text{$V$ @ $A$ @ $A$ @ $A$ & $A$ &$ 

V@^ACE}}ā^ÁŠæ¸iā^ÁØæà^}•ÁÔ![:ā^!ÁÙ&@[|æ!•@i]ÁØ`}åŸæ•Á

CE^•œàjā•@^âÁà^ÁT!ĖÁæ}åÅ∏;•ĚÁCEàà[cÁœÁW•@^!Áā}Å{^{{[!^Á
PÈ[-ÁT]•ĚÁW•@ᡯ;ÝÞÁææ`\*@c^!ÉÁCE}}ā^ÁŠæ¸!ā^ÁØæà^}•ÁÔ![:ā^!ÉÁ
±ÍFÉÁ¸@[Áåā^áÁ[}|^ÁæÁ-^¸Á^œ!•Áæ-c^!Á@^!Á\*!æå`æcā[}Á-![{Á
ÈÁVÓ♠?}ÅTæ¸!ÉÁV@^Á-`}åÅ•@æ||Áà^Á`•^åÁc[Á]![çãå^Á`}å^!É
VĨħæãæ#AåÁ}æææ#AåÁ;æåææ#AåjæjāæåÁ];æå~!^}&^Ác[ÁæÁR`}ā[;Á]iÁ

• ~&^••AæchÓ!^}ÁTæ¸!há•h}[ch}^&^••æ!i|^A•@[¸}hi}hk[]£ ç^}ci[]æ|h¸æ^•ĒhÚ!^-^!^}&^hi•hc[hà^h\*iç^}hc[hæh•c`å^}ch -![{hÞ^¸hŸ[!\hÔia^ĒhV@^h-`}åh•@æ||hà^h`•^åhc[h]![çiå^h `}å^!\*!æå~æc^h,}æ}&iæ|hæiåĒhQFJJID

 $$$V_0^{\hat{0}} = \frac{1}{\hat{0}} \hat{0} = \hat{$ 

V@^ÁÜ^à^&&æÁYā}•[¦ÁÒçæ}•Áæ}åÁÒ||^}ÁYā}•[¦ÁT^{{ [¦áæ|ÁÛ&@[|榕@ā]ÁØ`}åŸæ•Á^•œà]ā•@^åÅà^ÁæÅà^``^•cÁ-![{ Á
Ü^à^&&æÁYā}•[¦ÁŌçæ}•ÉŸ@[Ååå^áÁ[}ÁRŢ|\_ÂĞÍÉÁFJ\_[JÉÀÙ@^Á
';ÇİÇ^âÁ@^¦Á•ā•c^!ÉÀÒ||^}ÁYā}•[!ÉÀā^Á[}|^ÄĜ€Á {ã}¹æc^Á,}æ}Ĕ
&áæ|ÁæåāÁc[ÁæÁ {ā};'iåc^Á•c\*ā^}cÉAÇFJÍJD

 $\label{eq:continuous_vertex} $$ V@^AP^|^$ & @^A^ & @^A^0 & & & A^0^A &$ 

V@^ÁÔ[;æÁÓÈÁæ}åÁœÉÁR\*jà\*•ÁØ[@•ÁÚ^;]^c\*æJÁÜ&@[jæ;•@i]Á Ø`}åÁ;æ•Á^•œæÀjā•@^åÁà^Ác@^ÁØ[@•ÁØ[`}åæci[}Á[-ÁP[`•Ë c[}ÊÁV^¢æ•ÈÁV@^Á-`}åÁ•@æJJÁà^Á\*•^åÁc[Á];[çiå^Á`}å^!Ë \*;æå\*æc^Á,}æ}&iæJÁæjÁæjÁfÍD

 $\begin{array}{l} V@^{A}P\varpi:^|A\tilde{O}[|\mathring{a} \ \{\varpi\}^{A}) \ \varpi^{A} \circ \varpi\mathring{a}|\mathring{a} \circ @^{A}\mathring{a} \wedge \mathring{a} \circ @^{A}\mathring{a} \wedge \mathring{a} \otimes \mathring{a} \otimes \mathring{a} \wedge \mathring{a} \otimes \mathring{a} \otimes \mathring{a} \wedge \mathring{a} \otimes \mathring{a} \otimes \mathring{a} \otimes \mathring{a} \otimes \mathring{a} \wedge \mathring{a} \otimes \mathring{a}$ 

Т

: YYg`UbX`:]bUbW]U``5]X``'%

Xà!\*à}àæÁŠ[[{à•ÁÙ&@à^--^|à}ÁFJH€ÉÁÓæ¦àæ¦æÁÙ&@à^--^|à}Á Ú[,^||ÉÁFJÎGÉÁV@^Á-`}åÁ•@æ||Áà^Á`•^åÁc[Á]![çåå^Á-æ&`|c^Á •æ|æ¦à^•Á[¦Á`}å^!\*!æå`æc^Á,}æ}&åæ|ÁæåĚÁÇFJÌGD

V@^AR^æ}ÅŠ`&æ•ÅŠ^}æ¦äűſJÁÙ&@[|æ!•@i]ÅØ`}åŸæ•Å
^•cæà|å•@^åÅà^ÁR[@}Åæ}åÅR^æ}ÅŠ`&æ•Åc[Å]![çåâ^Å,}æ}&åæ|Å
æ••å•cæ}&^Ác[Áæ}Å`}å^!\*!æå\*æc^Á•c\*å^}cA¸åc@Åå[&`Ĕ
{^}c^åÅ,}æ}&åæ|Å}^^åŸ@[Åå^{{[}•c!æc^•Åc@^Á@å\*@^•cÅ
æ&æå^{á&Å]![{å•^Áæ}}åÅæÅ]^!•[}æ|Å&[{{åc{^}chc[Åc@^Á
cæ\\*o\*A[-ÅO]\*^}ÅT渦ÅÔ[||^\*^ÈAV@å•Å•&@[|æ!•@å]Ÿå||Å
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àå[&@^{á•c!^Å[!Á {[|^&\*|æ!Ååå[|[\*^ÈAÇG€FFD]

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Ò¢]|[!^Ác@^æc¦å&æ|Ác^¢c•Á-¦[ { Ác@^Á&[}c^ { ] [!æ¦^Á•cæ\*^Ác[Á c@^Á[¦å\*ã}•Á[-ÁQcæ|àæ}Ác@^æc^¦Áã}Ác@^ÁFÎc@Á&^}c`¦^ÉÁã}&|`åä}\*Á ]ā^&^•Áà^ÁÖæ¦ā[ÁØ[ÉÁŠ`ã\*āÁÚ⦿}å^||[ÉÁŌæ¦|[ÁŌ[]å[}āÉAc@^Á Ō[ { {^åàæÁå^||qæ¦c^Áæ}åÁÞä&&[|fIÁTæ&@äæç^||äÈ

## ; 9C@'%'\$::cWig'.'@]ZY']b'9Ufh\0g':ihifY'7`]aUhY

ŒÁ|^æåi}\*Á\*^[|[\*ā•cÁ\*āç^•Áæ}Á[ç^\çá^¸Á[-ÁÒæ!c@q•Á&|ā{æc^Á ā}Ác@^ÁGG}åÁ&^}c`!^ÁÇ^^æ!ÁGF€€Áæ}åÁà^^[}åDÁàæ•^áÁ[}Á c@^Á&`!!^}cÁ•&á^}a,&Á&[}•^}•`•ÈÁ

# $D < MG'\%' \& : cWig. H\Y' Ib] jYfgY'5WWcfX]b['hc' 9]bghY]b$

Öi•&[ç^!h@[¸ hai { ^hæ}åhåi•cæ}&^h { ^æ•`!^ { ^}c•h { æå^h à î-kåi--^!^}ch[à•^!ç^!•hæ!^h!^|æc^àhc[hc@^i!h { [ci[}•Èh Ù^ç^!æ|hh]æ!æå[¢^•+h[-h!^|æciçic^h]i||hà^håi•&`••^åhæ}åh !^•[|ç^åÈ

## 5H<@9H=7G'5B8'D<MG=75@'98I75H=CB

## 5X a ]b]ghfUh]cb

Ùcæ&^^ÁŒåæ { •ÉÁŒ••i•cæ}cÁÖi!^&c[;Á[-ÁŒc@|^ci&•Á-[;Á Øæ&ijici^•Áæ}åÁU]^!æci[}•ÉÁæ}åÁÙc!^}\*c@Áæ}åÁ Ô[}åäci[}i}\*ÁÔ[æ&@

 $Ræ\&[\grave{a}\&T\check{}|]\&\}\bullet\grave{E}\&C\bullet\bullet\&\circ cæ\}c\&O\&|^\&c[\&\&C\&ACO|^c\&\bullet\&\bullet\&\&O][\&c\bullet\&ACO] = \&\&C\&ACO|^c\&\bullet\&\bullet\&O|^c\&\bullet\&\bullet\&O| = \&\&C\&ACO|^c\&\bullet\&\bullet\&O| = \&\&C\&ACO|^c\&\bullet\&O| = \&\&C\&ACO|^c\&\bulletO| = \&\&C\&ACO|^c\&O| = \&\&C\&ACO|^c\&\bulletO| = \&C\&ACO|^c\&\bulletO| = \&C\&ACO|^c\&\bulletO| = \&C\&ACO|^c\&O| = \&CACO|^c\&O| = \&CACO|^$ 

#### : UW i `hm

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Rā||ÁÓ¦^•|ā}ÊÁQ}•c¦~&c[¦Áæ}åÁP^æåÁÔ[æ&@

Òlā}ÁÖ^Tæ!&[ÊÁŠ^&c~!^!Áæ}åÁP^æåÁÔ[æ&@

Ræ•[}ÁP^, āccĒÁŠ^&c~¦^¦Áæ}åÁP^æåÁÔ[æ&@

 $Tæ|&āÁŠā]]^{cÊÁŠ^&c^{+}AA}&}åÁP^æåÁÔ[æ&@$ 

V^;;^ÁT&Šæ\*\*@jā}ÊÁŠ^&c\*;^;ÁBÁP^æåÁŒc@j^cã&ÁV;æã}^;

Sæcā^ÁV榦ĒÁÙ^}ā[¦ÁŠ^&c~¦^¦Áæ}åÁP^æåÁÔ[æ&@

Sæc@^ÁVā^¦}^^ÊÁÖã¦^&c[¦Á[~ÁÚ@^•ã&æļÁÒå~&æcā[}

Šæ`¦æÁXå&c[¦åæË⊤æ¦;æ}[ÁS^{]^¦ÊÅŠ^&c`¦^¦Áæ}åÁŒ••å•cæ}cÁ Œc@|^cå&ÁV¦æå}^¦

Þā\\āÁY@āc|[&\ÊÁŠ^&c~\^\Áæ}åÁP^æåÁÔ[æ&@

#### **G**hUZZ

R[x]AO

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O;^}ÅTæ,!q•ÁÚ@^•å&æ|ÁÒå~&æci[}Å&~!iå&~|~{ &i•Åå^•å\*}^åh c[Å]![çiåa^Á[]]!c~}åci^•Åc[Åå^ç^|[]Åi•^|[]\*Å@æàic•Åc@æch ¸ä||Å^}@æ}&^Ác@^A~~æ|ic^Á[-Á|i-^ÉAØ![]Åi•^|[]\*Å@æàic•Åc@æch ¸ä||Å^}@æ}&^Ác@^A~~æ|ic^Á[-Á|i-^ÉAØ![]Ái•^][]cÅ ä}•ÉA|i-^cä[]Ædc[AæAçæliā^c^A[-Áaæ}&^A[--^lia]\*•ÉA|i-^cä { ^Á•][!cÅ e-\ā||•ÉA,c}^••Å&|æ••^•ÉAæ}åÅæA,^||]^^••Å&~!iia\*]~ { ÉAc@^A Ö^]æ!c {^}cA]![çiā^•ÅæAàA;^\*@ac@A[-Á]![\*!æ{ ii}\*Åc[A {^^cA c@^A}^^a•Á[-Ác@^A\*]\*[çiā^•ÅæAà\*]\*aco^A\*!^æc^!ÅÔ[||^\*^A &[{ \*}icCA^A)^\*a•Á[-Ác@^A]\*]0^•i&æ|A^a\*&æci[}Aæ}&AAæ}&^A&\*!iia\*Ē|^\*(\*^cA^C)\*\*[]^\*\*Aa\*]\*\*[\*\*Ac@a}Åi£A&[~\*A\*]\*\*[\*^Ac@\*A\*]\*\*[\*\*Aco\*]\*Aa\*]\*\*[\*\*Aco\*]\*Aa\*]\*\*[\*\*Aco\*]\*Aa\*]\*\*[\*\*Aco\*]\*Aa\*]\*\*[\*\*Aco\*]\*Aa\*]\*\*Aa\*]\*\*(\*\*Aco\*]\*Aa\*]\*\*Aa\*]\*\*(\*\*Aco\*]\*Aa\*]\*\*Aa\*]\*\*(\*\*Aco\*]\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]\*\*Aa\*]

Ú¦æ¢ã•Á&[~¦•^•Á[}Áæ||Á|^ç^|•Áæ¦^Áåå•cã}\*~ã•@^åÁà^Á \*^} ~å}^Á&[||æà[¦æcā[}Á¸āc@Á,^|å•āc^Á[¦\*æ}ā:æcā[}•Áæ}åÁ à^ÁæÁå^}æ{ã&Á];[&^••Á[~Á!^'^&cā[}Ác@æcÁā}&[;][!æc^•Á |^••[}•Á|^æ¦}^åÁi}Ác@^Á,^|åÁi}c[Ác@^Á&|æ••¦[[{Á•^cci}\*Á }āc^ÈÁV@^Á}æc~¦^Á[~Ã,^|å,[¦\Áæ••ã\*}{^}c•Áæ}åÁ]¦[b^&c•Á çæ¦ā^•Áæ&&[¦åā}\*Ác[Ác@^Á|^æ¦}ā}\*Á[àb^&cāç^•Á~[¦Ác@^Á &[~i•^Aæ}åAæ&&[iåi}\*Ac[Ac@^A}^^å•A[~Ac@^A&[{{~}}ac^A ]æ¦c}^¡ÈÁQ}Á{[•cÁÚ¦æ¢ā•Á&[ˇ¦•^•ÊÁ•cˇå^}c•Áæ¦^Á^}\*æ\*^åÁ ā}Á,^|åÁ]|æ&^{^}c•Á[¦Á¸[¦\ā}\*Á[}Á&[{{`}}āc^Ë&[}}^&c^åÁ ]; [b^&c•Ác@æcÁ { ^^cÁæ}Áāå^}cā,^åÁ}^^åÁā}Ac@^Á&[ { { `}āc^ÈÁ Q}Á[c@^¦Á&[~¦•^•ÊÁc@^Á~[&~•Áā•Á[}Áå^ç^|[]ā}\*ÁæÁ¦^|æcā[}Ë •@ā]Áà^c,^^}Ác@^ÁÔ[||^\*^Áæ}åÁæÁ&[{{ `}āc^Á[¦\*æ}ā:æcā[}Á c@æcÁ ā||Á~|cā { æc^|^Áà^}^, cÁc@^Á[ !\*æ}ā:æcā[ }Áæ•Á \_^||Áæ•Ác@^Á Ô[||^\*^È

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7C@@56CF5H=CB'K=H<'H<9'; F58I5H9' G7<CC@'C:'5FHG'5B8'G7=9B79G'5B8' H<9'; F58I5H9'G7<CC@'C:'GC7=5@' KCF?'5B8'GC7=5@'F9G95F7<'

CchÓ!^}ÁTæ¸!ÉŸ^Á^{ à!æ&^Áæhåā•ci}&ciç^Áæ&æå^{ i&Å { [å^|Å c@æcÁ[-~^!•ÁæÅ•^|^&cÅ} { à^!A[-Á[~c•cæ}åi]\*Á&[^å~&æci[}æ|Å\*!æå~æc^Á]![\*!æ{•Åi}Áæ!c•Áæ}åÅ•&å^}&^•Áæ}åÅ•[&iælÅ•[&iælÅ\*]!/Åi}&&[}b^\*}&ci[}&ci[}æ|Å\*]åå\*\*&ac^Á&[]\*iæå~æc^Á&[]\*i\*!æå~æc^Á&[]\*\*\*A-[!Ÿ[{^}£KC•Å•~&@ÊÁÓ!^}ÅTæ¸!Å\*}å^!\*!æå~Ë

## 57589A=7'5K5F8G' 5B8'DF=N9G

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c[Ác@^ÁÖ^]æ¦c{^}cÁ[-ÁÒ}\*|ã•@Ác@^Áà^•cÁ][^{Á[!Á\*![`]Á[-Á
][^{•ÉÅÇFJÍÏD

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V@^Á { [ } , ^Àejá@ÁŒ-li&æftÚ&@[|榕@i]Á,æf•Á^•cæàβ≰@^åÁ à^ÁæÁ\*!æ}cÁ-! [ { Ác@^ÁV@[¦}&![~cÁØ~}åÁM æ¸æ¦å^ååæ}}`æ||^hc[hæh{^{à^!h[~hc@^hb`}à[!h&|æ••h-[!h ¸[!\h[~h•]^&åæ|h^¢&^||^}&^hi}h@^!h{&b[!h•`àb^&cÇ•Dhæ}àhi•h @^|àhå`ià}\*hc@^h•^}i[!h^^æ!EhCFJGFD

V@^ÁÙæ¦æ@ÁÙċi'^¦ÁR^•`]ÁØ`}åÁ¸æ•Á^•cæàjā•@^åÁá}Á
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Ÿ[;\Áæ|`{}æ^Ékæ•Á¸^||Áæ•Á-æ{ā]^Áæ}åÁ-¦ā^}å•ÉÁV@^Áá}&[{^Á
ā•Ác[Áà^Áæ¸æ¦å^áÁæ}}`æ||^Ác[Á[}^Á[;!Á{[;!^Á`}å^!\*!æå`æc^Á
T•cˇå^}c•Ác[Á-`;c@^¦ÁæÁ•]^Ææ|¼}c¶Á;e^T;^•cÉÁ];[b^&cÁ‡;¼&æ;^^¦Á
æ!•\*[æ|Áā`iā}\*Ác^;{ÁЫ⁄@[pæ[4ææææ@]åÁÇ₱ŮïìD

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Ú![-^••[!Á[-ÁÕ!^^\AæcÁÓ!^}ÅTæ, !Áæ}åÅåå•cä}\* \*ã•@^åÁ
c!æ}•]æc[!Á[-Á][^c!^ÊÁV@^Á]!ã:^Áå•Áæ,æ!å^åÁ-[!Ác@^Áà^•cÁ
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c@^Á&@æä!•Á[-Ác@^ÁÖ^]æ!c {^}c•Á[-ÁÔ]æ••ã&æ|Áæ}åÁT[å^!}Å
Šæ}\*~æ\*^•ÊÁÇFJÌID

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## AREAS OF STUDY

### **DEFINITIONS**

## Major

In order to ensure that a student's education involves not simply exposure to many disciplines but also development of some degree of mastery in at least one, she must choose a major subject at the end of the sophomore year. With the gyÆ

Anthropology

Astronomy (at Haverford) €ast Asian Studies

Biology Chemistry

Child and Family Studies

Classical and Near Eastern Archaeology

Classical Culture and Society Comparative Literature Computational Methods Computer Science Creative Writing

Dance

East Asian Studies

**Economics** Education English

**Environmental Studies** 

Film Studies

French and Francophone Studies

Gender and Sexuality

Geology

German and German Studies

Greek

Growth and Structure of Cities

History History of Art International Studies

Italian Latin

Linguistics (at Haverford)

Mathematics

Middle Eastern Studies Music (at Haverford)

Philosophy **Physics** 

Political Science Psychology Russian Sociology Spanish Theater Studies

**Economics** English

Fine Arts (Haverford College) French and Francophone Studies

Geology

German and German Studies

Greek

Growth and Structure of Cities

History History of Art Italian Latin

Linguistics (Swarthmore College)

Linguistics and Languages (Swarthmore College)

Mathematics

Music (Haverford College)

Philosophy **Physics** Political Science

Psychology

Religion (Haverford College) Romance Languages

Russian Sociology Spanish

### Concentration

The concentration, which is not required for the degree, is a cluster of classes that overlap the major and focus a student's work on a specific area of interest:

- · Gender and Sexuality
- Geoarchaeology (with a major in Anthropology, Classical and Near Eastern Archaeology, or Geology)
- Latin-American, Latino and Iberian Peoples and Cultures
- Neural and Behavioral Sciences (with a major in Biology or Psychology)
- · Peace, Confict and Social Justice

## **Key to Course Letters**

ANTH Anthropology

ARAB Arabic

ARTA Arts in Education

ASTR Astronomy

BIOL Biology

CHEM Chemistry

CNSE Chinese

ARCH Classical and Near Eastern Archaeology

CSTS Classical Culture and Society

COML Comparative Literature

CMSC Computer Science

ARTW Creative Writing

ARTD Dance

EAST East Asian Studies

ECON Economics

**EDUC** Education

ENGL English

ARTS Fine Arts

FREN French and Francophone Studies

GNST General Studies

GEOL Geology

GERM German and German Studies

GREK Greek

CITY Growth and Structure of Cities
HEBR Hebrew and Judaic Studies

HIST History

HART History of Art

ITAL Italian

JNSE Japanese

LATN Latin

LING Linguistics

MATH Mathematics

MUSC Music

PHIL Philosophy

PHYS Physics

POLS Political Science

PSYC Psychology

RELG Religion

RUSS Russian

SOCL Sociology

SPAN Spanish

ARTT Theater

## **Key to Course Numbers**

001-099

These course numbers are used by only a few departments. They refer to introductory courses that are not counted towards the major.

100-199

Introductory courses, generally taken in the frst and second years.

200-299

Introductory and intermediate-level courses, generally taken in the frst two years.

300-399

Advanced courses.

400-499

Special categories of work (e.g., 403 for a fer worf

## **Key to Requirement Indicators**

Quantitative Skills: Indicates courses that meet the requirement for work in Quantitative Skills.

Division I: Indicates courses that meet part of the divisional requirement for work in the social sciences.

Division IIL: Indicates courses that meet the laboratory science part of the divisional requirement for work in the natural sciences and mathematics.

Division II: Indicates courses that meet part of the divisional requirement for work in the natural sciences or mathematics, but not the laboratory science part of the Division II requirement.

Division III: Indicates courses that meet part of the divisional requirement for work in the humanities.

Division I or III, II or III, etc.: Indicates courses that can be used to meet part of the divisional requirement for work in either division, but not both.

Quantitative and Mathematical Reasoning (QM): Indicates courses that meet the requirement for work in QM.

Scientifc Inquiry (SI): Indicates courses that meet the requirement for work in SI.

Critical Interpretation (CI): Indicates courses that meet the requirement for work In CI.

Cross-Cultural Analysis (CC): Indicates courses that meet the requirement for work CC.

Inquiry Into the Past (IP): Indicates courses that meet the requirement for work In IP

### **Neighboring College Courses**

Selected Haverford College courses may be listed in this catalog when applicable to Bryn Mawr programs. Consult the Haverford catalog for full course descriptions. Students should consult their deans or major advisers for information about Swarthmore College, University of Pennsylvania and Villanova University courses pertinent to their studies. Catalogs and course guides for Swarthmore are available through the Tri-Co Course Guide. Catalogs and course guides for Penn and Villanova are available through each institution's website.

## **Course Descriptions**

Following the description are the name(s) of the instructor(s), the College requirements that the course meets, if any, and information on cross-listing. Information on prerequisite courses may be included in the descriptions or in the prefatory material on each depart-

At the time of this printing, the course offerings and descriptions that follow were accurate. Whenever possible, courses that will not be offered in the current year are so noted. There may be courses offered in the current year for which information was not available at the time of this catalog printing. For the most up-to-date and complete information regarding course offerings, faculty, status and divisional requirements, please consult the Tri-Co Course Guide, which can be found on the College website at http://www.trico.haverford.edu.

## **ANTH B253 Childhood in the African Experience**

An overview of cultural contexts and indigenous literatures concerning the richly varied experience and interpretation of infancy and childhood in selected regions of Africa. Cultural practices such as pregnancy customs, naming ceremonies, puberty rituals, sibling relationships, and gender identity are included. Modern concerns such as child abuse, street children, and other social problems of recent origin involving children are considered in terms of theoretical approaches current in the social sciences. Prerequisites: anthropology major, any social sciences introductory course, Africana studies concentration, or permission of instructor.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Kilbride, P. Not offered in 2011-12.

## **ANTH B341 Cultural Perspectives on Marriage and Family**

This course considers various theoretical perspectives that inform our understanding of cross-cultural constructions of marriage and the family. Sociobiology, deviance, feminism, social constructionism, and cultural evolutionary approaches will be compared using primarily anthropological-ethnographic case examples. Cultural material from Africa and the United States will be emphasized. Applications will emphasize current U.S. socially contested categories such as same-sex marriage, plural marriage, gender diversity, divorce, and the blended family. Prerequisites: any history, biology, or social science major.

Division I: Social Science 1.0 units Kilbride.P. Not offered in 2011-12.

## ARCH B101 Introduction to Egyptian and Near Eastern Archaeology: Egypt and Mesopotamia

A historical survey of the archaeology and art of the ancient Near East and Egypt. Division III: Humanities Inquiry into the Past (IP) Cross-Cultural Analysis (CC) 1.0 units Evans, J., Ataç, M-A. Not offered in 2011-12.

## **ARCH B230 Archaeology and History of Ancient Egypt**

A survey of the art and archaeology of ancient Egypt from the Pre-Dynastic through the Graeco-Roman periods, with special emphasis on Egypt's Empire and its outside connections, especially the Aegean and Near Eastern worlds.

Division III: Humanities Inquiry into the Past (IP) 1.0 units Ataç, M-A.

#### **CITY B237 Urbanization in Africa**

The course examines the cultural, environmental, economic, political, and social factors that contributed to the expansion and transformation of preindustrial cities. colonial cities, and cities today. We will examine various themes, such as the relationship between cities and societies; migration and social change; urban space, health problems, city life, and women. Division I: Social Science

CROSS-LISTED AS HIST-B237 1.0 units Ngalamulume,K. Not offered in 2011-12.

#### **CITY B266 Schools in American Cities**

This course examines issues, challenges, and possibilities of urban education in contemporary America. We use as critical lenses issues of race, class, and culture; urban learners, teachers, and school systems; and restructuring and reform. While we look at urban education nationally over several decades, we use Philadel

## CITY B338 The New African Diaspora: African and Caribbean Immigrants in the United States

An examination of the socioeconomic experiences of immigrants who arrived in the United States since the landmark legislation of 1965. After exploring issues of development and globalization at "home" leading to migration, the course proceeds with the study of immigration theories. Major attention is given to the emergence of transnational identities and the transformation of communities, particularly in the northeastern United States.

Division I: Social Science CROSS-LISTED AS SOCL-B338 1.0 units Osirim,M. Not offered in 2011-12.

#### **COML B279 Introduction to African Literature**

This course examines major themes in modern Middle Eastern literatures through selected prose works by prominent modern writers in translation from Arabic, Hebrew, Persian and Turkish. Topics include tradition versus modernity, gender and the family, the individual and the state, and the impact of regional confict. Division III: Humanities

CROSS-LISTED AS ENGL-B279 1.0 units Beard,L. Not offered in 2011-12.

## **COML B388 Contemporary African Fiction**

Noting that the offcial colonial independence of most African countries dates back only half a century, this course focuses on the fctive experiments of the most recent decade. A few highly controversial works from the 90's serve as an introduction to very recent work. Most works are in English. To experience depth as well as breadth, there is a small cluster of works from South Africa. With novels and tales from elsewhere on the huge African continent, we will get a glimpse of "living in the present" in history and letters.

Division III: Humanities CROSS-LISTED AS ENGL-B388 1.0 units Beard,L. Not offered in 2011-12.

## **ECON B324 The Economics of Discrimination and Inequality**

Explores the causes and consequences of discrimination and inequality in economic markets. Topics include economic theories of discrimination and inequality, evidence of contemporary race- and gender-based inequality, detecting discrimination, and identifying sources of racial and gender inequality. Additionally, the instructor and students will jointly select supplementary

topics of specific interest to the class. Possible topics include: discrimination in historical markets, disparity in legal treatments, issues of family structure, and education gaps. Prerequisites: At least one 200-level applied microeconomics elective, Economics 203 or 204, and Economics 200 or 202.

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#### **EDUC B200 Critical Issues in Education**

Designments who the frst course for students interested in pursuing one of the options offered through the Education Program, this course is also open to students who

thinking about, literature. Might our attending to such texts alter our sense of what literature is? Division III: Humanities Critical Interpretation (CI) 1.0 units Dalke.A. Not offered in 2011-12.

#### **ENGL B234 Postcolonial Literature in English**

This course will survey a broad range of novels and poems written while countries were breaking free of British colonial rule. Readings will also include cultural theorists interested in defining literary issues that arise from the postcolonial situation.

Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS COML-B234 1.0 units Tratner,M. Not offered in 2011-12.

### **ENGL B235 Reading Popular Culture: Freaks**

This course traces the iconic fgure of the "freak" in American culture, from 19th c. sideshows to the present. Featuring literature and flms that explore "extraordinary Others", we will fesh out the ways in which our current understandings of gender, sexuality, normalcy, and race are constituted through images of "abnormality." Division III: Humanities 1.0 units Schneider, S.

## **ENGL B262 Survey in African American Literature**

Pairing canonical African American fction with theoretical, popular, and flmic texts from the late-19th Century through to the present day, we will address the ways in which the Black body, as cultural text, has come to be both constructed and consumed within the nation's imagination and our modern visual regime.

Division III: Humanities Critical Interpretation (CI) 1.0 units Schneider, S.

ENGL B263 Toni Morrison and the Art M M

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**ENGL B346 Theories of Modernism** 

## 72 Africana Studies

international contexts, the political economy, history and practice of post-colonial development aid, focusing (not exclusively) on the countries of South Asia (Afghanistan,

Africana Studies courses currently offered at Haverford include:

## Fall 2011

ANTH H249	Colonialism, Law, Human Rights in Africa
ENGL H265	African American Literature
HIST H114	Origins of the Global South
HIST H243	African American Political History Since 1865
ICPR H101	Introduction to African and Africana Studies
POLS H345	Islam, Democracy and Development
RELG H137	Black Religion and Liberation Theology

	Islam, Democracy and Development Black Religion and Liberation Theology
Spring 2012	
ANTH H155	Themes in the Anthropology of Religion
BIOL H124	Perspectives in Biology: Tropical Infectious Disease
ENGL H270	Portraits in Black: The Infuence of an Emergent African-American Culture
ENGL H275	Thinking Globally, Writing Locally
ENGL H363	Topics in American Literature
POLS H235	African Politics
RELG H132	Varieties of African American Religious Experience
RELG H242	Topics in Religion and Intellectual History: The Religious Writings of James Baldwin

SPAN H340 The Moor in Spanish Literature

## **ANTHROPOLOGY**

Students may complete a major or a minor in Anthropology. Within the major, students may complete a concentration in geoarchaeology.

## **Faculty**

Richard Davis, Professor

Philip Kilbride, Professor (on leave semester II)

Melissa Pashigian, Associate Professor and Chair

Denise Su, Assistant Professor

Amanda Weidman, Assistant Professor

Anthropology is a holistic study of the human condition in both the past and the present. The anthropological

## **Concentration in Geoarchaeology**

The Department of Anthropology participates with Classical and Near Eastern Archaeology and Geology in offering a concentration within the major in geoarchaeology.

## **Cooperation with Other Programs**

The Department of Anthropology actively participates and regularly contributes to the minors in Africana Studiibp A

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Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units Gallup-Diaz,I. Not offered in 2011-12.

#### **ANTH B203 Human Ecology**

The relationship of humans with their environment; culture as an adaptive mechanism and a dynamic component in ecological systems. Human ecological perspectives are compared with other theoretical orientations in anthropology. Prerequisites: ANTH 101, 102, or permission of instructor.

Division I: Social Science Cross-Cultural Analysis (CC) Counts toward Environmental Studies minor 1.0 units Davis, R.

## **ANTH B204 North American Archaeology**

For millennia, the North American continent has been home to a vast diversity of Native Americans. From the initial migration of big game hunters who spread throughout the continent more than 12,000 years ago to the high civilizations of the Maya, Teotihuacan, and Aztec, there remains a rich archaeological record that refects the ways of life of these cultures. This course will introduce the culture history of North America as well as explanations for culture change and diversification. The class will include laboratory study of North American archaeological and ethnographic artifacts from the College's Art and Archaeology collections.

Division I: Social Science Inquiry into the Past (IP) 1.0 units Davis.R. Not offered in 2011-12.

## ANTH B206 Confict and Confict Management: A **Cross-Cultural Approach**

This course examines cross-cultural differences in the levels and forms of confict and its management through a wide range of cases and alternative theoretical perspectives. Conficts of interest range from the interpersonal to the international levels and an important question is the relevance of confict and its management in small-scale societies as a way to understand political confict and dispute settlement in the United States and modern industrial settings. Prerequisite: one course in political science, anthropology, or sociology.

Division I: Social Science CROSS-LISTED AS POLS-B206 Counts toward Peace & Confict Studies concentration 1.0 units

#### **ANTH B214 Third World Feminisms**

The course focuses on the fgure of the "exploited Filipina body" as a locus for analyzing the politics of gendered transnational labor within contemporary capitalist globalization. We will examine gendered migrant labor, the international sex trade, the "traffc in women" discourse, feminist and women's movements, and transnational feminist theory.

Division I: Social Science Cross-Cultural Analysis (CC) Counts toward Gender and Sexuality Studies concentration 1.0 units Velasco,G. Not offered in 2011-12.

## **ANTH B220 Methods and Theory in Archaeology**

An examination of techniques and theories archaeologists use to transform archaeological data into statements about patterns of prehistoric cultural behavior, adaptation and culture change. Theory development, hypothesis formulation, gathering of archaeological data and their interpretation and evaluation are discussed and illustrated by examples. Theoretical debates current in American archaeology are reviewed and the place of archaeology in the general feld of anthropology is discussed. Prerequisite: ANTH 101 or permission of instructor.

Division I: Social Science Inquiry into the Past (IP) 1.0 units Davis,R.

## **ANTH B223 Anthropology of Dance**

This course surveys ethnographic approaches to the study of dance in a variety of contemporary and historical contexts, including ballet in the Soviet Union, a range of traditional dances of Cambodia and Liberia in circumstances of war and exile, capoeira in today's Brazil, and social dances in North America. Recognizing dance as a kind of shared cultural knowledge and drawing on theories and literature in anthropology, dance and related felds such as history, and ethnomusicology, we will examine dance's relationship to social structure, ethnicity, gender, spirituality and politics. Lectures, discussion, media, and guest speakers are included. Prerequisite: an anthropology course, or a dance lecture/seminar course, or permission of the instructor.

Division I or Division III CROSS-LISTED AS ARTD-B223 1.0 units Shapiro-Phim, T.

# **ANTH B226 Post Communist Transitions in Eastern Europe**

This comparison of pre- and post-communist social formations in Eastern Europe in specific nation-states considers how social changes influenced spheres of life, such as family, morality, religion, economic institutions and nationalism. The course will take an interdisciplinary perspective, drawing from literature of social sciences, especially anthropology. Prerequisite: an introductory social science course, or permission of the instructor.

Division I: Social Science CROSS-LISTED AS HIST-B216 1.0 units Hyánková,T. Not offered in 2011-12.

## **ANTH B229 Topics in Comparative Urbanism**

This is a topics course. Topics vary. Enrollment limited to 25 with preference to Cities majors.

Division I: Social Science

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Counts toward Environmental Studies minor Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units McDonogh,G. Not offered in 2011-12.

#### **ANTH B231 Cultural Profles in Modern Exile**

This course investigates the anthropological, philosophical, psychological, cultural, and literary aspects of modern exile. It studies exile as experience and metaphor in the context of modernity, and examines the structure of the relationship between imagined/remembered homelands and transnational identities, and the dialectics of language loss and bi- and multi-lingualism. Particular attention is given to the psychocultural dimensions of linguistic exclusion and loss. Readings of works by Julia Alvarez, Anita Desai, Sigmund Freud, Milan Kundera, Friedrich Nietzsche, Salman Rushdie, and others.

context that infuences food acquisition and choice. Material covered will primarily be from an evolutionary and cross-cultural perspective. Also included will be a

## **ANTH B270 Geoarchaeology**

Societies in the past depended on our human ancestors' ability to interact with their environment. Geoarchaeology analyzes these interactions by combining archaeological and geological techniques to document human behavior while also reconstructing the past environment. Course meets twice weekly for lecture, discussion of readings and hands on exercises. Prerequisite: one course in anthropology, archaeology or geology. CROSS-LISTED AS ARCH-B270 CROSS-LISTED AS GEOL-B270 1.0 units Barber, D., Magee, P. Not offered in 2011-12.

## **ANTH B274 Bioarchaeology**

An introduction to human osteological analysis, a subfeld of human anatomy. Lab work emphasizes identification of landmark features on each bone, and techniques of sexing and aging human skeletal material. Lecture introduces skeletal biology and covers the fundamentals of bioarchaeological analysis. Topics include nutrition, diet, stress and deprivation, determination of gender and age, population affnities, and principles of paleopathological identification. Prerequisite: ANTH B101 or equivalent, or permission of the instructor. Inquiry into the Past (IP) CROSS-LISTED AS ARCH-B274 1.0 units Rhodes,J. Not offered in 2011-12.

ANTH H H fered i

## **ANTH B341 Cultural Perspectives on Marriage and Family**

This course considers various theoretical perspectives that inform our understanding of cross-cultural constructions of marriage and the family. Sociobiology, deviance, feminism, social constructionism, and cultural evolutionary approaches will be compared using primarily anthropological-ethnographic case examples. Cultural material from Africa and the United States will be emphasized. Applications will emphasize current U.S. socially contested categories such as same-sex marriage, plural marriage, gender diversity, divorce, and the blended family. Prerequisites: any history, biology, or social science major.

Division I: Social Science Counts toward Africana Studies concentration 1.0 units Kilbride.P.

Not offered in 2011-12.

## **ANTH B347 Advanced Issues in Peace and Confict Studies**

An in-depth examination of crucial issues and particular cases of interest to advanced students in peace and confict studies through common readings and student projects. Various important theories of confict and confict management are compared and students undertake semester-long feld research. The second half of the semester focuses on student research topics with continued exploration of confict-resolution theories and research methods. Prerequisite: POLS 206, 111, or Haverford's POLS 247.

CROSS-LISTED AS POLS-B347

Counts toward Peace & Confict Studies concentration 1.0 units

Neuman.T.

Not offered in 2011-12.

### **ANTH B350 Advanced Topics in Gender Studies**

This is a topics course on the gendered perspective. Life stories, case studies, and ethnographic methodology will be featured. Topics vary.

Division I: Social Science

Counts toward Gender and Sexuality Studies concentration

1.0 units

Kilbride, P.

Not offered in 2011-12.

## ANTH B354 Identity, Ritual and Cultural Practice in **Contemporary Vietnam**

This course focuses on the ways in which recent economic and political changes in Vietnam infuence and shape everyday lives, meanings and practices there. It explores construction of identity in Vietnam through topics including ritual and marriage practices, gendered socialization, social reproduction and memory. Prerequisite: at least ANTH B102 or permission of the instructor. Division I: Social Science **CROSS-LISTED AS EAST-B354** 1.0 units Pashigian, M.

#### ANTH B359 Topics in Urban Culture and Society

This is a topics course. Course content varies. Division I or Division III CROSS-LISTED AS CITY-B360 CROSS-LISTED AS HART-B359 CROSS-LISTED AS SOCL-B360 Counts toward Environmental Studies minor 1.0 units McDonogh, G., Hayes-Conroy, A., Arbona, J. Not offered in 2011-12.

Not offered in 2011-12.

## **ANTH B360 Advanced Topics in Human Evolution**

This course will explore central issues in the study of human origins. We will examine Miocene hominoids from Africa, Asia, and Europe to better understand the ongoing debate about the origins of the hominin lineage, particularly issues pertaining to the location and hominoid group from which hominins arose. We will also look at the earliest putative hominins from Africa within the context of the earlier Miocene hominoids for a better understanding of their taxonomic position. Prerequisite: ANTH 209.

Division I: Social Science

1.0 units Su.D. Not offered in 2011-12.

## ANTH B382 Religious Fundamentalism in the Global Era

Through a comparison of Jewish, Islamic, Christian and Hindu political movements, the course seeks to investigate the religious turn in national and transnational contexts. We will also seek to fnd commonalities and differences in religious movements, and religious regimes, while considering the aspects of globalization which usher in new kinds of transnational affliation. Prerequisite: An introductory course in Anthropology, Political Science or History or permission of the instructor. Division I or Division III

CROSS-LISTED AS HIST-B382

CROSS-LISTED AS POLS-B382

Counts toward Middle East Studies concentration Counts toward Peace & Confict Studies concentration 1.0 units

Neuman.T.

Not offered in 2011-12.

## **ARABIC**

## **Faculty**

Fernaz Perry, Drill Instructor

Camelia Suleiman, Lecturer and Coordinator

Arabic language instruction is offered through Tri-College cooperation. Courses are available at Bryn Mawr, Haverford, and Swarthmore Colleges. The teaching of Arabic is a component of the three colleges' efforts to increase the presence of the Middle East in their cur

## **ARTS PROGRAM**

Students may complete a minor in Creative Writing, Dance or Theater and may submit an application to major in Creative Writing, Dance or Theater through the independent major program. Students may complete a major in Fine Arts or a major or minor in Music at Haverford College. English majors may complete a concentration in Creative Writing.

## **Faculty**

Madeline Cantor, Senior Lecturer

Linda Caruso Haviland, Associate Professor and Director of Dance and Chair of the Arts Program

James Christy, Lecturer

Nancy Doyne, Instructor

Thomas Ferrick, Lecturer

Daisy Fried, Instructor

Karl Kirchwey, Professor (on leave semesters I and II)

Mark Lord, Professor and Director of Theater (on leave semester II)

Elizabeth Mosier, Lecturer

KapenKRchswell, Visiting Assistant Professor

Catharine Slusar, Instructor

Daniel Smith, Instructor

Daniel ant Professor

## **ARTW B125 Writing Science**

How does scientifc research make its way out of the lab? Science translates from research experience to journals written for the expert and is often translated again for more general audiences—appearing in venues

mastery of character, story and structure. Students will complete bi-weekly playwriting assignments of 10-12 pages and, ultimately, a one-act play of 30-40 pages. Readings include plays by Beckett, Chekhov, Lorraine Hansberry, Ibsen, Arthur Miller, Tennessee Williams, August Wilson and others. Prerequisite: ARTW 262; or suitable experience in directing, acting or playwriting; or submission of a work sample of 10 pages of dialogue.

Division III: Humanities **CROSS-LISTED AS ARTT-B362** 

1.0 units Herzog, A. Not offered in 2011-12.

#### **ARTW B364 Longer Fictional Forms**

An advanced workshop for students with a strong background in fction writing who want to write longer works: the long short story, novella and novel. Students will write intensively, and complete a long story, novel or novella (or combination thereof) totaling up to 20,000 words. Students will examine the craft of their work and of published prose. Prerequisite: ARTW 260 or proof of interest and ability.

Division III: Humanities 1.0 units

Torday, D.

## **ARTW B382 Poetry Master Class**

Four leading contemporary poets who are also accomplished teachers will each conduct a three-weeklong unit in this course. Students will have their poems reviewed by each of the visiting poets, who will also present a public reading of their work. Poet-teachers will include Cornelius Eady, Marilyn Hacker, Mary Jo Salter and Gerald Stern. A writing sample of 5-7 poems must be submitted to the English Department by the end of the Fall 2008 semester to be considered for this course. Prerequisite: ARTW B231 or ART W B261 (ARTW B361 is also strongly recommended) or equivalent proficiency in writing text-based verse.

Division III: Humanities 1.0 units Kirchwey, K. Not offered in 2011-12.

## **ARTW B403 Supervised Work**

Students who have had a Creative Writing Major approved through the Independent Major Program will work with a member of the Creative Writing Program faculty on a semester-long 403 (Independent Study) as a fnal project their senior year. Highly qualifed Creative Writing minors and concentrators may petition the program to complete an independent study, subject to the availability of faculty to supervise such projects. 1.0 units

Torday, D., Kirchwey, K.

## **DANCE**

Dance is not only an art and an area of creative impulse and action; it is also a significant and enduring human behavior that can serve as a core of creative and scholarly inquiry within the liberal arts. The Program offers full semester courses in progressive levels of ballet and modern and jazz as well as a full range of technique courses in diverse genres and various traditions. Several performance opportunities are available to students ranging from our Dance Outreach Project, which travels to schools throughout the Philadelphia region, to our Spring Concert for which students work with professional choreographers or reconstructors and perform in our newly renovated theater. We also offer lecture/seminar courses designed to introduce students to dance as a vital area of academic inquiry that examine dance within Western traditions as well as courses that extend or locate themselves beyond those social or theatrical traditions.

Students can take single courses in dance, can minor in dance, or submit an application to major through the independent major program. The core academic curriculum that serves as the basis for our minor or our independent major includes intermediate or advanced technique courses, performance ensembles, dance composition, independent work, and courses in dance research or analysis.

## **Minor and Major Requirements**

Requirements for the dance minor are six units of coursework: three required (ARTD 140, 142, and one credit which may be distributed among the following: 230, 231, 232, 330, 331 or 345); three approved electives; and requisite attendance at a prescribed number of performances/events. The major requires eleven courses, drawn primarily from our core academic curriculum and including: ARTD 140 and one additional dance lecture/seminar course; ARTD 142; one 0.5 technique course each semester after declaring the major distributed among ARTD 230, 231, 232, 330, and 331). The major also requires attendance at a prescribed number of performances/events, demonstration of basic writing competency in dance, and a senior capstone experience. With the advisor's approval, one elective in the minor and two electives in the major may be selected from allied Tri-College departments. In both the minor and the major, students may choose to emphasize one aspect of the feld, but must frst consult with the dance faculty regarding their course of study.

## **Technique and Performance Courses**

The Dance Program offers a full range of dance instruction including courses in ballet, modern, jazz, and African as well as techniques developed from other cultural art and social forms such as famenco, Classical Indian,

feedback on weekly choreographic assignments and readings contributes to analyzing and refning choreography. Concurrent attendance in any level technique course is required.

Division III: Humanities Critical Interpretation (CI) 1.0 units Vriend, L.

## **ARTD B223 Anthropology of Dance**

This course surveys ethnographic approaches to the study of dance in a variety of contemporary and historical contexts. Recognizing dance as a kind of shared cultural knowledge and drawing on theories and literature in anthropology, dance and related felds, students will examine the relationship of dance to social structure, ethnicity, gender, spirituality, and politics. Some of the ethical and practical issues related to feld research of expressive culture will also be introduced. Lectures, discussion, media, and guest speakers are included. Prerequisite: an anthropology course, or a dance lecture/seminar course, or permission of the instructor. Division I or Division III Critical Interpretation (CI) Cross-Cultural Analysis (CC) CROSS-LISTED AS ANTH-B223 1.0 units Shapiro-Phim, T.

## ARTD B230 Intermediate Technique: Modern

Intermediate level dance technique courses focus on expanding the movement vocabulary, on introducing movement phrases that are increasingly complex and demanding, and on further attention to motional dynamics and spatial contexts. Students at this level are also expected to begin demonstrating an intellectual and kinesthetic understanding of these technical challenges and their actual performance. Students will be evaluated on their openness and commitment to the learning process, increased understanding of the technique, and demonstration in class of their technical skills and stylistic progress as articulated within the feld.

Division III: Humanities 0.5 units Stortz, M., Cantor, M.

## **ARTD B231 Intermediate Technique: Ballet**

Intermediate level dance technique courses focus on expanding the ballet vocabulary, on introducing movement phrases that are increasingly complex and demanding, and on further attention to motional dynamics and spatial contexts. Students at this level are also expected to begin demonstrating an intellectual and kinesthetic understanding of these technical challenges and their actual performance. Students will be evaluated on their openness and commitment to the learning process, increased understanding of the technique, and demonstration in class of their technical skills and stylistic progress as articulated within the feld. Division III: Humanities 0.5 units

Mintzer,L.

## **ARTD B232 Intermediate Technique: Jazz**

Intermediate level dance technique courses focus on expanding the jazz vocabulary, on introducing movement phrases that are increasingly complex and demanding, and on further attention to motional dynamics and spatial contexts. Students at this level are also expected to begin demonstrating an intellectual and kinesthetic understanding of these technical challenges and their actual performance. Students will be evaluated on their openness and commitment to the learning process, increased understanding of the technique, and demonstration in class of their technical skills and stylistic progress as articulated within the feld. Division III: Humanities

0.5 units Goodman, Y.

## **ARTD B240 Dance History I: Roots of Western Theater Dance**

This course investigates historical and cultural forces affecting the development and functions of pre-20thcentury dance, with particular emphasis given to Western Theater dance. The development of dance forms and practices will be introduced chronologically but they will also be considered theoretically as social, aesthetic, and personal phenomena and as arising, in part, from the impact of global interchanges. Students will be introduced to both traditional and more contemporary models of historiography with particular reference to the changing modes of documenting, researching and analyzing dance. In addition to lectures and discussion, the course will include flm, video, slides, and some movement experiences.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) Counts toward Gender and Sexuality Studies concentration 1.0 units Caruso Haviland.L. Not offered in 2011-12.

## ARTD B241 Dance History II: A History of **Contemporary Western Theater Dance**

This course investigates the history of dance with particular emphasis on its development in the 20th and 21st centuries as a Western Theatre Art form within a broader context of global art and culture. The course investigates the historical and cultural forces that shape both the form and function of dance as well as the reciprocal relationship of dance to or impact on those

same forces. Dance will be considered both chronologically and theoretically as cultural, social, aesthetic, and personal phenomena. In addition to lectures and discussion, the course will include flm, video, slides, and some movement experiences.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units
Caruso Haviland,L.

## **ARTD B242 Dance Composition II**

This course builds on work accomplished in Composition I and develops an understanding of and skill in the theory and craft of choreography. This includes deepening movement invention skills; exploring form and structure; investigating sources for sound, music, text and language; developing group design; and broadening critical understanding. Students will work on a selected number of projects and will have some opportunity to revise and expand work. Readings and viewings will be assigned and related production problems will be considered. Concurrent attendance in any level technique course is required. Division III: Humanities Critical Interpretation (CI) 1.0 units Cantor, M.

## **ARTD B250 Performing the Political Body**

Artists, activists, intellectuals, and ordinary people have used dance and performance to support political goals and ideologies or to perform social or cultural interventions in the private and public spheres. We will focus on how dance is a useful medium for both embodying and analyzing ideologies and practices of power particularly with reference to gender, class, and ethnicity. In addition to literary, anthropological, and political texts, the course

## **ARTD B342 Advanced Choreography**

Independent study in choreography under the guidance of the instructor. Students are expected to produce one major choreographic work and are responsible for all production considerations. Concurrent attendance in any level technique course is required.

Division III: Humanities

1.0 units

Caruso Haviland, L., Cantor, M.

## **ARTD B345 Dance Ensemble**

Dance ensembles are offered in Ballet, Modern, Jazz, African, and Dance Outreach and are designed to offer students significant opportunities to develop dance technique, particularly in relationship to dance as a performance art. Students audition for entrance into individual ensembles. Original works choreographed by faculty or guest choreographers or works reconstructed/restaged from classic or contemporary repertories are rehearsed and performed in concert. The Dance Outreach ensemble tours Philadelphia schools with a choreographed lecture-demonstration and performance. This course is suitable for intermediate and advanced level dancers. These and additional ensembles, such as Hip-hop, may be taken, instead, for Physical Education credit. Division III: Humanities 0.5 units

Cantor, M., Cruz, H., Caruso Haviland, L., Staff

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formances are held both on and off campus; students have the opportunity to perform in master classes with internationally known chamber musicians.

The Bryn Mawr Chamber Music Society offers extracurricular opportunities for experienced Bryn Mawr and Haverford students, faculty and staff to perform a variety of chamber works in a series of concerts held in the Music Room.

## **THEATER**

The curricular portion of the Bryn Mawr and Haverford Colleges' Theater Program focuses on the point of contact between creative and analytic work. Courses combine theory (reading and discussion of dramatic literature, history and criticism) and practical work (creative exercises, scene study and performance) to provide viable theater training within a liberal-arts context.

## **Minor Requirements**

Requirements for the minor in Theater are six units of course work, three required (ARTT 150, 251 and 252) and three elective. Students must consult with the Theater faculty to ensure that the necessary areas in the feld are covered. Students may submit an application to major in Theater through the independent major program.

#### **Theater Performance**

Numerous opportunities exist to act, direct, design and work in technical theater. In addition to the Theater Program's mainstage productions, many student theater groups exist that are committed to musical theater, improvisation, community outreach, Shakespeare, flm and video work, etc. All Theater Program productions are open and casting is routinely blind with respect to race and gender.

#### **ARTT B150 Introduction to Theater**

An exploration of a wide range of dramatic works and history of theater through research, analysis and discussion to develop understanding and foundations for a theatrical production.

Division III: Humanities 1.0 units Staff

#### **ARTT B230 Topics in American Drama**

Considers American plays of the 20th century, reading major playwrights of the canon alongside other dramatists who were less often read and produced. Will also study later 20th century dramatists whose plays both develop and resist the complex foundation established by canonical American playwrights and how American drama refects and responds to cultural and political

shifts. Considers how modern American identity has been constructed through dramatic performance, considering both written and performed versions of these plays.

Division III: Humanities CROSS-LISTED AS ENGL-B230 1.0 units Hemmeter,G. *Not offered in 2011-12.* 

#### **ARTT B241 Modern Drama**

A survey of modern drama from the 19th century to the present, beginning with Georg Buchner and ending with living writers. We will explore the formation of modern sensibilities in playwriting through careful study of the evolution of dramatic form and the changing relationship between written text and performance.

Division III: Humanities CROSS-LISTED AS ENGL-B241 1.0 units Lord,M. Not offered in 2011-12.

## **ARTT B250 Twentieth-Century Theories of Acting**

An introduction to 20th-century theories of acting emphasizing the intellectual, aesthetic, and sociopolitic

## 94 Astronomy

into theater, Beckett's infuences (particularly silent flm) and collaborations, and the relationship between the texts of the major dramatic works and the development of both modern and postmodern performance tech

physics or astronomy. Astronomy majors may pursue a double major or a minor in physics. A concentration in scientific computing is available for astronomy and astrophysics majors. The department coordinator for this concentration is Beth Willman.

## **Major Requirements**

- 1. Physics 105 (or 101), Physics 106 (or 102), Physics 213, Physics 214.
- 2. Two mathematics courses; Mathematics 121 and all 200 level or higher mathematics courses can be used to satisfy this requirement.

3.

## **ASTR H206 Introduction to Astrophysics II**

Introduction to the study of: the structure and formation of the Milky Way galaxy; the interstellar medium; the properties of galaxies and their nuclei; and cosmology including the Hot Big Bang model. Prerequisite: Astr

physiology and animal behavior. Lecture three hours, laboratory three hours a week. There are no prerequisites for this course.

Division II with Lab

Scientif c Investigation (SI)

Counts toward Neural and Behavioral Sciences concentration

0.5 units

Brodfuehrer, P., Franklin, W.

## **BIOL B113 Biological Exploration IV**

BIOL 110-113 are introductory-level courses, designed to encourage students to explore the feld of biology at multiple levels of organization: molecular, cellular, organismal, and ecological. Each course will explore these areas of biology through a unifying theme. This year, Biology 113 will examine the proximate and ultimate explanations of ecological case studies that every biologist should know. Lecture three hours, laboratory three hours a week. There are no prerequisites for this course.

Division II with Lab Scientifc Investigation (SI) Counts toward Neural and Behavioral Sciences concentration 0.5 units

## **BIOL B220 Ecology**

A study of the interactions between organisms and their environments. The scientifc underpinnings of current environmental issues, with regard to human impacts, are also discussed. Students become familiar with eco-

## 100 Biology

exponential growth and ending with spatially-explicit individual-based simulations. Students will design and implement a fnal project from their own disciplines. Six hours of combined lecture/lab per week. Division II and Quantitative Skills Scientifc Investigation (SI) Quantitative Methods (QM) CROSS-LISTED AS CMSC-B250 CROSS-LISTED AS GEOL

## **BIOL B313 Integrative Organismal Biology I**

The frst semester of a two-semester course focusing on how organisms cope with environmental challenges by investigating the requirements for life at the level of individual cells and multi-cellular organisms, the anatomical and physiological properties of cells, tissues and organ systems, and how these properties allow organisms to interact successfully with their environment. Two three-hour lecture/laboratory sessions per week. Prerequisites: two quarters of BIOL 110-113 and one 200-level biology course.

1.0 units Gardiner,S., Brodfuehrer,P. Not offered in 2011-12.

#### **BIOL B314 Integrative Organismal Biology II**

The second semester of Integrative Organismal Biology. Two three-hour lecture/laboratory sessions per week. Prerequisite: BIOL 313 or permission of instructor. 1.0 units

Gardiner, S., Brodfuehrer, P. *Not offered in 2011-12.* 

#### **BIOL B320 Evolutionary Ecology**

This course will examine how phenotypic variation in organisms is optimized and constrained by ecological and evolutionary factors. We will cover concepts and case studies in life history evolution, behavioral ecology, and population ecology with an emphasis on both mathematical and experimental approaches. Recommended Prerequisites: BIOL B111-B114 or BIOL B220 Quantitative Skills

Counts toward Environmental Studies minor 1.0 units Sears,M.

## **BIOL B321 Neuroethology**

This course provides an opportunity for students to understand the neuronal basis of behavior through the examination of how particular animals have evolved neural solutions to specific problems posed to them by their environments. The topics will be covered from a research perspective using a combination of lectures, discussions and student presentations. Prerequisite: BIOL 202, PSYC 218 or PSYC 217 at Haverford. Counts toward Neural and Behavioral Sciences concentration

1.0 units Brodfuehrer,P. Not offered in 2011-12.

## **BIOL B326 From Channels to Behavior**

Introduces the principles, research approaches, and methodologies of cellular and behavioral neuroscience. The frst half of the course will cover the cellular

properties of neurons using current and voltage clamp techniques along with neuron simulations. The second half of the course will introduce students to state-of-the-art techniques for acquiring and analyzing data in a variety of rodent models linking brain and behavior. Prerequisites: two quarters of BIOL 110-113 and one of the following: PSYC 218, PSYC 217 at Haverford, or BIOL 202.

CROSS-LISTED AS PSYC-B326
Counts toward Neural and Behavioral Sciences concentration
1.0 units
Thomas,E., Brodfuehrer,P.
Not offered in 2011-12.

## **BIOL B328 Analysis of Geospatial Data Using GIS**

An introduction to analysis of geospatial data, theory, and the practice of geospatial reasoning. As part of this introduction students will gain experience in using one or more GIS software packages and be introduced to data gathering in the feld by remote sensing. Each student is expected to undertake an independent project that uses the approaches and tools presented.

CROSS-LISTED AS CITY-B328 CROSS-LISTED AS ARCH-B328 CROSS-LISTED AS GEOL-B328 Counts toward Environmental Studies minor 1.0 units Consiglio,D., Fitz-Patrick,D., Reese,B. Not offered in 2011-12.

## **BIOL B336 Evolutionary Biology: Advanced Topics**

A seminar course on current issues in evolution. Discussion based on readings from the primary literature. Topics vary from year to year. One three-hour discussion a week. Prerequisite: BIOL 236 or permission of instructor. CROSS-LISTED AS ANTH-B336 CROSS-LISTED AS GEOL-B336 1.0 units Gardiner,S.

## **BIOL B340 Cell Biology**

A lecture course with laboratory emphasizing current knowledge in cell biology. Among topics discussed are cell membranes, cell surface specializations, cell motility and the cytoskeleton, regulation of cell activity, energy generation and protein synthesis. Laboratory experiments are focused on studies of cell structure, making use of techniques in cell culture and immunocytochemistry. Lecture three hours, laboratory four hours a week. Prerequisites: BIOL 201 or 271, or with permission of instructor. This course may be taken concurrently with CHEM 211.

1.0 units Greif,K.

# BIOL B354 Basic Concepts and Special Topics in Biochemistry

For postbaccalaureate premedical students and nonmajors who meet the pre-requisites. Course does not count toward the biology major, majors should take BIOL B375. Pre-requisites: two quarters of BIOL 110-113 or equivalent, CHEM 211 or permission of the instructor. 1.0 units Porello.S.

#### **BIOL B361 Emergence**

A multidisciplinary exploration of the interactions underlying both real and simulated systems, such as ant colonies, economies, brains, earthquakes, biological evolution, artificial evolution, computers, and life. These emergent systems are often characterized by simple, local interactions that collectively produce global phenomena not apparent in the local interactions.

CROSS-LISTED AS CMSC-B361
1.0 units

Kumar,D., Blank,D., Grobstein,P.

Not offered in 2011-12.

#### **BIOL B364 Developmental Neurobiology**

A lecture/discussion course on major topics in the development of the nervous system. Some of the topics to be addressed are cell generation, cell migration, cell survival and growth, axon guidance and target specificity, synapse formation and behavioral development. Lecture three hours a week. Prerequisite: BIOL 201 or 271. 1.0 units Greif.K.

## BIOL B369 Biochemical Mechanisms of Disease Progression

An interdisciplinary course exploring the biochemical mechanisms involved in disease progression, their theraputic strategies, experimental techniques and challenges facing scientists. Topics will be covered from a research perspective using a combination of lectures, discussions, presentations and group activities. Prerequisites: BIOL B375 or CHEM B242.

Wilent, V.

Not offered in 2011-12.

# **BIOL B375 Integrated Biochemistry and Molecular Biology I**

The frst semester of a two-semester course that focuses on the structure and function of proteins, carbohydrates, lipids and nucleic acids, enzyme kinetics, metabolic pathways, gene regulation and recombinant DNA techniques. Students will explore these topics via lecture, critical reading and discussion of primary literature and laboratory experimentation. Three hours of

lecture, three hours of lab per week. Prerequisite: BIOL 110 and 111, and two semesters of organic chemistry. Division II with Lab 1.0 units

Chander,M.

## BIOL B376 Integrated Biochemistry and Molecular Biology II

This second semester of a two-semester sequence will continue with analysis of nucleic acids and gene regulation through lecture, critical reading and discussion of primary

BiologyThi primary

addition, students write, defend and publicly present one long research paper. Three hours of class lecture and discussion a week, supplemented by frequent meetings with individual students. Current topic description: Organismal biology.

1.0 units
Gardiner,S.

## **BIOL B393 Senior Seminar in Molecular Genetics**

This course focuses on topics of current interest and significance in molecular genetics, such as chromatin

# **BIOL B401 Supervised Research in Neural and Behavioral Sciences**

Laboratory or library research under the supervision of a member of the Neural and Behavioral Sciences committee. Required for those with the concentration. Prerequisite: permission of instructor.

1.0 units

Greif, K., Grobstein, P., Brodfuehrer, P.

## **BIOL B403**

Supervised Laboratory Research in Biology Laboratory research under the supervision of a member of the department. Prerequisite: permission of instructor. 1.0 units

Greif,K., Gardiner,S., Grobstein,P., Brodfuehrer,P., Davis,T., Chander,M., Sears,M.

## **BIOL B425 Praxis III**

Counts toward Praxis Program concentration 1.0 units Greif,K., Grobstein,P.

## **CHEMISTRY**

Students may complete a major or minor in Chemistry. With the major, students may complete a minor of the computational methods or education. Concentrations in biological chemistry, environmental studies or geochem

chemistry elective and GEOL 302 or 397, and by completing BIOL 220 and GEOL 103 and one course listed under "Humans in the Environment" and two courses listed under "Planning and Policy". The courses selected to fulfII this concentration must be approved by the major advisers in Chemistry and Environmental Studies.

## **Concentration in Geochemistry**

Students may receive an A.B. degree in chemistry with a concentration in geochemistry by fulflling the core requirements in chemistry (CHEM 103, 104, 211, 212, 251, 252) and three courses selected from 221, 222, 231 and 242, one advanced course selected from CHEM 322 or 332, and by completing three geology courses selected from GEOL 201, 202, 301 or 302. The courses selected to fulfII this concentration must be approved by the major advisers in Chemistry and Geology.

## A.B./M.A. Program

To earn an M.A. degree in chemistry in the College's A.B./M.A. program, a student must complete the requirements for an undergraduate chemistry major and also must complete six units of graduate level work in chemistry. Of these six units, as many as two units may be undergraduate courses at the 300 level taken for graduate credit (these same two courses may be used to fulf II the major requirements for the A.B. degree), at least two units must be graduate seminars at the 500 level, and two units must be graduate research at the 700 level leading to the submission of an acceptable M.A. thesis. Other requirements are a written fnal examination covering material in the candidate's special feld and an oral examination.

## 3-2 Program in Engineering and **Applied Science**

See the description of the 3-2 Program in Engineering and Applied Science, offered in cooperation with the California Institute of Technology, for earning both an A.B. at Bryn Mawr and a B.S. at Cal Tech.

#### **CHEM B100 The Stuff of Art**

An introduction to chemistry through fne arts, this course emphasizes the close relationship of the fne arts, especially painting, to the development of chemistry and its practice. The historical role of the material in the arts, in alchemy and in the developing science of chemistry, will be discussed, as well as the synergy between these areas. Relevant principles of chemistry will be illustrated through the handling, synthesis and/ or transformations of the material. This course does not count towards chemistry major requirements, and is not suitable for premedical programs. Lecture 90 minutes, laboratory three hours a week. Enrollment limited to 20.

Division II with Lab CROSS-LISTED AS HART-B100 1.0 units Burgmayer,S. Not offered in 2011-12.

## **CHEM B101 Chemistry Fundamentals**

For students with little background in Chemistry. Prepares students for Chemistry 103 by covering problemsolving techniques, mathematics needed for chemistry, atoms, molecules, chemical structures, chemical reactions and solutions. Depending on interest, there may be a topical focus such as drugs and doses, food and energy, or the environment. The course may include Individual student conferences and electronic resources. Offered in the second half of the Fall and Spring semesters. Enrollment is based on performance on a placement test or permission of the instructor. Prerequisite: Quantitative Skills requirement met or concurrent enrollment in a Quantitative Skills course. Division II: Natural Science 1.0 units

Staff, Porello,S.

## **CHEM B103 General Chemistry I**

For students with some background in chemistry. Sections usually have a maximum of 55 students. Topics include aqueous solutions and solubility; the electronic structure of atoms and molecules; chemical reactions and energy; intermolecular forces. Examples discussed in lecture and laboratory workshop include environmental sciences, material sciences and biological chemistry. Lecture three hours and Chemistry workshop three hours a week. The laboratory workshop period will be used for traditional chemical experimentation or related problem solving. The course may include individual conferences, evening problem or peer-led instruction sessions. Prerequisites: Satisfactory performances on the Chemistry Placement Test and on the Quantitative Reasoning Assessment.

Division II with Lab and Quantitative Skills Scientifc Investigation (SI) Quantitative Methods (QM) 1.0 units Lukacs, K., Porello, S., Goldsmith, J.

## **CHEM B104 General Chemistry II**

A continuation of CHEM 103. Topics include chemical reactions; introduction to thermodynamics and chemical equiibria; acid-base chemistry; electrochemistry; chemical kinetics. Lecture three hours, recitation one hour and laboratory three hours a week. May include individual conferences, evening problem or peer-led instruction sessions. Prerequisite: CHEM 103 with a grade of at least 2.0, strong performance on the chemistry placement test.

Division II with Lab and Quantitative Skills Scientifc Investigation (SI)
Quantitative Methods (QM)
1.0 units

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#### **CHEM B231 Inorganic Chemistry**

Bonding theory; structures and properties of ionic solids; symmetry; crystal feld theory; structures, spectroscopy, stereochemistry, reactions and reaction mechanisms of coordination compounds; acid-base concepts; descriptive chemistry of main group elements. Lecture three hours a week. Prerequisite: CHEM 212.

Division II: Natural Science

units

Burgmayer,S.

#### **CHEM B242 Biological Chemistry**

The structure, chemistry and function of amino acids, proteins, lipids, polysaccharides and nucleic acids; enzyme kinetics; metabolic relationships of carbohydrates, lipids and amino acids, and the control of various pathways; protein synthesis. Lecture three hours a week. Prerequisite: CHEM 212.

Division II: Natural Science

1.0 units White,S.

#### CHEM B251 Research Methodology in Chemistry I

This laboratory course integrates advanced concepts in chemistry from biological, inorganic, organic and physical chemistry. Students will gain experience in the use of departmental research instruments and in scientifc literature searches, quantitative data analysis, record-keeping and writing. One hour of lecture and fve hours of laboratory per week. Prerequisite: CHEM 212. Corequisite: CHEM 221 or 242. 0.5 credit/semester. 0.5 units

Burgmayer, S. Goldsmith, J.

#### CHEM B252 Research Methodology in Chemistry II

This laboratory course integrates advanced concepts in chemistry from biological, inorganic, organic and physical chemistry. Students will gain experience in the use of departmental research instruments and in scientifc literature searches, quantitative data analysis, record-keeping and writing. One hour of lecture and fve hours of laboratory per week. Prerequisite: CHEM 212. Corequisite: CHEM 222 or 231.

1.0 units

White, S., Porello, S.

## **CHEM B311 Advanced Organic Chemistry**

A survey of the methods and concepts used in the synthesis of complex organic molecules. Lecture three hours a week. Prerequisites: CHEM 212 and 222.

Division II: Natural Science

1.0 units

Malachowski, B.

Not offered in 2011-12.

#### **CHEM B312 Advanced Organic Chemistry**

Principles of physical organic chemistry with emphasis on reaction mechanisms, reactive intermediates and stereochemistry. Lecture three hours a week. Prerequisites: CHEM 212 and 222.

Division II: Natural Science

1.0 units Mallory, F.

Not offered in 2011-12.

#### **CHEM B315 Medicinal Chemistry**

A survey of topics related to drug discovery including lead discovery, target interactions, structural optimization, drug metabolism, and drug synthesis. The course will engage in an advanced treatment of these topics with particular attention to an understanding of drug design and development on the molecular level. Case studies will be used to illustrate the application of these principles. Discussions may include OxyContin and related opiate analgesics; aspirin and related NSAIDs; penicillin and other antibacterial agents; Tamifu and related anti-virals; Alzheimer's disease drugs; and antidepressants. Prerequisites: CHE 212 or the equivalent. 1.0 units

Malachowski,B. *Not offered in 2011-12.* 

#### **CHEM B321 Advanced Physical Chemistry**

Topics vary. Prerequisites: CHEM 221 and 222 or permission of the instructor. Lecture/seminar three hours per week.

Division II: Natural Science

1.0 units Francl,M.

Not offered in 2011-12.

#### **CHEM B332 Advanced Inorganic Chemistry**

A survey of metals in biology illustrating structural, enzymatic and pharmaceutical applications of transition metals in biological chemistry and including discussion of structural themes and bonding, reaction types, and catalysis. Lecture three hours per week. Prerequisites: CHEM 231 and 242 or permission of the instructor.

Division II: Natural Science

1.0 units

Burgmayer,S.

# **CHEM B334 Organometallic Chemistry**

Fundamental concepts in organometallic chemistry, including structure and bonding, reaction types, and catalysis, and applications to current problems in organic synthesis. Lecture three hours a week. Prerequisite: CHEM B231 or permission from the instructor.

1.0 units

Malachowski, B.

#### 110 Child and Family Studies

of which must be at the 300 level. No more than two courses may be double-counted with a major or other degree credential.

Students will craft a pathway in the minor as they engage in course selection through ongoing discussions with their advisor. Sample pathways might include: political science/child and family law; sociology/educational policy; child and family mental health; depictions of children/families in literature and flm; child and family public health issues; social work/child welfare; anthropology/cross-cultural child and family issues; gender issues affecting children and families; social justice/diversity issues affecting children and families.

The minor also requires participation in at least one semester or summer of volunteer, practicum, praxis, community-based work study, or internship experience

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112	Classical and Near Eastern Archaeology
CL	ASSICAL AND NEAR

advising professor before registration. Students planning to do such research should consult with professors in the department in the spring semester of their junior year or no later than the beginningtof the feedlesemester of Ahe seniolv1 yellalr. M M

# Languages

Majors who contemplate graduate study in classical felds should incorporate Greek and Latin into their programs. Those who plan graduate work in Near Eastern or Egyptian may ta aorsemaduatin

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# ARCH B104 Archaeology of Agricultural and Urban Revolutions

This course examines the archaeology of the two most fundamental changes that have occurred in human society in the last 12,000 years, agriculture and urbanism, and we explore these in Egypt and the Near East as far as India. We also explore those societies that did not experience these changes. Three hours of class, one hour of special topics each week.

Division III: Humanities
Inquiry into the Past (IP)
Cross-Cultural Analysis (CC)
CROSS-LISTED AS CITY-B104
Counts toward Environmental Studies minor
Counts toward Geoarchaeology concentration
1.0 units
Magee,P.

# ARCH B105 Introduction to Greek Art and Archaeology

This course examines the visual arts and material culture of the ancient Greek world, and reviews past and present approaches to archaeological and art historical research in the area. We will focus on the time span of roughly 1,000 years from the so-called Dark Age through the Archaic, Classical, and Hellenistic periods, circa 1100 to 31 B.C.E. We will explore major excavated sites, such as Athens, Delphi, Olympia, and Pergamon, and discuss key examples of architecture, sculpture, painting, mosaics, and portable arts. This is a half-semester, half-credit course. Three hours of class, one hour of special topics each week.

Division III: Humanities Inquiry into the Past (IP) 0.5 units Lindenlauf,A. Not offered in 2011-12.

**ARCH B106 Introduction to Roman Art and** 

and heroes were depicted, developed and transmitted in the visual arts such as vase painting and architectural sculpture, as well as projected into the natural environment.

Division III: Humanities Inquiry into the Past (IP) CROSS-LISTED AS CSTS-B125 CROSS-LISTED AS HART-B125 1.0 units Lindenlauf,A. Not offered in 2011-12.

# ARCH B236 The Archaeology of Syria

Recent excavations in Syria have contributed important

CROSS-LISTED AS ANTH-B270 CROSS-LISTED AS GEOL-B270 1.0 units Barber,D., Magee,P. Not offered in 2011-12.

#### **ARCH B274 Bioarchaeology**

An introduction to human osteological analysis, a subfeld of human anatomy. Lab work emphasizes identification of landmark features on each bone, and techniques of sexing and aging human skeletal material. Lecture introduces skeletal biology and covers the fundamentals of bioarchaeological analysis. Topics include nutrition, diet, stress and deprivation, determination of gender and age, population affinities, and principles of paleopathological identification. Prerequisite: ANTH B101 or equivalent, or permission of the instructor. CROSS-LISTED AS ANTH-B274

1.0 units Rhodes,J.

Not offered in 2011-12.

#### **ARCH B301 Greek Vase-Painting**

This course is an introduction to the world of painted pottery of the Greek world, from the 10th to the 4th centuries B.C.E. We will interpret these images from an art-historical and socio-economic viewpoint. We will also explore how these images relate to other forms of representation. Prerequisite: one course in classical archaeology or permission of instructor.

Division III: Humanities 1.0 units Lindenlauf,A. *Not offered in 2011-12*.

#### **ARCH B303 Classical Bodies**

An examination of the conceptions of the human body evidenced in Greek and Roman art and literature, with emphasis on issues that have persisted in the Western tradition. Topics include the fashioning of concepts of male and female standards of beauty and their implications; conventions of visual representation; the nude; clothing and its symbolism; the athletic ideal; physiognomy; medical theory and practice; the visible expression of character and emotions; and the formulation of the "classical ideal" in antiquity and later times.

Division III: Humanities CROSS-LISTED AS COML-B313 CROSS-LISTED AS HART-B305

Counts toward Gender and Sexuality Studies concentra-

tion 1.0 units Donohue,A. *Not offered in 2011-12.* 

# **ARCH B305 Ancient Athens: Acropolis**

This course is an introduction to the Acropolis of Athens, perhaps the best-known acropolis in the world. We will explore its history, understand and interpret specific monuments and their sculptural decoration and engage in more recent discussions, for instance, on the role the Acropolis played in shaping the Hellenic identity. CROSS-LISTED AS CITY-B305

1.0 units Lindenlauf,A. *Not offered in 2011-12.* 

#### **ARCH B308 Ceramic Analysis**

Pottery is a fundamental means of establishing the relative chronology of archaeological sites and of understanding past human behavior. Included are theories, methods and techniques of pottery description, analysis and interpretation. Topics include typology, seriation, ceramic characterization, production, function, exchange and the use of computers in pottery analysis. Laboratory work on pottery in the department collections. Prerequisite: permission of instructor.

Counts toward Geoarchaeology concentration 1.0 units Magee,P.

# ARCH B312 The Eastern Mediterranean in the Late Bronze Age

This course will cover economic and cultural interactions among the Levant, Cyprus, Anatolia, Egypt, and the Aegean. We will study the politics and powers in the Eastern Mediterranean circa 1500 to 1100 B.C.E.—the Egyptian and Hittite empires, the Mitanni, Ugarit and Syro-Palestinian polities, Cyprus and the Mycenaeans. Topics include: metallurgy, mercantile systems, seafaring, the Sea Peoples, systems collapse, and interpretive issues when working with archaeological and historical sources.

Division III: Humanities 1.0 units Wright,J. *Not offered in 2011-12.* 

#### ARCH B323 On the trail of Alexander the Great

This course explores the world of Alexander the Great and the Hellenistic world on the basis of a variety of sources. Particular focus is put on the material culture of Macedonia and Alexander's campaigns that changed forever the nature and boundaries of the Greek world. Prerequisite: a course in classical archaeology or permission of the instructor.

Division III: Humanities 1.0 units

Lindenlauf,A.

Not offered in 2011-12.

#### **ARCH B328 Analysis of Geospatial Data Using GIS**

An introduction to analysis of geospatial data, theory, and the practice of geospatial reasoning. As part of this introduction students will gain experience in using one or more GIS software packages and be introduced to data gathering in the feld by remote sensing. Each student is expected to undertake an independent project that uses the approaches and tools presented. CROSS-LISTED AS CITY-B328 CROSS-LISTED AS BIOL-B328 CROSS-LISTED AS GEOL-B328 Counts toward Environmental Studies minor 1.0 units Consiglio, D.

## **ARCH B330 Archaeological Theory and Method**

A history of archaeology from the Renaissance to the present with attention to the formation of theory and method; special units on gender and feminist theory and post-modern approaches. Division III: Humanities

CROSS-LISTED AS ANTH-B330 1.0 units Wright,J

#### ARCH B352 Ancient Egyptian Architecture: The New **Kingdom**

A proseminar that concentrates on the principles of ancient Egyptian monumental architecture with an emphasis on the New Kingdom. The primary focus of the course is temple design, but palaces, representative settlements, and examples of Graeco-Roman temples of the Nile Valley will also be dealt with.

Division III: Humanities 1.0 units Ataç, M-A. Not offered in 2011-12.

#### ARCH B355 Archaeology of the Achaemenid Empire in Cross Cultural Context

The Achaemenid Empire (538-332 B.C.E.) ruled the largest landmass of any of the ancient Near Eastern Empires. Attempts by archaeologists to understand the manner in which authority was asserted over this area have suffered from a reliance on biased historical sources, largely from the Classical World. This course uses archaeological data to re-examine the Achaemenid Empire in a global context. This data is examined th

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# COMPARATIVE LITERATURE

Students may complete a major or minor in Comparative Literature.

#### Coordinator

Maria Christina Quintero, Comparative Literature

#### **Steering Committee**

Elizabeth Allen, Russian

Francis Higginson, French and Francophone Studies

Pauline Lin, East Asian Studies

Hoang Nguyen, English

Maria Christina Quintero, Spanish

Roberta Ricci, Italian

Azade Seyhan, German and German Studies

The study of Comparative Literature situates literature in an international perspective; examines transnational cultural connections through literary history, literary criticism, critical theory, and poetics; and works toward a nuanced understanding of the socio-cultural functions of literature. The structure of the program allows students to engage in such diverse areas of critical inquiry as East-West cultural relations, global censorship and human rights, diaspora studies, flm history and theory, and aesthetics of modernity. Therefore, interpretive methods from other disciplines also play a role in the comparative study of literature; among these are anthropology, ethnology, philosophy, history, history of art, religion, classical studies, area studies (Africana studies, Middle Eastern studies, Latin American studies, among others), gender studies, and other arts.

Comparative Literature students are required to have a reading knowledge of at least one foreign language adequate to the advanced study of literature in that language. Some Comparative Literature courses may require reading knowledge of a foreign language as a prerequisite for admission. Students considering graduate work in Comparative Literature should also study a second foreign language.

#### **Major Requirements**

Requirements for the Comparative Literature major are COML 200: Introduction to Comparative Literature (normally taken in the sophomore year); six literature courses at the 200 level or above, balanced between two literature departments (of which English may be one)-at least two of these (one in each national literature) must be at the 300 level or above, or its equivalent as approved in advance by the adviser; one course in critical theory; two electives; COML 398: Theories and Methods in Comparative Literature and 399: Senior Seminar in Comparative Literature.

#### **Honors**

Students who, in the judgment of the advisory committee, have done distinguished work in their courses and in the senior seminar will be considered for departmental honors.

#### **Minor Requirements**

Requirements for the minor are COML 200 and 398. plus four additional courses—two each in the literature of two languages. At least one of these four courses must be at the 300 level. Students who minor in comparative literature are encouraged to choose their national literature courses from those with a comparative component.

Both majors and minors are encouraged to work closely with the chairs and members of the advisory committee in shaping their programs.

NOTE: Please note that not all topics courses (B223, 299, 321, 325, 326, 340) count toward COML elective requirements. See adviser.

# **COML B200 Introduction to Comparative Literature**

This course explores a variety of approaches to the comparative or transnational study of literature through readings of several kinds: texts from different cultural traditions that raise questions about the nature and function of storytelling and literature; texts that comment on, respond to, and rewrite other texts from different historical periods and nations; translations; and readings in critical theory.

Division III: Humanities Critical Interpretation (CI) 1.0 units Seyhan, A.

# **COML B209 Introduction to Literary Analysis: Philosophical Approaches to Criticism**

Designated theory course. An introduction to various methods of reading the literary text from the perspective of critical methods informed by philosophical ideas. In their quest for self-understanding and knowledge, literature and philosophy share similar forms of inquiry and imaginative modeling. Selected literary texts and critical essays focus on questions of language, translation, understanding, and identity in their relation to history, epistemology, ethics, and aesthetics. One of the main objectives of the course is to provide students with the critical tools necessary for an informed reading of texts. Division III: Humanities

CROSS-LISTED AS GERM-B209 CROSS-LISTED AS PHIL-B209 1.0 units Seyhan,A. Not offered in 2011-12.

#### COML B211 Primo Levi, the Holocaust and Its Aftermath

A consideration, through analysis and appreciation of his major works, of how the horrifc experience of the Holocaust awakened in Primo Levi a growing awareness of his Jewish heritage and led him to become one of the dominant voices of that tragic historical event, as well as one of the most original new literary fgures of post-World War II Italy. Always in relation to Levi and his works, attention will also be given to other Italian women writers whose works are also connected with the Holocaust.

Division III: Humanities CROSS-LISTED AS ITAL-B211 CROSS-LISTED AS HEBR-B211 Counts toward International Studies minor 1.0 units Patruno, N. Not offered in 2011-12.

## **COML B212 Borges y sus lectores**

Primary emphasis on Borges and his poetics of reading: other writers are considered to illustrate the semiotics of texts, society, and traditions. Division III: Humanities CROSS-LISTED AS SPAN-B211 1.0 units Sacerio-Gari, E.

## **COML B213 Theory in Practice: Critical Discourses** in the Humanities

Designated COML theory course. This seminar provides exposure to infuential 20th-century French thinkers. It will examine three major currents: Postcolonial Theory; Feminist Theory; Päst-Structuralist ThreedityiirThae primary osl

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about the art of translation. Literary translation will be considered as a spectrum ranging from Dryden's "metaphrase" (word-for-word translation) all the way through imitation and adaptation. The course will include class visits by working literary translators. The Italian verbs for "to translate" and "to betray" are neighbors; throughout, the course concerns the impossibility and importance of literary translation. Open to creative writing students and students of literature.

Division III: Humanities CROSS-LISTED AS GERM-B245 Counts toward Gender and Sexuality Studies concentration 1.0 units Meyer,I.

# **COML B248 The Reception of Classics in the Hispanic World**

A survey of the reception of Classical literature in the Spanish-speaking world. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their

# 124 Comparative Literature

mographic spectrum, looks back to the ancient origins.

Division III: Humanities CROSS-LISTED AS ITAL-B310 1.0 units Perco,G.

#### **COML B325 Etudes avancées**

An in-depth study of a particular topic, event or historical fgure in French civilisation. The seminar topic rotates among many subjects: La Révolution française: histoire, littérature et culture; L'Environnement naturel dans la culture française; Mal et valeurs éthiques; Le Cinéma et la politique, 1940-1968; Le Nationalisme en France et dans les pays francophones; Etude socio-culturelle des arts du manger en France du Moyen Age à nos jours. Division III: Humanities

CROSS-LISTED AS FREN-B325
1.0 units
Le Menthéour, R., Mahuzier, B.

Not offered in 2011-12.

#### **COML B326 Etudes avancées**

An in-depth study of a particular topic, event or historical fgure in French civilisation. The seminar topic rotates among many subjects: La Révolution française: histoire, littérature et culture; L'Environnement naturel dans la culture française; Mal et valeurs éthiques; Le Cinéma et la politique, 1940-1968; Le Nationalisme en France et dans les pays francophones; Etude socio-culturelle des arts du manger en France du Moyen Age à nos jours. Division III: Humanities CROSS-LISTED AS FREN-B326 1.0 units Mahuzier,B. *Not offered in 2011-12.* 

#### **COML B340 Topics in Baroque Art**

huge African continent, we will get a glimpse of "living in the present" in history and letters.

Division III: Humanities

**CROSS-LISTED AS ENGL-B388** 

Counts toward Africana Studies concentration

1.0 units

Beard, L.

Not offered in 2011-12.

#### **COML B398 Theories and Methods in Comparative** Literature

This course, required of all senior comparative literature majors in preparation for writing the senior thesis in the spring semester, has a twofold purpose: to review interpretive approaches informed by critical theories that enhance our understanding of literary and cultural texts; and to help students prepare a preliminary outline of their senior theses. Throughout the semester, students research theoretical paradigms that bear on their own comparative thesis topics in order to situate those topics in an appropriate critical context.

1.0 units Seyhan,A.

Not offered in 2011-12.

#### **COML B399 Senior Seminar in Comparative** Literature

1.0 units Staff, Quintero,M.

## **COML B403 Supervised Work**

1.0 units Seyhan,A.

Haverford College currently offers the following courses in Comparative Literature:

#### Fall 2011

COML H205 Legends of Arthur

COML H214 Writing the Nation: 19th-Century Literature in Latin America

COML H223 Working Through the Holocaust Past in German Drama & Film

COML H228 The Logos and the Tao

COML H248 The Quran

COML H293 Translation and other Transformations: Theory and Practice

COML H301 Topics in Middle English: Sex & Gender in the Middle Ages

COIVIL H312	disciplines
COML H321	Literature & Media: From Print Culture to Web 2.0
COML H322	Politics of Memory in Latin America

COMI H212 Advanged Tenios: Deced entre les

COML H351 Writing and Social Construction of Subjectivity

COML H377 Problems in Postcolonial Literature COML H398 Theories and Methods in Comparative Literature

#### Spring 2012

COML H200 Introduction to Comparative Literature

COML H215 Tales of Troy

COML H222 Rethinking Latin America in Contemporary Narrative

COML H224 Political Action in Greek and Latin Literature

COML H229 Topics in Rhetorical Theory: Roland Barthes and the Image

COML H235 Spanish American Theater

COML H250 Words and Music

COML H262 European Film

COML H278 Christian Thought from Modernity to Postmodernity

COML H312 La revolution haitienne: Historiographie et imaginaire

COML H321 Topics in German Literature

COML H357 Topics in Aesthetics: The Apolline and the Dionysiac Creative Drives

# **COMPUTER SCIENCE**

Students may complete a major or minor in Computer Science or a minor in computational methods.

#### **Faculty**

Douglas Blank, Associate Professor and Chair

Eric Eaton, Lecturer

Deepak Kumar, Professor (on leave semester II)

Dianna Xu, Associate Professor (on leave semester I)

Computer Science is the science of algorithms—their theory, analysis, design and implementation. As such it is an interdisciplinary feld with roots in mathematics and engineering and applications in many other academic disciplines. The department at Bryn Mawr is founded on the belief that computer science should transcend from being a subfeld of mathematics and engineering and play a broader role in all forms of human inquiry.

The Computer Science Department is supported jointly by faculty at both Bryn Mawr and Haverford Colleges. The department welcomes students who wish to pursue a major in computer science. Additionally, the department also offers a minor in computer science, a concentration in computer science (at Haverford College) and a minor in computational methods (at Bryn Mawr College). The department also strives to facilitate evolving interdisciplinary majors. For example, students can propose a major in cognitive science by combining coursework from computer science and disciplines such as psychology and philosophy. Students can further specialize their majors by selecting elective courses that focus on specific disciplinary tracks or pathways within the discipline.

All majors, minors and concentrations offered by the department emphasize foundations and basic principles of information science with the goal of providing students with skills that transcend short-term trends in computer hardware and software.

#### **Major in Computer Science**

Students are encouraged to prepare a major course plan in consultation with their academic adviser in Computer Science. The requirements for a major in computer science are three introductory courses (CMSC 110 or 205, 206 and 231), three core courses (CMSC 240, 245 and one of 330, 340 or 345), six electives of a student's choosing and a senior thesis. Students can specialize in specific disciplinary tracks or pathways by carefully choosing their elective courses. Such pathways can enable specialization in areas such as: computational theory, computer systems, software development,

#### **CMSC B206 Introduction to Data Structures**

Introduction to the fundamental algorithms and data structures of computer science: sorting, searching, recursion, backtrack search, lists, stacks, queues, trees, graphs, dictionaries. Introduction to the analysis of algorithms. Prerequisite: CMSC 205 or 110, or permission of instructor.

Division II: Natural Science Scientifc Investigation (SI) Quantitative Methods (QM) 1.0 units Eaton,E.

## **CMSC B231 Discrete Mathematics**

An introduction to discrete mathematics with strong applications to computer science. Topics inclt 9

## **CMSC B325 Computational Linguistics**

Introduction to computational models of understanding and processing human languages. How elements of linguistics, computer science, and artificial intelligence can be combined to help computers process human language and to help linguists understand language through computer models. Topics covered: syntax, semantics, pragmatics, generation and knowledge representation techniques. Prerequisite: some background in linguistics or computer science.

CROSS-LISTED AS LING-B325

CROSS-LISTED AS PHIL-B324

1.0 units

Kumar,D.

## CMSC B330 Algorithms: Design and Practice

This course examines the applications of algorithms to the accomplishments of various programming tasks. The focus will be on understanding of problem-solving the focus will be on understanding of problem-solving with the construction of algorithms, rather than emphasizing formal proving methodologies. Topics include divide and conquer, approximations for NP-Complete problems, data mining and parallel algorithms. Prerequisites: CMSC 206 and 231. Division II and Quantitative Skills units Å

#### **CMSC B399 Senior Conference**

An independent project in computer science culminating in a written report/thesis and oral presentation. Class discussions of work in progress and oral and written presentations of research results will be emphasized. Required for all computer science majors in the spring semester of their senior year.

1.0 units Blank,D.

#### CMSC B403 Supervised Work/Independent Study

Blank, D., Eaton, E., Kumar, D., Xu, D.

#### CMSC B425 Praxis III: Independent Study

Counts toward Praxis Program concentration 1.0 units Blank, D.

# **EAST ASIAN STUDIES**

Students may complete a major in East Asian Studies, a minor in Chinese language or Japanese language, or a (non-language) minor in East Asian Studies.

## **Faculty**

Tz'u Chiang, Senior Lecturer

Robert Dostal, Professor and Acting Chair

Yonglin Jiang, Associate Professor (on leave semester II)

Pauline Lin, Assistant Professor

Changchun Zhang, Instructor

The Bi-College Department of East Asian Studies links rigorous language training to the study of East Asian culture and society. In addition to our intensive programs in Chinese and Japanese languages, the departmental faculty offers courses in East Asian philosophy, linguistics, literature, religion, social and intellectual history. The East Asian Studies program also incorporates courses by affliated Bi-College faculty on East Asian anthropology, cities, economics, philosophy, and sociology, as well as additional courses on East Asian culture and society by faculty at Swarthmore.

The intellectual orientation of the East Asian Studies Department is primarily historical and text-based; that is, we focus on East Asia's rich cultural traditions as a way to understand its present, through the study of primary sources (in translation and in the vernacular) and scholarly books and articles. All students wishing to specialize in this humanistic approach to the study of China, Japan, and (with special approval) Korea are encouraged to consider the East Asian Studies major.

But we also work closely with affliated faculty in the Bi-Co and Tri-Co community who approach East Asia from the perspective of such social science disciplines as Anthropology, Economics, Political Science, Sociology, and the Growth and Structure of Cities, as well as with faculty in History, Music, Religion, and Philosophy. EAS majors are encouraged to take advantage of these programs to supplement their EAS coursework. Please consult the course guide, online or in print, for details on this year's offerings.

#### **Major Requirements**

· Completion of at least the third-year level of (Mandarin) Chinese or Japanese (i.e. 101-102). Students who entered college with native fuency in one East Asian language (including Korean) must complete this requirement with another East Asian language.

#### **EAST B212 Introduction to Chinese Literature**

This is a topics course. This course explores literature about everyday life beginning from the earliest times with the Book of Songs to the great 18th century novel, the Dream of the Red Chamber. Topics may vary. Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) 1.0 units Lin,P.

#### **EAST B218 Topics in World Cities**

An introduction to contemporary issues related to the urban environment. Topics vary. Division I: Social Science CROSS-LISTED AS CITY-B218 1.0 units Staff

#### **EAST B225 Topics in Modern Chinese Literature**

This a topics course. This course explores modern China from the early 20th century to the present through its literature, art and flms, reading them as commentaries of their own time. Topics vary. Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) CROSS-LISTED AS HART-B225 CROSS-LISTED AS HIST-B220 1.0 units Lin,P. Not offered in 2011-12.

#### **EAST B229 Topics in Comparative Urbanism**

This is a topics course. Topics vary. Enrollment limited to 20 with preference to Cities majors. Current topic description: Conquest, subordination, hybridities, resistance and post-colonial reconfigurations have shaped cities and citizens worldwide for millennia. Beginning from the work of Fanon, we explore political economics, architecture, planning, culture, and social struggle via British rule (Hong Kong, Belfast), French domination (Paris, North Africa) and dialectics of the U.S.-Mexico border. The class entails systematic comparison through research, discussion and writing. Limit 20, pref soph/ junior majors

#### **EAST B272 Topics in Early and Medieval China**

This is a topics course. Course content varies. Division I: Social Science Inquiry into the Past (IP)
Cross-Cultural Analysis (CC)
CROSS-LISTED AS CITY-B273
CROSS-LISTED AS HART-B272
1.0 units
Lin,P.
Not offered in 2011-12.

#### **EAST B325 Topics in Chinese History and Culture**

This is a topics course. Course content varies. Division III: Humanities CROSS-LISTED AS HIST-B326 1.0 units Staff

#### **EAST B352 China's Environment**

This seminar explores China's environmental issues from a historical perspective. It begins by considering a range of analytical approaches, and then explores three general periods in China's environmental changes, imperial times, Mao's socialist experiments during the frst thirty years of the People's Republic, and the post-Mao reforms. Prerequisite: Sophomore standing. Division I: Social Science CROSS-LISTED AS HIST-B352 Counts toward Environmental Studies minor 1.0 units Jiang, Y.

# EAST B354 Identity, Ritual and Cultural Practice in Contemporary Vietnam

This course focuses on the ways in which recent economic and political changes in Vietnam infuence and shape everyday lives, meanings and practices there. It explores construction of identity in Vietnam through topics including ritual and marriage practices, gendered socialization, social reproduction and memory. Prerequisite: at least ANTH B102 or permission of the instructor. Division I: Social Science CROSS-LISTED AS ANTH-B354 1.0 units Pashigian,M. Not offered in 2011-12.

# **EAST B362 Environment in Contemporary East Asia: China and Japan**

This seminar explores environmental issues in contemporary East Asia from a historical perspective. It will explore the common and different environmental problems in Japan and China, and explain and interpret their causal factors and solving measures in cultural traditions, social movements, economic growth, political and

legal institutions and practices, international cooperation and changing perceptions. Prerequisite: Sophomore standing or above.
Division I or Division III
Counts toward Environmental Studies minor
1.0 units
Jiang,Y.
Not offered in 2011-12.

#### **EAST B398 Senior Seminar**

A research workshop culminating in the writing and presentation of a senior thesis. Required of all majors; open to concentrators and others by permission.

1.0 units

of social, cultural and business issues confronting China today. Students will read and write about urgent matters that China is facing; while enhancing aural and spoken skills through presentations and discussions. Prerequisite: Third Year Chinese or the equivalent.

Cross-Cultural Analysis (CC)

1.0 units

Lin,P.

Not offered in 2011-12.

#### **CNSE B403 Supervised Work**

1.0 units

#### JAPANESE LANGUAGE

The Japanese Language Program offers a full undergraduate curriculum of courses in Modern Japanese. Students who will combine language study with focused work on East Asian society and culture may wish to consider the major in East Asian Studies. Information about specifc study abroad opportunities can be obtained from the director.

# **College Foreign Language Requirement**

The College's foreign language requirement may be satisfed by completing JNSE 003 and 004 with an average grade of at least 2.0 or with a grade of 2.0 or better in JNSE 004.

Haverford College currently offeres the following courses in Japanese:

JNSE H001 First-Year Japanese

JNSE H002 First-Year Japanese

JNSE H003 Second-Year Japanese

JNSE H004 Second-Year Japanese

JNSE H101 Third-Year Japanese

JNSE H102 Third-Year Japanese

JNSE H201 Fourth-Year Japanese

JNSE H202 Fourth-Year Japanese

# **ECONOMICS**

Students may complete a major or minor in Economics.

## **Faculty**

Janet Ceglowski, Professor (on leave semester I)

Margaret Clarke, Lecturer

Jonathan Lanning, Assistant Professor

Michael Rock, Professor

David Ross, Associate Professor and Chair

Matthew Weinberg, Assistant Professor

The Economics curriculum is designed to provide an understanding of economic processes and institutions and the interactions among economic, political and social structures. The curriculum helps students master the methods used by economists to analyze economic issues and it enables them to make reasoned assessments of alternative public policies in a wide range of felds.

#### **Major Requirements**

The economics major consists of 10 semester courses in economics and one semester of college-level calculusOTMeHequilre3 comarse for Reference to the construction of 
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# **Minor Requirements**

# 138 Economics

course may be used toward the economics major only with the permission of the instructor. Prerequisite: MATH B101 (or equivalent) or consent of the instructor. Division I: Social Science 1.0 units Alger,D.

CROSS-LISTED AS CITY-B215 1.0 units Stahnke, R. Not offered in 2011-12.

#### **ECON B225 Economic Development**

Examination of the issues related to and the policies designed to promote economic development in the developing economies of Africa, Asia, Latin America, and the Middle East. Focus is on why some developing economies grow faster than others and why some growth paths are more equitable, poverty reducing, and environmentally sustainable than others. Includes consideration of the impact of international trade and investment policy, macroeconomic policies (exchange rate, monetary and fscal policy) and sector policies (industry, agriculture, education, population, and environment) on development outcomes in a wide range of political and institutional contexts. Prerequisite: ECON B105, or H101 and H102.

Division I: Social Science CROSS-LISTED AS CITY-B225 1.0 units Rock,M.

#### **ECON B234 Environmental Economics**

Introduction to the use of economic analysis explain the underlying behavioral causes of environmental and natural resource problems and to evaluate policy responses to them. Topics may include air and water pollution; the economic theory of externalities, public goods and the depletion of resources; cost-beneft analysis; valuing non-market benefts and costs; economic justice; and sustainable development. Prerequisites: ECON B105, or H101 and H102.

Division I: Social Science CROSS-LISTED AS CITY-B234 Counts toward Environmental Studies minor 1.0 units Rock.M.

## **ECON B236 The Economics of Globalization**

Division I: Social Science

An introduction to international economics through theory, policy issues, and problems. The course surveys international trade and fnance, as well as topics in international economics. It investigates why and what a nation trades, the consequences of such trade, the role of trade policy, the behavior and effects of exchange rates, and the macroeconomic implications of trade and capital fows. Topics may include the economics of free trade areas, world fnancial crises, outsourcing, immigration, and foreign investment. Prerequisites: ECON B105, or H101 and H102. The course is not open to students who have taken ECON 316 or 348.

CROSS-LISTED AS CITY-B238 1.0 units Ceglowski, J. Not offered in 2011-12.

# **ECON B242 Economics of Local Environmental Programs**

Considers the determinants of human impact on the environment at the neighborhood or community level and policy responses available to local government. How can economics help solve and learn from the problems facing rural and suburban communities? The instructor was a local township supervisor who will share the day-to-day challenges of coping with land use planning, waste disposal, dispute resolution, and the provision of basis services. Prerequisite: ECON 105 Division I: Social Science CROSS-LISTED AS CITY-B204 Counts toward Environmental Studies minor 1.0 units Ross,D.

## **ECON B243 Economic Inequality and Government Policy Choices**

This course will examine the U.S. economy and the effects of government policy choices. The class will focus on the potential trade-offs between economic efficiency and greater economic equality. Some of the issues that will be explored include tax, education, and health care policies. Different perspectives on issues will be examined. Prerequisite: ECON B105, or H101 and H102. Division I: Social Science 1.0 units Vartanian.T.

# 140 Economics

cations are considered. Each student does an empirical research project using multiple regression and other

context of two topical policy modules. Prerequisites: ECON B203, B200, B202 and at least one 200-level elective.
1.0 units
Ross,D., Alger,D.
Not offered in 2011-12.

**ECON B393 Research Seminar in Industrial and Environmentdust** 

The Bi-College Education Program offers several options. Students may:

- Explore one or more aspects of education in areas of particular interest – such as urban schooling – by enrolling in single courses;
- · Pursue a minor in educational studies;
- Pursue a minor in education leading to secondary teacher certification;
- Pursue a minor in education leading to elementary teacher certification at Swarthmore and Eastern Colleges;
- Complete the secondary teacher certification program after they graduate through the Post-baccalaureate Teacher Education Program;
- Sub-matriculate (as juniors or seniors) into the University of Pennsyl / M

those that address practical strategies for working with academic writers. To put pedagogic theory into practice, the course will offer a praxis dimension. Students will spend a few hours a week working in local public school classrooms or writing centers. In-class collaborative work on writing assignments will allow students to develop writing skills and share their insights into the writing process with others.

Division III: Humanities CROSS-LISTED AS ENGL-B220 1.0 units Hemmeter,G. *Not offered in 2011-12.* 

# **EDUC B220 Changing Pedagogies in Mathematics** and Science

This course examines perspectives related to teaching and learning math and science, including questioning why (if at all) it is important for people to learn these subjects, what is viewed as successful teaching and learning in these disciplines, and how people learn math and science.

Division I: Social Science Cross-Cultural Analysis (CC) Counts toward Praxis Program concentration 1.0 units Donnay,V.

# EDUC B225 Empowering Learners: Theory and Practice of Extra-Classroom Teaching

This Praxis course is for students in extra-classroom tutoring and mentoring roles on and off campus. In addition to school settings, sites of play and livelihood are examined as sites of teaching and learning for people of various ages and phases of life. Focus is on learning to facilitate and assess learners' growth within a context, challenging prescribed roles, and identifying structural barriers and opportunities. This is a half-credit course. Cross-Cultural Analysis (CC)
Counts toward Praxis Program concentration 1.0 units
Lesnick,A.

# **EDUC B240 Researching Education on Campus**

Not offered in 2011-12.

This course will teach students use and interpret observation, survey, interview, focus group, and other qualitative methods of educational research, as well as to read and write about such research. Course projects could include assessment of the staff/student work through the Teaching and Learning Initiative as well as of other projects faculty, students, and staff wish to study within the bi-college context. In addition to class meetings, research teams will meet regularly.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Lesnick,A. Not offered in 2011-12.

#### **EDUC B250 Literacies and Education**

A critical exploration of what counts as literacy, who decides, and what the implications are for teaching and learning. Students explore both their own and others experiences of literacy through reading and writing about power, privilege, access and responsibility around issues of adult, ESL, cultural, multicultural, gendered, academic and critical literacies. Fieldwork required. (Writing Intensive Praxis I). Priority given frst to those pursuing certification or a minor in educational studies. Division I: Social Science
Cross-Cultural Analysis (CC)
1.0 units
Lesnick,A.

# **EDUC B251 Arts Teaching in Educational and Community Settings**

This is a Praxis II course intended for students who

Practice Teaching. Open only to students engaged in practice teaching.
Division I: Social Science
1.0 units
Curl,H., Cook-Sather,A.
Offered at Haverford in 2011-12.

#### **EDUC H302 Practice Teaching Seminar**

Curl, H.

### **EDUC B303 Practice Teaching in Secondary Schools**

Supervised teaching in secondary schools (12 weeks). Two units of credit are given for this course. Open only to students preparing for state certification. CROSS-LISTED AS EDUC-B433 1.0 units Curl,H., Cook-Sather,A.

### **EDUC B310 Defning Educational Practice**

An interdisciplinary inquiry into the work of constructing professional identities and roles in education-related contexts. Three to fve hours a week of feldwork are required. Enrollment is limited to 20 with priority given to students pursuing the minor in educational studies. Division I: Social Science
Counts toward Praxis Program concentration 1.0 units
Lesnick,A., Hall,B.
Offered at Haverford in 2011-12.

#### **EDUC H310 Defning Educational Practice**

Curl, H.

### **EDUC B311 Fieldwork Seminar**

Drawing on the diverse contexts in which participants complete their feldwork, this seminar invites exploration and analysis of ideas, perspectives and different ways of understanding his/her ongoing feldwork and associated issues of educational practice, reform, and innovation. Five to eight hours of feldwork are required per week. Enrollment is limited to 20. Open only to students completing the minor in educational studies. Counts toward Praxis Program concentration 1.0 units Lesnick,A.

# **EDUC B320 Topics in German Literature and Culture**

Current topic description: What conceptualizations of education emerged in the German Enlightenment and during the 19th and 20th centuries in German-speaking countries? Does education support specific goals shared across a nation, support the status quo, or question dominant paradigms? How are notions of religion, gender, sexuality, class, race, and national identity refected in education? And how do adult and children's

literature, as well as flm, grapple with these issues? Language of instruction: English. Division III: Humanities CROSS-LISTED AS GERM-B320 Counts toward Film Studies minor 1.0 units Meyer,I.

#### **EDUC B403 Supervised Work**

1.0 units Lesnick,A., Cook-Sather,A., Cohen,J.

### **EDUC B425 Independent Study (Praxis III)**

Counts toward Praxis Program concentration 1.0 units Cohen, J., Lesnick, A., Cook-Sather, A.

# **EDUC B433 Practice Teaching in Secondary Schools**

Supervised teaching in secondary schools (12 weeks) û for students enrolled in the Post-baccalaureate Teacher Educating Program. Two units of credit are given for this course. Open only to non-matriculating students preparing for state certification.

CROSS-LISTED AS EDUC-B303

CROSS-LISTED AS EDUC-B303 1.0 units Curl,H.

# **ENGLISH**

Students may complete a major or minor in English. Within the major, students may complete a concentration in Creative Writing. English majors may also complete concentrations in Africana Studies, in Environmental Studies or in Gender and Sexuality.

# **Faculty**

Linda-Susan Beard, Associate Professor

Peter Briggs, Professor and Chair

Jennifer Callaghan, Lecturer

Anne Dalke, Senior Lecturer

Jennifer Harford Vargas, Assistant Professor

Jane Hedley, Professor (on leave semester I)

Gail Hemmeter, Senior Lecturer

Hoang Nguyen, Assistant Professor (on leave semesters I and II)

Raymond Ricketts, Lecturer

Katherine Rowe, Professor

Bethany Schneider, Associate Professor

Suzanne Schneider, Postdoctoral Fellow

Jamie Taylor, Assistant Professor

Kate Thomas, Associate Professor

Michael Tratner, Professor

# **Students Going Abroad**

Students should complete both English 250 and one 300-level course before leaving for a semester or year abroad.

# English Majors and the Education Certification Program

English majors planning to complete an education certification in their senior year should fle a work plan with the chairs of the Education and English Departments no later than December 1 of their junior year. English majors on this path will follow an accelerated writing schedule in their senior year.

#### **Extended Research**

Some students seek a longer horizon and a chance to dig deeper into their research interests. Rising juniors and seniors in English frequently apply for fellowship support from the Hanna Holborn Gray program, to pursue original research over the summer or through the year. The projects may be stand-alone or may lead to a senior essay. In either case, students work closely with faculty advisers to define the goals, methods, and potential outcomes of their research.

# **ENGL B125 Writing Workshop**

This course offers students who have already taken an Emily Balch Seminar an opportunity to develop their skills as college writers. Through frequent practice, class discussion, and in-class collaborative activity, students will become familiar with all aspects of the writing process and will develop their ability to write for an academic audience. The class will address a number of writing issues: formulating questions; analyzing purpose; generating ideas; structuring and supporting arguments; marshalling evidence; using sources effectively; and developing a clear, fexible academic voice. Students will meet regularly with the course instructor, individually and in small groups, to discuss their work.

Division III: Humanities Critical Interpretation (CI) 1.0 units

Todd, J., Ruben, M., Callaghan, J., Ricketts, R., Ladva, N. *Not offered in 2011-12.* 

# **ENGL B126 Writing Workshop for Non-Native Speakers of English**

This course offers non-native speakers of English a chance to develop their skills as college writers. Through frequent practice, class discussion, and inclass collaborative activity, students will become familiar with the writing process and will learn to write for an academic audience. Student writers in the class will be guided through the steps of composing and revising college essays: formulating questions; analyzing purpose;

generating ideas; structuring and supporting arguments; marshalling evidence; using sources effectively; and developing a clear, fexible academic voice. Writers will receive frequent feedback from peers and the instructor. 1.0 units Litsinger,B.

#### **ENGL B201 Chaucer: Canterbury Tales**

Access to and skill in reading Middle English will be acquired through close study of the Tales. Exploration of Chaucer's narrative strategies and of a variety of critical approaches to the work will be the major undertakings of the semester.

Division III: Humanities Critical Interpretation (CI) 1.0 units Taylor,J. Not offered in 2011-12.

# **ENGL B202 Understanding Poetry**

This course is for students who wish to develop their skills in reading and writing critically about poetry. The course will provide grounding in the traditional skills of prosody (i.e., reading accentual, syllabic, and accentual-syllabic verse) as well as tactics for reading and un derstanding the breath-based or image-based prosody of free verse. Lyric, narrative, and dramatic poetry will be discussed and differentiated. We will be using close reading and oral performance to highlight the unique fusion of language, rhythm (sound), and image that makes

#### **ENGL B205 Introduction to Film**

This course is intended to provide students with the tools of critical flm analysis. Through readings of images and sounds, sections of flms and entire narratives, students will cultivate the habits of critical viewing and establish a foundation for focused work in flm studies. The course introduces formal and technical units of cinematic meaning and categories of genre and history that add up to the experiences and meanings we call cinema. Although much of the course material will focus on the Hollywood style of flm, examples will be drawn from the history of cinema. Attendance at weekly screenings is mandatory.

Division III: Humanities

Critical Interpretation (CI)

Critical Interpretation (CI)
CROSS-LISTED AS HART-B205
Counts toward Film Studies minor
1.0 units
Tratner,M.

### **ENGL B209 Literary Kinds**

Beginning with a biological evolutionary model, we examine a range of explanations for how and why new genres evolve. Readings will consist of critical accounts of genre; three hybrid novel forms will serve as imaginative test cases for these concepts. Students will identify, compare, and write an exemplar of a genre that interests them.

Division III: Humanities Critical Interpretation (CI) 1.0 units Dalke,A.

# ENGL B210 Renaissance Literature: Performances of Gender

Readings chosen to highlight the construction and performance of gender identity during the period from 1550 to 1650 and the ways in which the gender anxieties of 16th- and 17th-century men and women differ from,

bewildering world. Ethnicity and its matrix of interactions is a force that forms personality.

Division III: Humanities

Critical Interpretation (CI)

CROSS-LISTED AS HART-B224

1.0 units

Baumli,K.

Not offered in 2011-12.

#### **ENGL B225 Shakespeare**

This introduction to Shakespeare's plays will explore the Bard's language, sources, print and stage history, and cultural geography. We'll think about form and performance, race and nationhood, authority and intimacy, gender and servitude, law and land. We'll read several plays and poems, watch flm adaptations, and attend a stage performance.

Division III: Humanities Critical Interpretation (CI) 1.0 units Rowe,K. *Not offered in 2011-12.* 

#### **ENGL B229 Movies and Mass Politics**

This course will trace in the history of movie forms a series of debates about the ways that nations can become mass societies, focusing mostly on the ways that Hollywood movies countered the appeals of Communism and Fascism.

Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS COML-B229 1.0 units Tratner,M. Not offered in 2011-12.

### **ENGL B230 Topics in American Drama**

Considers American plays of the 20th century, reading major playwrights of the canon alongside other dramatists who were less often read and produced. Will also study later 20th century dramatists whose plays both develop and resist the complex foundation established by canonical American playwrights and how American drama refects and responds to cultural and political shifts. Considers how modern American identity has been constructed through dramatic performance, considering both written and performed versions of these plays.

Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS ARTT-B230

#### **ENGL B237 The Dictator Novel in the Americas**

This course examines representations of dictatorship in Latin American and Latina/o novels. We will explore the relationship between narrative form and absolute power by analyzing the literary techniques writers use to contest authoritarianism. We will compare dictator novels from the United States, the Caribbean, Central America, and the Southern Cone. Prerequisite: only for students wishing to take the course for major/minor credit in SPAN is SPAN B200/B202

Division III: Humanities CROSS-LISTED AS COML-B237

CROSS-LISTED AS COML-B237
CROSS-LISTED AS SPAN-B237

Counts toward Gender and Sexuality Studies concentra-

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units Harford Vargas,J.

# ENGL B238 The History of Cinema 1895 to 1945 Silent Film: From United States to Soviet Russia and Beyond

This course will explore cinema from its earliest, most primitive beginnings up to the end of the silent era. While the course will focus on a variety of historical and theoretical aspects of cinema, the primary aim is to look at flms analytically. Emphasis will be on the various artistic methods that went into the direction and production of a variety of celebrated silent flms from around the world. These flms will be considered in many contexts: artistic, historical, social, and even philosophical, so that

# 152 English

Wordsworth, Browning, Christina Rossetti, Yeats, Heaney, Walcott.

#### **ENGL B269 Vile Bodies in Medieval Literature**

The Middle Ages imagined the physical body as the site of moral triumph and failure and as the canvas to expose social ills. The course examines medical tracts, saint's lives, poetry, theological texts, and representations of the Passion. Discussion topics range from plague and mercantilism to the legal and religious depiction of torture. Texts by Boccaccio, Chaucer, Dante, and Kempe will be supplemented with contemporary readings on trauma theory and embodiment. Division III: Humanities Critical Interpretation (CI) Counts toward Gender and Sexuality Studies concentration 1.0 units Taylor, J. Not offered in 2011-12.

# ENGL B270 American Girl: Childhood in U.S. Literatures, 1690-1935

This course will focus on the "American Girl" as a particularly contested model for the nascent American. Through examination of religious tracts, slave and captivity narratives, literatures for children and adult literatures about childhood, we will analyze U. S. investments in girlhood as a site for national self-fashioning. Division III: Humanities
Critical Interpretation (CI)
Counts toward Gender and Sexuality Studies concentration
1.0 units
Schneider,B.

#### **ENGL B271 House of Wits**

An extended visit with one of America's most interesting and infuential families: the unruly, expansive children of Henry James, Sr. The course will focus on the remarkable writings of the diarist Alice, who became a feminist Counts toward Film Studies minor 1.0 units Nguyen,H.

# 156 English

Division III: Humanities

CROSS-LISTED AS HART-B299

performance and performativity in daily life as well as in the performing arts. Division III: Humanities 1.0 units Ricketts,R. Not offered in 2011-12.

#### **ENGL B356 Endgames: Theater of Samuel Beckett**

An exploration of Beckett's theater work conducted through both reading and practical exercises in performance techniques. Points of special interest include the monologue form of the early novels and its translation into theater, Beckett's infuences (particularly silent flm) and collaborations, and the relationship between the texts of the major dramatic works and the development of both modern and postmodern performance techniques.

Division III: Humanities CROSS-LISTED AS ARTT-B356 1.0 units Lord,M. Not offered in 2011-12.

### **ENGL B359 Dead Presidents**

Framed by the extravagant funerals of Presidents Washington and Lincoln, this course explores the cultural importance of the fgure of the President and the Presidential body, and of the 19th-century preoccupations with death and mourning, in the U.S. cultural imaginary from the Revolutionary movement through the Civi

Mby the eMth

# **ENGL B369 Women Poets: Gwendolyn Brooks,** Adrienne Rich, Sylvia Plath

In this seminar we will be playing three poets off against each other, all of whom came of age during the 1950s. We will plot each poet's career in relation to the public and personal crises that shaped it, giving particular attention to how each poet constructed "poethood" for herself.

Division III: Humanities
Counts toward Africana Studies concentration
Counts toward Gender and Sexuality Studies
concentration
1.0 units
Hedley,J.
Not offered in 2011-12.

# ENGL B372 Composing a Self: American Women's Life Writing

Beginning with Rowlandson's 1682 captivity narrative and concluding with Kingston's *The Woman Warrior*, we examine how American women have constructed themselves in print. Gender, ethnicity, spirituality and sexuality inform public narratives; while letters and diaries serve as a counterweight, revealing private selves and prompting exploration of authority, authorship, history, citizenship and identity. Course includes personal life-writing and archival research in the College's Special Collections.

Division III: Humanities

Counts toward Gender and Sexuality Studies concentra-

### **ENGL B398 Senior Seminar**

Required preparation for ENGL 399 (Senior Essay). Through weekly seminar meetings and regular writing and research assignments, students will design a senior essay topic or topics of their choice, frame exciting and practical questions about it, and develop a writing plan for its execution. Students will leave the course with a departmentally approved senior essay prospectus, an annotated bibliography on their chosen area of inquiry, and 10 pages of writing towards their senior essay. Students must pass the course to enroll in ENGL 399. 1.0 units

Hemmeter, G., Schneider, B.

### **ENGL B399 Senior Essay**

Supervised independent writing project required of all English majors. Students must successfully complete ENGL 398 (Senior Conference) and have their Senior Essay prospectus approved by the department before they enroll in ENGL 399.

1.0 units

Hedley, J., Briggs, P., Dalke, A., Beard, L.

### **ENGL B403 Supervised Work**

Advanced students may pursue independent research projects. Permission of the instructor and major adviser is required.

1.0 units

Dalke, A., Rowe, K., Gorfnkel, E.

#### **ENGL B425 Praxis III**

Counts toward Praxis Program concentration 1.0 units

# Affliated Faculty at Swarthmore College:

Peter Collings, Physics and Astronomy, Environmental Studies Director\*

Elizabeth Bolton, English Literature

Timothy Burke, History

# **Core Courses**

#### **ENVS 101 Introduction to Environmental Studies**

(at Bryn Mawr) E. Stroud, M. Sears (Fall 2011)

### **ENVS 101 Case Studies in Environmental Issues**

(at Haverford) N. Anand, H. White (Fall 2011)

#### **ENVS 001 Introduction to Environmental Studies**

(at Swarthmore)
D. Barber, M. Wallace
(Spring 2012)

#### **ENVS 397: Senior Seminar in Environmental Studies**

(at Bryn Mawr) C. Hager, J. Wilson (Fall 2011)

### **ENVS 091 Environmental Studies Capstone Seminar**

(at Swarthmore) (Spring 2012)

#### **Elective Courses**

The ES Minor Steering Committee determines the list of courses approved to meet the minor requirements and classifes the courses in two categories: core and cognate courses.

- Core courses are those within the Tri-College community that are centrally organized around environmental themes and devote at least 50% of the class time to studying environmental issues.
- Cognate courses are those that have less focus on the environment compared to core courses, but nevertheless build understanding and knowledge of areas of inquiry that are highly valuable to the study and solution of environmental problems. While the focus on the environment typically occupies less than half of the class time in cognate courses, there is some mention of how the main focus of the course can inform understanding of environmental issues.

The approved lists of electives are subject to revision and the list published on the website immediately prior to each semester will govern which courses may be used to satisfy the elective requirements.

### **Approved List of Electives**

An asterisk (\*) indicates cognate course; no more than one credit of these may be used for each category. (L) indicates laboratory course; one of the courses in category A must be a laboratory course.

### Category A) Environmental Science and Engineering

#### **Bryn Mawr**

BIOL 210 Biology and Public Policy

BIOL 220 (L) Ecology

BIOL 225 \* Biology of Plants

BIOL 250 \* Computational Methods

BIOL 309 (L) Biological Oceanography

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GEOL 101 (L) How the Earth Works

0 (22万(01L/日 (03) (L) Earth Systems and the Environment

GEOL 130 Life in Earth's Future Climate

GEOL 206 \* Resources

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GEOL 230 \* The Science of Soils

GEOL 255 Problem Solving in the Environmental

BIOL 036 (L) Ecology BIOL 039 (L) Marine Biology BIOL 115E \* Plant Molecular Genetics - Biotechnology BIOL 116 \* Microbial Processes and Biotechnology BIOL 130 \* Behavioral Ecology ö BIOL 137 Biodiversity and Ecosystem Function CHEM 001 \*(L) Chemistry in the Human Environment CHEM 043 \*(L) Analytical Chemistry CHEM 103 Topics in Environmental Chemistry ENGR 003 \*(L) Problems in Technology ENGR 004A (L) Environmental Protection ENGR 004B \*(L) Swarthmore and the Biosphere ENGR 035 \*(L) Solar Energy Systems ENGR 057 \* Operations Research ENGR 063 Water Quality and Pollution Control ENGR 066 Environmental Systems MATH 056 \* Modeling PHYS 024 (L) The Earth and Its Climate Category B) Environment & Society **Bryn Mawr** ANTH 203 Human Ecology ANTH 210 \* Medical Anthropology á. ANTH 237 Environmental Health ANTH 263 \*Anthropology and Architecture ARCH 245 The Archaeology of Water CITY 175 Environment and Society: History, Place, and Problems CITY 2xx (number to be designated) Building Green CITY 278 American Environmental History Rights Programr

RELG 022 Religion and Ecology SOAN 006 \* FYS: Forest of the Symbols SOAN 023C Anthropological Perspectives on Conservation

The following are descriptions of Bryn Mawr courses:

# **ANTH B203 Human Ecology**

The relationship of humans with their environment; culture as an adaptive mechanism and a dynamic component in ecological systems. Human ecological perspectives are compared with other theoretical orientations in anthropology. Prerequisites: ANTH 101, 102, or permission of instructor.

Division I: Social Science

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Davis,R.

# **ANTH B210 Medical Anthropology**

This course examines the relationships between culture, society, disease and illness. It considers a broad range of health-related experiences, discourses, knowledge and practice among different cultures and among indinionidal viduals and groups in different positions of power. Topics covered include sorcery, herbal remedies, healing rituals, folk illnesses, modern disease, scientific medical perceptions, clinical technique, epidemiology and

Division II: Natural Science 1.0 units Greif,K.

#### **BIOL B220 Ecology**

A study of the interactions between organisms and their environments. The scientifc underpinnings of current environmental issues, with regard to human impacts, are also discussed. Students become familiar with ecological principles and with the methods ecologists use to address tricky ecological issues. Students apply these principles through the design and implementation of experiments both in the laboratory and the feld. Lecture three hours a week, laboratory/feld investigation three hours a week. There will be optional feld trips throughout the semester. Prerequisite: two quarters of BIOL 110-113 or GEOL 103.

Division II with Lab Scientifc Investigation (SI) 1.0 units Sears, M., Williams, N. Not offered in 2011-12.

### **BIOL B225 Biology of Plants**

In-depth examination of the structures and processes underlying survival, growth, reproduction, competition and diversity in plants. Three hours of lecture a week. Prerequisites: two quarters of BIOL 110-113. Division II and Quantitative Skills 1.0 units Franklin, W., Williams, N. Not offered in 2011-12.

### **BIOL B250 Computational Methods in the Sciences**

A study of how and why modern computation methods are used in scientifc inquiry. Students will learn basic principles of simulation-based programming through hands-on exercises. Content will focus on the development of population models, beginning with simple exponential growth and ending with spatially-explicit individual-based simulations. Students will design and implement a fnal project from their own disciplines. Six hours of combined lecture/lab per week.

Division II and Quantitative Skills Scientifc Investigation (SI) Quantitative Methods (QM) CROSS-LISTED AS CMSC-B250 CROSS-LISTED AS GEOL-B250 1.0 units Sears, M. Not offered in 2011-12.

#### **BIOL B309 Biological Oceanography**

A comprehensive examination of the principal ecosystems of the world's oceans, emphasizing the biotic and abiotic factors that contribute to the distribution of

marine organisms. A variety of marine ecosystems are examined, including rocky intertidal, and hydrocarbon seeps, with an emphasis on the distinctive characteristics of each system and the assemblage of organisms associated with each system. Lecture three hours, laboratory three hours a week. One required three-day feld trip, for which an extra fee is collected, and other occasional feld trips as allowed for by scheduling. Prerequisites: two quarters of BIOL 110-113 and one 200-level science course, or permission of instructor. Gardiner,S.

#### **BIOL B320 Evolutionary Ecology**

This course will examine how phenotypic variation in organisms is optimized and constrained by ecological and evolutionary factors. We will cover concepts and case studies in life history evolution, behavioral ecology, and population ecology with an emphasis on both mathematical and experimental approaches. Recommended Prerequisites: BIOL B111-B114 or BIOL B220 Quantitative Skills 1.0 units Sears,M.

# **BIOL B328 Analysis of Geospatial Data Using GIS**

An introduction to analysis of geospatial data, theory, and the practice of geospatial reasoning. As part of this introduction students will gain experience in using one or more GIS software packages and be introduced to data gathering in the feld by remote sensing. Each student is expected to undertake an independent project that uses the approaches and tools presented.

CROSS-LISTED AS ARCH-B328 CROSS-LISTED AS GEOL-B328 1.0 units Consiglio, D., Fitz-Patrick, D., Reese, B. Not offered in 2011-12.

CROSS-LISTED AS CITY-B328

### CITY B103 Earth System Science and the **Environment**

This integrated approach to studying the Earth focuses on interactions among geology, oceanography, and biology. Also discussed are the consequences of population growth, industrial development, and human land use. Two lectures and one afternoon of laboratory or feldwork per week. A required two-day (Fri.-Sat.) feld trip is taken in April.

Division II with Lab CROSS-LISTED AS GEOL-B103 1.0 units Elkins, L., Barber, D. Not offered in 2011-12.

# CITY B104 Archaeology of Agricultural and Urban Revolutions

From Egypt to India This course examines the archaeology of the two most fundamental changes that have occurred in human society in the last 12,000 years, agriculture and urbanism, and we explore these in Egypt and the Near East as far as India. We also explore those societies that did not experience these changes. Division III: Humanities

CROSS-LISTED AS ARCH-B104

1.0 units

Magee,P.

# CITY B175 Environment and Society: History, Place, and Problems

Introduces the ideas, themes, and methodologies of the interdisciplinary feld of environmental studies beginning with defnitions: what is nature? What is environment? And how do people and their settlements ft into each? The course then moves to distinct disciplinary approaches in which scholarship can and does (and does not) inform our perceptions of the environment. Assignments introduce methodologies of environmental studies, requiring reading landscapes, working with census data and government reports, critically interpreting scientifc data, and analyzing work of experts.

Division I: Social Science Inquiry into the Past (IP) CROSS-LISTED AS SOCL-B175 1.0 units Stroud,E., Simpson,R. Not offered in 2011-12.

# CITY B204 Economics of Local Environmental Programs

Division I: Social Science CROSS-LISTED AS ECON-B242 1.0 units Ross,D.

#### **CITY B210 Natural Hazards**

A quantitative approach to understanding the earth processes that impact human societies. We consider the past, currey

# 168 Environmental Studies

sideration of the impact of international trade and investment policy, macroeconomic policies (exchange rate, monetary and fscal policy) and sector policies (industry, agriculture, education, population, and environment) on development outcomes in a wide range of political and institutional contexts. Prerequisite: ECON B105, or H101 and H102.

Division I: Social Science

majors and applying them to collaborative interdisciplinary projects. Prerequisite: Open only to Environmental Studies students who have completed all introductory work for the minor.

1.0 units Hager,C.

### **GEOL B103 Earth Systems and the Environment**

This integrated approach to studying the Earth focuses on interactions among geology, oceanography, and biology. Also discussed are the consequences of population growth, industrial development, and human land use. Two lectures and one afternoon of laboratory or feldwork per week. A required two-day (Fri.-Sat.) feld trip is taken in April.

Division II with Lab Scientifc Investigation (SI) CROSS-LISTED AS CITY-B103 1.0 units Marenco, K., Barber, D., Elkins, L. Not offered in 2011-12.

### **GEOL B206 Resources**

An examination of issues concerning the supply of energy and raw materials required by humanity. This includes an investigation of the geological framework that determines resource availability, and of the social, economic, and political considerations related to energy production and resource development. Two 90-minute lectures a week. Prerequisite: one year of college science

Division II: Natural Science 1.0 units Barber.D. Not offered in 2011-12.

### **GEOL B209 Natural Hazards**

Elkins,L.

A quantitative approach to understanding the earth processes that impact human societies. We consider the past, current, and future hazards presented by geologic processes, including earthquakes, volcanoes, landslides, foods, and hurricanes. The course includes discussion of the social, economic, and policy contexts within which natural geologic processes become hazards. Case studies are drawn from contemporary and ancient societies. Lecture three hours a week, with one day-long feld trip. Prerequisite: one semester of college science or permission of instructor. Division II and Quantitative Skills Quantitative Methods (QM) CROSS-LISTED AS CITY-B210 1.0 units

#### **GEOL B230 The Science of Soils**

Physical, chemical, and biological processes within soil systems. Emphasis is on factors governing the physica protection, nutries a valuability and plays growth and production within soils. How to classify soils and to assess nutrient cycling and contaminant fate will be covered. Prerequisite: at least one introductory course in Geology, Biology or Chemistry.

# 170 Environmental Studies

HIST B212 Pirates, Travelers, and Natural

Historians: 1492-1750

In the early modern period, conquistadors, missionar-

Division III: Humanities CROSS-LISTED AS PHIL-B240 1.0 units Brook,A. Not offered in 2011-12.

# POLS B278 Oil, Politics, Society, and Economy

Examines the role oil has played in transforming societies, in shaping national politics, and in the distribution of wealth within and between nations. Rentier states and authoritarianism, the historical relationships between oil companies and states, monopolies, boycotts, sanctions and demands for succession, and issues of social justice mark the political economy of oil.

Division I: Social Science

1.0 units

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# **POLS B310 Comparative Public Policy**

Ab complairis on Potopolicy Oprocesses land bulk omes across

(and private) debates. Prerequisite: one course in Sociology, or the consent of the instructor.

Division I: Social Science

1.0 units Simpson,R.

Not offered in 2011-12.

### SOCL B346 Advanced Topics in Environment and Society

This is a topics course. Topics vary. Division I: Social Science CROSS-LISTED AS CITY-B345 1.0 units Simpson,R. *Not offered in 2011-12.* 

### **SOCL B354 Comparative Social Movements**

CROSS-LISTED AS POLS-B354 1.0 units Hager,C. Not offered in 2011-12.

### **SOCL B360 Topics in Urban Culture and Society**

This is a topics course. Course content varies. Division I: Social Science
CROSS-LISTED AS CITY-B360
CROSS-LISTED AS ANTH-B359
CROSS-LISTED AS HART-B359
1.0 units
McDonogh,G., Hayes-Conroy,A.
Not offered in 2011-12.

# **FILM STUDIES**

Students may complete a minor in Film Studies.

#### Coordinator

Homay King, History of Art

#### **Faculty**

Erica Cho, Visiting Assistant Professor Hoang Nguyen, Assistant Professor (on leave semesters I and II)

### **Steering Committee**

Timothy Harte, Russian

Homay King, History of Art

Imke Meyer, German and German Studies Program

Hoang Nguyen, English (on leave semesters I and II)

Michael Tratner, English

Sharon Ullman, History and Gender and Sexuality Studies

Film Studies is an interdisciplinary program of inquiry bringing a range of analytical methods to bear upon flms, flm audiences, and the social and industrial contexts of flm and media production, distribution and exhibition. The courses that comprise the minor in flm studies refect the diversity of approaches in the academic study of cinema. The minor is anchored by core courses in formal analysis, history and theory. Elective courses in particular flm styles, directors, national cinemas, genres, areas of theory and criticism, and issues in flm and media culture add both breadth and depth to this program of study.

Film Studies is a Bryn Mawr College minor. Students must take a majority of courses on the Bryn Mawr campus; however, minors are encouraged to consider courses offered in the Tri-College consortium and at the Undem\(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\) \(^1\

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- 1. One introductory course in the formal analysis of flm
- 2. One course in flm history or an area of flm history
- 3. One course in flm theory or an area of flm theory
- 4. Three electives.

At least one of the six courses must be at the 300 level. Courses that fall into two or more of the above categories may fulfII the requirement of the student's choosing, but may not fulfll more than one requirement simultaneously. Students should consult with their advisers to determine which courses, if any, may count simultaneously for multiple credentials. Final approval is at the discretion of the program director.

### **ARTW B266 Screenwriting**

An introduction to screenwriting. Issues basic to the art of storytelling in flm will be addressed and analyzed: character, dramatic structure, theme, setting, image, sound. The course focuses on the flm adaptation; readings include novels, screenplays, and short stories. Films adapted from the readings will be screened. In the course of the semester, students will be expected to outline and complete the frst act of an adapted screenplay of their own.

Division III: Humanities Critical Interpretation (CI) 1.0 units Dovne, N.

# COML B238 The History of Cinema 1895 to 1945 Silent Film: From United States to Soviet Russia and **Beyond**

This course will explore cinema from its earliest, most primitive beginnings up to the end of the silent era. While the course will focus on a variety of historical and theoretical aspects of cinema, the primary aim is to look at flms analytically. Emphasis will be on the various artistic methods that went into the direction and production of a variety of celebrated silent flms from around the world. These flms will be considered in many contexts: artistic, historical, social, and even philosophical, so that students can develop a deeper understanding of silent cinema's rapid evolution.

Division III: Humanities CROSS-LISTED AS ENGL-B238 **CROSS-LISTED AS HART-B238** CROSS-LISTED AS RUSS-I

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and narrative form. The class will address central debates within feminism from the 1970s to the present, in particular, feminism's infuence on women's independent flm production and the question of female authorship. Division III: Humanities
Critical Interpretation (CI)
CROSS-LISTED AS HART-B239
1.0 units
Gorfnkel,E.
Not offered in 2011-12.

### **ENGL B257 Gender and Technology**

the production of gender; the historical role gender has played in the evolution of various technologies; how the co-construction of gender and technology has been represented in a range of on-line, flmic, fctional, and critical media; and what all of the above suggest for the technological engagement of everyone in today's world. Division III: Humanities
Critical Interpretation (CI)
CROSS-LISTED AS CMSC-B257
1.0 units
Dalke,A., McCormack,E., Blankenship,L.
Not offered in 2011-12.

Explores the historical role technology has played in

### **ENGL B280 Video Practices: From Analog to Digital**

This course explores the history and theory of video art from the late 1960's to the present. The units include: aesthetics; activisim; access; performance; and institutional critique. We will refect on early video's "utopian moment" and its manifestation in the current new media revolution. Feminist, people of color and queer productions will constitute the majority of our corpus. Prerequisite: ENGL/HART B205 Intro to Film or consent of the instructor.

Division III: Humanities CROSS-LISTED AS HART-B280 1.0 units Nguyen,H. Not offered in 2011-12.

### **ENGL B299 History of Narrative Cinema**

This course surveys the history of narrative flm from 1945 through the contemporary moment. We will analyze a series of styles and national cinemas in chronological order, including Italian Neorealism, the French New Wave, and other post-war movements and genres. Viewings of canonical flms will be supplemented by more recent examples of global cinema. While historical in approach, this course emphasizes the theory and criticism of the sound flm, and we will consider various methodological approaches to the aesthetic, socio-political, and psychological dimensions of cinema. Fulfills the history requirement or the introductory course requirement for the Film Studies minor.

Division III: Humanities CROSS-LISTED AS HART-B299 1.0 units King,H. Not offered in 2011-12.

#### **ENGL B334 Topics in Film Studies**

This is a topics course. Content varies. Current topic description: In what ways do flm, photography, and digital media shape the space of public appearance? To what extent are political, social, and cultural recognition predicated on the capacity to appear in photographs, on flm, on television, on the internet, and in classrooms and musuems? We will explore topics such as 1) how invisible and marginal subjects are to be pictured, 2) how existing repertoires of images affect who and what can appear, 3) how the censorship, circulation, and exhibition of images factor into public visibility. Division III: Humanities

Division III: Humanities CROSS-LISTED AS HART-B334 1.0 units King,H.

# ENGL B341 Cult Genres: Camp, Kitsch, and Trash Cinema

Division III: Humanities CROSS-LISTED AS HART-B341 1.0 units Gorfnkel,E. Not offered in 2011-12.

# ENGL B367 Asian American Film Video and New Media

The course explores the role of pleasure in the production, reception, and performance of Asian American identities in flm, video, and the internet, taking as its focus the sexual representation of Asian Americans in works produced by Asian American artists from 1915 to present. In several units of the course, we will study graphic sexual representations, including pornographic images and sex acts some may fnd objectionable. Students should be prepared to engage analytically with all class material. To maintain an atmosphere of mutual respect and solidarity among the participants in the class, no auditors will be allowed.

Division III: Humanities CROSS-LISTED AS HART-B367 1.0 units Nguyen,H. *Not offered in 2011-12.* 

# **GERM B262 Film and the German Literary Imagination**

Course content varies. Topic for Fall 2010: "Austrian Cinema: From the Silent Era to the Present." This course offers an overview of Austrian cinema from the

silent era to the present. We will trace the ways in which Austrian flm grapples with the fall of the Habsburg Empire, World War I and its aftermath, Austro-Fascism,

respect and solidarity among the participants in the class, no auditors will be allowed. Division III: Humanities CROSS-LISTED AS ENGL-B367 1.0 units Nguyen,H. Not offered in 2011-12.

#### **HEBR B110 Israeli Cinema**

The course traces the evolution of the Israeli cinema from ideologically charged visual medium to a universally recognized flm art, as well as the emergent Palestinian cinema and the new wave of Israeli documentaries. It will focus on the historical, ideological, political, and cultural changes in Israeli and Palestinian societies and their impact on flms' form and content.

Division III: Humanities Critical Interpretation (CI)

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ing the expressive potential of the medium to create a personal visual statement. Prerequisite: Preference to declared majors who need Foundations, and to those who have entered the lottery for the same Foundations course at least once without success. Lottery conducted by Prof. on the frst day of class. Kim,H.

#### **ARTS H121 Foundation Printmaking: Relief Printing**

A seven-week course covering various techniques and approaches to the art of the woodcut and the linocut, emphasizing the study of design principles and the expressive potential of the medium to create a personal visual statement. Prerequisite: Preference to declared majors who need Foundations, and to students who have entered the lottery for the same Foundations course at least once without success. Kim, H.

Not offered in 2011-12.

# **ARTS H122 Foundation Printmaking: Lithography**

A seven-week course covering various techniques and approaches to Lithography, including stone and plate preparation, drawing materials, editioning, black and white printing. Emphasizing the expressive potential of the medium to create a perseclar visional standard majorajous where the determinent. Prerequisite: Preference to devolved majorajous where the determinent that the lottery for the same Foundations course at the lotters once without success.

#### ARTS H225 Lithography: Material and Techniques

An intermediate course covering B/W and Color Lithography in plates and stones. Combined methods with other printmaking techniques such as Paper lithography and Monotype are explored during the course along with photographic approaches. An edition of images is required along with experimental ones. Development of technical skills in traditional Lithography and personal visual study are necessary with successful creative solutions. A strong body of work following a specific theme is required. Individual discussions and group critiques are held periodically. Additional research on the history of printmaking is requested. Prerequisite: Permission of Instructor by review of portfolio. Kim.H.

Not offered in 2011-12.

#### ARTS H231 Drawing (2-D): All Media

Students are encouraged to experiment with various drawing media and to explore the relationships between media, techniques and expression. Each student will strive to develop a personal approach to drawing while addressing fundamental issues of pictorial space, structure, scale, and rhythm. Students will work from observation, conceptual ideas and imagination. Course includes drawing projects, individual and group crits, slide lectures, museum and gallery visits. Prerequisite: Fine Arts Foundations or consent. Whalley,E., Goodrich,J.

#### **ARTS H233 Painting: Materials and Techniques**

Students are encouraged to experiment with various painting techniques and materials in order to develop a personal approach to self-expression. We will emphasize form, color, texture, and the relationship among them; infuences of various techniques upon the expression of a work; the characteristics and limitations of different media. Students will work from observation, conceptual ideas and imagination. Course includes drawing projects, individual and group crits, slide lectures, museum and gallery visits. Prerequisite: Fine Arts Foundations or consent. Whalley, E., Goodrich, J.

#### ARTS H241 Drawing (3-D): All Media

In essence the same problems as in Fine Arts 231A or B. However, some of the drawing media are clay modeling in half-hour sketches; the space and design concepts solve three-dimensional problems. Part of the work is done from life model. May be repeated for credit. Prerequisite: Fine Arts Foundations or consent. Baenziger,M.

Not offered in 2011-12.

#### **ARTS H243 Sculpture: Materials and Techniques**

This course is designed to give students an in depth introduction to a comprehensive range of three-dimensional concepts and fabrication techniques. Students are encouraged to develop their own visual vocabulary and to understand their ideas in the context of contemporary sculpture. Processes including wood and metalworking, mold-making, and casting procedures for a range of synthetic materials in addition to bronze will be introduced in class. Projects are designed to provide students with a framework to explore all sculptural techniques introduced in class while developing their own personal form of visual expression. Course may be repeated for credit. Prerequisite: Fine Arts Foundations or consent.

Baenziger, M.

#### **ARTS H251 Photography: Materials and Techniques**

Students are encouraged to develop an individual approach to photography. Emphasis is placed on the creation of black and white photographic prints which express plastic form, emotions and ideas about the physical world. Work is critiqued weekly to give critical insights into editing of individual student work and the use of the appropriate black and white photographic materials necessary to give coherence to that work. Study of the photography collection, gallery and museum exhibitions, lectures, and a critical analysis of photographic sequences in books and a research project supplement the weekly critiques. Prerequisite: Fine Arts 103 or equivalent.

Williams, W.

### ARTS H253 The Theory and Practice of Conceptual Art

In this course, the specifc mid-20th century movement called Conceptual Art will be explored, as will its progenitors and its progeny. Students will study the founding manifestos, the canonical works and their critical appraisals, as well as develop tightly structured studio practica to embody the former research. The course invites artists, writers, activists and cultural thinkers, those who want to know what it is to make things, spaces, situations, communities, allies and trouble—without necessarily knowing how to draw, paint, sculpt, photograph, videotape or flm.

Muse,J.

Not offered in 2011-12.

#### ARTS H260 Photography: Materials and Techniques

Prerequisite: Fine Arts Foundations or consent. Williams, W.

#### **ARTS H321 Experimental Studio: Etching**

An advanced course covers Color Etching using multiple plates. Viscosity printing, line etching, aquatint, soft-ground, surface roll, Chin-collè, plate preparation, registration and editioning are covered. Students study techniques and concepts in Intaglio method as well as visual expressions through hands-on experiences. Development of technical skills of Intaglio and personal visual study are necessary and creative and experimental approaches beyond two-dimensional outcomes encouraged. A strong body of work following a specific theme is required. Individual discussions and group critiques are held periodically. Additional research on the history of printmaking is requested. Prerequisite: Permission of instructor by review of portfolio. Kim,H.

### ARTS H322 Experimental Studio: Printmaking: Lithography

An advanced course explores traditional and experimental lithographic printmaking techniques in multiple plates and stones. Two- and three- dimensional and design and drawing exploration in color also are addressed. During the semester, students use multipleplate and stone lithography in colors. Registration, color separation, and edition are taught at an advanced level. Combining other mediums can be explored individually. Development of technical skills of the Lithographic process with personal visual study is necessary and creative and experimental approaches are highly encouraged. A strong body of work following a specific theme is required. Individual discussions and group critiques are held periodically. Prerequisite: One course in printmaking or consent. Kim,H.

#### ARTS H331 Experimental Studio: Drawing (2-D)

Students will build on the work done in 200 level courses, to develop further their individual approach to drawing. Students are expected to create projects that demonstrate the unique character of ents arnt ques are

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### **FRENCH AND FRANCOPHONE STUDIES**

Students may complete a major or minor in French and Francophone Studies. Within the major, student may complete the requirements for secondary education certification. Students may complete an M.A. in the combined A.B./M.A. program (through 2014-2015 academic year).

#### **Faculty**

Grace Armstrong, Professor

Benjamin Cherel, Lecturer

Francis Higginson, Associate Professor and Chair

Rudy Le Menthéour, Assistant Professor

Brigitte Mahuzier, Professor (on leave semesters I and II)

Agnès Peysson-Zeiss, Lecturer

The Departments of French at Bryn Mawr and Haverford Colleges offer a variety of courses and two options for the major. The purpose of the major in French is to lay the foundation for an understanding and appreciation of French and Francophone culture through its literature and language, the history of its arts, its thought and its institutions. Course offerings are intended to serve both

or abroad. Students placed at the 200 level by departmental examinations are exempted from the 100-level requirements. Occasionally, students may be admitted to seminars in the graduate school.

#### Honors and the Senior Experience

For the French and Francophone Literature option: After taking Senior Conference in semester I of the senior year, students have the choice in semester II of writing a thesis (30-40 pp.) under the direction of a faculty member or taking a 300-level course in which they write a Senior Essay (15-20 pp.) The frst choice offers selfselected students who already have developed a clearly defined subject in semester I the opportunity to pursue independent research and writing of the thesis with a faculty mentor. The second choice allows students, often double majors with another thesis or pre-medical students, the opportunity to produce a substantial, but shorter, piece of work within the structure of their 300-level course in semester II. Departmental honors are awarded for excellence in the Senior Experience after the oral defense of either the Senior Thesis or the Senior Essay.

For the Interdisciplinary Studies in French option: Students take French 325 or 326 in their senior year and, if they have not already done so, complete the two 300-level courses required outside the department. In semester II they write a thesis in French or English under the direction of a member of the French faculty and a mentor outside the department. Departmental honors are awarded for excellence in the Senior Experience after the oral defense of the Senior Thesis.

#### **Minor Requirements**

Requirements for a French minor are FREN 005-102 or 005-105, or 101-102 or 101-105; the 200-level language course; and four 200-level or 300-level courses. At least one course must be at the 300 level.

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#### 184 French and Francophone Studies

week) sections that are supplemented by an extra hour

per week with an assistant. This is a year-long cours p The á M

both semesters are required for credit.

Language Level 2

1.0 units

#### **FREN B004 Intermediate French**

Cherel, B., Le Menthéour, R.

The emphasis on speaking, understanding, and writing French is continued; texts from French literature and cultural media are read; and short papers are written in French. Students use the Language Learning Center regularly and attend supplementary oral practice sessions. The course meets in non-intensive (three hours a

une tradition classique, les écrivains des Lumières en minaient l'idéologie sous-jacente.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Le Menthéour, R.

#### FREN B205 Le Temps des prophétes: de Chateaubriand á Baudelaire

From Chateaubriand and Romanticism to Baudelaire, a study of selected poems, novels and plays.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Mahuzier,B. Not offered in 2011-12.

#### FREN B206 Le Temps des virtuoses: Symbolisme, Naturalisme et leur progéniture

A study of selected works by Claudel, Gide, Proust, Rimbaud, Valéry, Verlaine, and Zola, Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Staff

#### FREN B207 Courants littéraires du 20ème siècle

A study of selected works illustrating the principal literary movements from 1900 to the present. Depending on who is teaching the course, this class will focus on various authors and literary movements of the 20th century such as Surrealism, Modernism, the Nouveau Roman, Oulipo, as well as works from the broader Francophone world.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) 1.0 units Mahuzier, B., Higginson, P. Not offered in 2011-12.

#### FREN B213 Theory in Practice: Critical Discourses in the Humanities

This seminar provides exposure to infuential 20thcentury French thinkers. It will examine three major currents: Postcolonial Theory; Feminist Theory; Post-Structuralist Theory. The primary goal here is to introduce students to exciting and diffcult critical thought that will prove useful to their future studies and will begin to develop necessary critical skills. While the materials covered are primarily grounded in French intellectual history, the course will also spend time situating these intellectual currents in broader transnational and transdisciplinary contexts. This is a required course for the French major. Course taught in English and serving the humanities.

Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS PHIL-B253 CROSS-LISTED AS COML-B213 **CROSS-LISTED AS GERM-B213** 1.0 units Dostal,R.

#### FREN B227 Topics in Modern Planning

This course examines topics in planning as defined by specific areas (modern European metropoles) or themes (the impact of oil). It is a writing intensive course.

Division I: Social Science CROSS-LISTED AS CITY-B227 CROSS-LISTED AS GERM-B227 CROSS-LISTED AS HART-B227 1.0 units Hein,C. Not offered in 2011-12.

#### FREN B248 Histoire des Femmes en France

A study of women and gender in France from the Revolution to the present. The course will pay particular attention to the role of women in the French Revolution (declarations, manifestos, women's clubs, salons, etc.) and in the post-revolutionary era, as well as to the more contemporary feminist manifestations in France since Simone de Beauvoir's Deuxiéme Sexe and the fow of feminist texts produced in the wake of May '68.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Mahuzier,B. Not offered in 2011-12.

#### FREN B251 La Mosaïque France

A study that opposes the discourse of exclusion, xenophobia, racism and the existence of a mythical, unique French identity by examining 20th-century French people and culture in their richness and variety, based on factors such as gender, class, region, colonization and decolonization, immigration and ethnic background. Films and texts by Begag, Beauvoir, Cardinal, Carles, Duras, Ernaux, Jakez Helias, Modiano, and Zobel. Division III: Humanities Cross-Cultural Analysis (CC) CROSS-LISTED AS CITY-B251 Counts toward International Studies minor 1.0 units Cherel.B. Not offered in 2011-12.

Division III: Humanities

4. Of the six courses, ho fewer than two and no more than three will also/form part of the student's major.

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Requirements for the minor are identical to those for the concentration, with the stipulation that no courses in gender and sexuality will overlap with courses taken to fulfill requirements in the student's major.

Neither a senior seminar nor a senior thesis is required for the concentration or minor; however, with the permission of the major department, a student may choose to count toward the concentration a senior thesis with significant content in gender and sexuality. Students wishing to construct an independent major in gender and sexuality should make a proposal to the Committee on Independent Majors.

# ANTH B101 Introduction to Anthropology: Prehistoric Archaeology and Biological Anthropology

An introduction to the place of humans in nature, primates, the fossil record for human evolution, human variation and the issue of race, and the archaeological investigation of culture change from the Old Stone Age to the rise of early civilizations in the Americas, Eurasia and Africa. In addition to the lecture/discussion classes, there is a one-hour weekly lab.

Division I: Social Science Scientifc Investigation (SI) 1.0 units Davis,R. Su,D.

#### **ANTH B102 Introduction to Cultural Anthropology**

An introduction to the methods and theories of cultural anthropology in order to understand and explain cultural similarities and differences among contemporary societion.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 urlits Pashigian,M., Weidman,A.

#### **ANTH B214 Third World Feminisms**

The course focuses on the fgure of the "exploited Filipina body" as a locus for analyzing the politics of gendered transnational labor within contemporary capitalist globalization. We will examine gendered migrant labor, the international sex trade, the "traffc in women" discourse, feminist and women's movements, and transnational feminist theory.

Division I: Social Science Cross-Cultural Analysis (CC)

1.0 units Velasco,G. Not offered in 2011-12. This course examines the relationship of gender to both the nation and the diaspora, within a context of globalization. We will study the co-constitutive relationship of gender, sexuality, race/ethnicity, and

#### **ANTH B350 Advanced Topics in Gender Studies**

This is a topics course on the gendered perspective. Life stories, case studies, and ethnographic methodology will be featured. Topics vary.

Division I: Social Science

1.0 units Kilbride, P.

Not offered in 2011-12.

#### **ARCH B234 Picturing Women in Classical Antiquity**

We investigate representations of women in different media in ancient Greece and Rome, examining the cultural stereotypes of women and the gender roles that they reinforce. We also study the daily life of women in the ancient world, the objects that they were associated with in life and death and their occupations.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) CROSS-LISTED AS CSTS-B234 CROSS-LISTED AS HART-B234 1.0 units Lindenlauf, A. Not offered in 2011-12.

#### **ARCH B303 Classical Bodies**

An examination of the conceptions of the human body evidenced in Greek and Roman art and literature, with emphasis on issues that have persisted in the Western tradition. Topics include the fashioning of concepts of male and female standards of beauty and their implications; conventions of visual representation; the nude; clothing and its symbolism; the athletic ideal; physiognomy; medical theory and practice; the visible expression of character and emotions; and the formulation of the "classical ideal" in antiquity and later times.

Division III: Humanities CROSS-LISTED AS COML-B313 **CROSS-LISTED AS HART-B305** 1.0 units Donohue, A. Not offered in 2011-12.

#### **ARTD B240 Dance History I: Roots of Western Theater Dance**

This course investigates the historic and cultural forces affecting the development and functions of pre-20thcentury dance as well as its relationship to and impact on the development of Western culture. It will consider nontheatrical forms and applications, but will give special emphasis to the development of theatre dance forms. It will also introduce students to the varied forms of historic research and the changing modes of documenting dance and to a view of history not only as a

linear progression of events but also as process, change and cultural shift. Lecture, discussion, and audiovisual materials.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Caruso Haviland, L. Not offered in 2011-12.

#### **BIOL B214 The Historical Roots of Women in Genetics and Embryology**

As a more focused version of the course from previous years, we will examine the role that women scientists and technicians played in the development of genetics and embryology from the late-19th to the mid-20th century. The course will look at the work and lives of well known and lesser known individuals, asking how factors such as their educational experiences and mentor relationships played a role in their contributions. One facet of the course will be to look at the Bryn Mawr Biology Department from the founding of the College into the mid-20th century.

Division II: Natural Science Scientifc Investigation (SI) Inquiry into the Past (IP) CROSS-LISTED AS HIST-B214 1.0 units Davis, G. Not offered in 2011-12.

#### **CITY B205 Social Inequality**

Division I: Social Science CROSS-LISTED AS SOCL-B205 1.0 units Osirim, M.

#### **CMSC B257 Gender and Technology**

Explores the historical role technology has played in the production of gender; the historical role gender has played in the evolution of various technologies; how the co-construction of gender and technology has been represented in a range of on-line, flmic, fctional, and critical media; and what all of the above suggest for the technological engagement of everyone in today's world. Division III: Humanities

CROSS-LISTED AS ENGL-B257 1.0 units Dalke, A., McCormack, E., Blankenship, L. Not offered in 2011-12.

#### **COML B220 Writing the Self**

A consideration, through analysis and appreciation of his major works, of how the horrifc experience of the Holocaust awakened in Primo Levi a growing awareness of his Jewish heritage and led him to become one of the dominant voices of that tragic historical event, as well as one of the most original new literary fgures of post-World War II Italy. Always in relation to Levi and his works, attention will also be given to other Italian women writers whose works are also connected with the Holocaust.

Division III: Humanities CROSS-LISTED AS CSTS-B220 1.0 units Conybeare,C. Not offered in 2011-12.

### **COML B245 Interdisciplinary Approaches to German Literature and Culture**

This is a topics course. The syllabus will include some theoretical readings, but the emphasis is practical and analytical, considering parallel translations of certain enduring literary texts as well as books and essays about the art of translation. Literary translation will be considered as a spectrum ranging from Dryden's "metaphrase" (word-for-word translation) all the way through imitation and adaptation. The course will include class visits by working literary translators. The Italian verbs for

#### **CSTS B220 Writing the Self**

What leads people to write about their lives? Do women and men present themselves differently? Do they think different issues are important? How do they claim authority for their thoughts and experiences? Readings will include Abelard and Heloise's Letters, Augustine's Confessions, Guibert de Nogent's A Monk's Confession, Patrick's Confession, Perus Ä

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male authors soared, the culture found itself at pains to define the appropriate moments for female speech and silence, action and passivity. We will engage a variety of pre-suffrage literatures that place women at the nexus of national narratives of slavery and freedom, foreignness and domesticity, wealth and power, masculinity and citizenship, and sex and race "purity."

Division III: Humanities Critical Interpretation (CI)

#### **ENGL B333 Lesbian Immortal**

Lesbian literature has repeatedly fgured itself in alliance

and personal crises that shaped it, giving particular attention to how each poet constructed "poethood" for herself.

Division III: Humanities 1.0 units Hedley,J. *Not offered in 2011-12.* 

#### ENGL B372 Composing a Self: American Women's Life Writing

Beginning with Rowlandson's 1682 captivity narrative and concluding with Kingston's The Woman Warrior, we examine how American women have constructed themselves in print. Gender, ethnicity, spirituality and sexuality inform public narratives; while letters and diaries serve as a counterweight, revealing private selves and prompting exploration of authority, authorship, history, citizenship and identity. Course includes personal life-writing and archival research in the College's Special Collections.

Division III: Humanities 1.0 units Bruder, A. *Not offered in 2011-12.* 

### FREN B201 Le Chevalier, la dame et le prêtre: littérature et publics du Moyen Age

Using literary texts, historical documents and letters as a mirror of the social classes that they address, this interdisciplinary course studies the principal preoccupations of secular and religious women and men in France from the Carolingian period through 1500. Selected works from epic, lai, roman courtois, fabliau, theater, letters, and contemporary biography are read in modern French translation.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Armstrong,G.

### FREN B302 Le printemps de la parole féminine: femmes écrivains des débuts

This study of selected women authors from the French Middle Ages, Renaissance and Classical periods—among them, Marie de France, the trobairitz, Christine de Pisan, Louise Labé, Marguerite de Navarre, and Madame de Lafayette—examines the way in which they appropriate and transform the male writing tradition and define themselves as self-conscious artists within or outside it. Particular attention will be paid to identifying recurring concerns and structures in their works, and to assessing their importance to female writing: among them, the poetics of silence, reproduction as a metaphor for artistic creation, and sociopolitical engagement.

Division III: Humanities CROSS-LISTED AS COML-B302 1.0 units Armstrong,G. *Not offered in 2011-12.* 

### **GERM B245 Interdisciplinary Approaches to German Literature and Culture**

This is a topics course. Course content varies. Division III: Humanities
Critical Interpretation (CI)
Cross-Cultural Analysis (CC)
CROSS-LISTED AS COML-B245
1.0 units
Meyer,I.

### **GERM B321 Advanced Topics in German Cultural Studies**

This is a topics course. Course content varies. Topic for 2011-12 is The Transnational Cosmopolitanism of Swiss Literature.

Division III: Humanities CROSS-LISTED AS CITY-B319 CROSS-LISTED AS COML-B321 CROSS-LISTED AS HART-B348 1.0 units Seyhan,A., Werlen,H.

#### GNST B290 Interdisciplinary Perspectives on Gender and Sexuality

This course offers a rigorous grounding for students interested in questions of gender and sexuality. Bringing together intellectual resources from multiple disciplines, it also explores what it means to think across and between disciplinary boundaries. Team-taught by Bryn Mawr and Haverford professors from different disciplines, this course is offered yearly on alternate campuses.

Division III: Humanities 1.0 units Dalke, A., Edwards, K.

#### HART B108 Critical Approaches to Visual Representation: Women, Feminism, and History of Art

An investigation of the history of art since the Renaissance organized around the practice of women artists, the representation of women in art, and the visual economy of the gaze.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Saltzman,L., Teaching Assistant,T.

#### **HART B234 Picturing Women in Classical Antiquity**

We investigate representations of women in different media in ancient Greece and Rome, examining the cultural stereotypes of women and the gender roles that they reinforce. We also study the daily life of women in the ancient world, the objects that they were associated with in life and death and their occupations.

Division III: Humanities CROSS-LISTED AS ARCH-B234 CROSS-LISTED AS CSTS-B234 1.0 units Lindenlauf, A. Not offered in 2011-12.

#### **HART B239 Women and Cinema**

This course will examine the particular challenges that women flmmakers face, as well as the unique and innovative contributions they have made to flm aesthetics and narrative form. The class will address central debates within feminism from the 1970s to the present, in particular, feminism's infuence on women's independent flm production and the question of female authorship. Division III: Humanities **CROSS-LISTED AS ENGL-B239** 1.0 units Gorfnkel,E. Not offered in 2011-12.

#### **HART B280 Video Practices: Analog to Digital**

Division III: Humanities CROSS-LISTED AS ENGL-B280 1.0 units Nguyen,H. Not offered in 2011-12.

#### **HART B305 Classical Bodies**

An examination of the conceptions of the human body evidenced in Greek and Roman art and literature, with emphasis on issues that have persisted in the Western tradition. Topics include the fashioning of concepts of male and female standards of beauty and their implications; conventions of visual representation; the nude; clothing and its symbolism; the athletic ide

#### HART B367 Asian American Film, Video and New Media

The course explores the role of pleasure in the production, reception, and performance of Asian American identities in flm, video, and the internet, taking as its focus the sexual representation of Asian Americans in works produced by Asian American artists from 1915 to present. In several units of the course, we will study graphic sexual representations, including pornographic images and sex acts some may fnd objectionable. Students should be prepared to engage analytically with all class material. To maintain an atmosphere of mutual respect and solidarity among the participants in the class, no auditors will be allowed.

Division III: Humanities CROSS-LISTED AS ENGL-B367 1.0 units Nguyen,H. Not offered in 2011-12.

#### HIST B214 The Historical Roots of Women in **Genetics and Embryology**

Division II: Natural Science CROSS-LISTED AS BIOL-B214 1.0 units Davis, G. Not offered in 2011-12.

#### HIST B292 Women in Britain since 1750

Focusing on contemporary and historical narratives, this course explores the ongoing production, circulation and refraction of discourses on gender and nation as well as race, empire and modernity since the mid-18th century. Texts will incorporate visual material as well as literary evidence and culture and consider the crystallization of the discipline of history itself.

Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Kale, M. Not offered in 2011-12.

#### ITAL B235 The Italian Women's Movement

Emphasis will be put on Italian women writers and flm directors, who are often left out of syllabi adhering to traditional canons. Particular attention will be paid to: a) women writers who have found their voices (through writing) as a means of psychological survival in a patriarchal world; b) women engaged in the women's movement of the 70's and who continue to look at, and rewrite, women's stories of empowerment and solidarity; c) "divaism", fame, via beauty and sex with a particular emphasis on the '60s (i.e. Gina Lollobrigida, Sofa Loren, Claudia Cardinale).

Division III: Humanities 1.0 units McAuliffe, D., Ricci, R. Not offered in 2011-12.

#### ITAL B299 Grief, Sexuality, Identity: Emerging Adulthood

Adolescence is an important time of personality development as a result of changes in the self-concept and the formation of a new moral system of values. Emphasis will be placed on issues confronting the role of the family and peer relationships, prostitution, drugs, youth criminality/gangsters/violence, cultural diversity, pregnancy, gender identity, mental/moral/religious development, emotional growth, alcoholism, homosexuality, sexual behavior. Prerequisite: ITAL B102 or ITAL B105. Division III: Humanities 1.0 units

Ricci,R.

#### **PHIL B221 Ethics**

An introduction to ethics by way of an examination of moral theories and a discussion of important ancient, modern, and contemporary texts which established theories such as virtue ethics, deontology, utilitarianism, relativism, emotivism, care ethics. This course considers questions concerning freedom, responsibility, and obligation. How should we live our lives and interact with others? How should we think about ethics in a global context? Is ethics independent of culture? A variety of practical issues such as reproductive rights, euthanasia, animal rights and the environment will be considered. Division III: Humanities

Critical Interpretation (CI) Cross-Cultural Analysis (CC) 1.0 units Koggel, C.

#### **PHIL B225 Global Ethical Issues**

The need for a critical analysis of what justice is and requires has become urgent in a context of increasing globalization, the emergence of new forms of confict and war, high rates of poverty within and across borders and the prospect of environmental devastation. This course examines prevailing theories and issues of justice as well as approaches and challenges by non-western, post-colonial, feminist, race, class, and disability theorists.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) CROSS-LISTED AS POLS-B225 1.0 units Koggel, C.

#### **PHIL B252 Feminist Theory**

Beliefs that gender discrimination has been eliminated and women have achieved equality have become commonplace. We challenge these assumptions examining the concepts of patriarchy, sexism, and oppression. Exploring concepts central to feminist theory, we attend to the history of feminist theory and contemporary accounts of women's place and status in different societ

disorders, dissociative identity disorder, borderline personality disorder, and chronic pain disorders. Other topics discussed will include work-family confict for working mothers, the role of sociocultural infuences on women's mental health, and mental health issues particular to women of color and to lesbian women. Prerequisite: PSYC B209 or PSYC B351.

Division I: Social Science 1.0 units Rosenfeld,A. *Not offered in 2011-12.* 

#### SOCL B201 The Study of Gender in Society

The defnition of male and female social roles and sociological approaches to the study of gender in the United States, with attention to gender in the economy and work place, the division of labor in families and households, and analysis of class and ethnic differences in gender roles. Of particular interest in this course is the comparative exploration of the experiences of women of color in the United States.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Osirim,M. Not offered in 2011-12.

#### **SOCL B205 Social Inequality**

Introduction to the major sociological theories of gender, racial-ethnic, and class inequality with emphasis on the relationships among these forms of stratification in the contemporary United States, including the role of the upper class(es), inequality between and within families, in the work place, and in the educational system. Division I: Social Science
Cross-Cultural Analysis (CC)
CROSS-LISTED AS CITY-B205
1.0 units
Osirim,M.

#### **SOCL B225 Women in Society**

A study of the contemporary experiences of women of color in the Global South. The household, workplace, community, and the nation-state, and the positions of women in the private and public spheres are compared cross-culturally. Topics include feminism, identity and self-esteem; globalization and transnational social movements and tensions and transitions encountered as nations embark upon development.

Cross-Cultural Analysis (CC) Division I: Social Science 1.0 units Osirim,M. Not offered in 2011-12.

### SOCL B262 Who Belie Wes What and Why: Theem Sociology of Public Opinion

This course explores public opinion: what it is, how it is measured, how it is shaped, and how it changes over time. Specifc attention is given to the role of elites, the mass media, and religion in shaping public opinion.

Sogdian

#### **GENERAL STUDIES**

General studies courses focus on areas that are not usually covered in the Bryn Mawr curriculum and provide a supplement to the areas more regularly covered. These courses cut across disciplines and emphasize relationships among them.

Many general studies courses are open, without prerequisite, to all students. With the permission of the major department, they may be taken for major credit.

### GNST B103 Introduction to Swahili Language and Culture I

The primary goal of this course is to develop an elementary level ability to speak, read, and write Swahili. The emphasis is on communicative competence in Swahili based on the National Standards for Foreign Language Learning. In the process of acquiring the language, students will also be introduced to East Africa and its cultures. No prior knowledge of Swahili or East Africa is required.

Division I or Division III Cross-Cultural Analysis (CC) Counts toward Africana Studies concentration 1.0 units Mshomba,E.

### GNST B105 Introduction to Swahili Language and Culture II

The primary goal of this course is to continue working on an elementary level ability to speak, read, and write Swahili. The emphasis is on communicative competence in Swahili based on the National Standards for Foreign Language Learning. Students will also continue learning about East Africa and its cultures. Introduction to Swahili Language and Culture I or permission of the instructor is required.

Division I or Division III Cross-Cultural Analysis (CC) Counts toward Africana Studies concentration 1.0 units Mshomba,E.

### GNST B145 Introduction to Latin American, Latino, and Iberian Peoples and Cultures

A broad, interdisciplinary survey of themes uniting and dividing societies from the Iberian Peninsula through the contemporary New World. The class introduces the methods and interests of all departments in the concentration, posing problems of cultural continuity and change, globalization and struggles within dynamic histories, political economies, and creative expressions. Division I or Division III
Cross-Cultural Analysis (CC)

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units Staff

#### **GNST B155 Introduction to Islamic Civilization**

This course offers a basic introduction to the Islamic world, from Spain to India, in its political, social, religious, and cultural dimensions. We cover the period from the rise of Islam to early modern times (roughly 600 to 1500). Texts in English translation.

Division III: Humanities Cross-Cultural Analysis (CC) CROSS-LISTED AS COML-B155 1.0 units Kim,S. Not offered in 2011-12.

#### **GNST B156 Themes in Middle Eastern Society**

The basis for the Middle East Studies Concentration, this course features changing themes. For Fall 2010, the theme is the space of religion: in daily life; in politics and culture; space and metaphor. Included are sacred kingship, the rise of Islamic states, roles of Middle Eastern Christians and Jews and challenges from secular ideologies that transform the space of religion.

Cross-Cultural Analysis (CC)

Counts toward Middle East Studies concentration 1.0 units Harrold.D.

Not offered in 2011-12.

#### **GNST B255 Video Production**

This course will explore aesthetic strategies utilized by low-budget flm and video makers as each student works throughout the semester to complete a 7-15 minute flm or video project. Course requirements include weekly screenings, reading assignments, and class screenings of rushes and roughcuts of student projects. Prerequisites: Some prior flm course experience necessary, instructor discretion.

Division III: Humanities Counts toward Film Studies minor 1.0 units

### **GNST B260 Silent Spaces: a History of Contemplation in the West**

This course will trace contemplative traditions developed and preserved in the Western monastic tradition from the desert through the present. Topics include elected silence and the ways in which it has shaped communities in the Western contemplative tradition, and the difference between enclosed contemplatives and contemplatives loose in the world.

1.0 units Francl,M.

## GNST B290 Interdisciplinary Perspectives on Gender and Sexuality

This course offers a rigorous grounding for students interested in questions of gender and sexuality. Bringing together intellectual resources from multiple disciplines, it also explores what it means to think across and between disciplinary boundaries. Team-taught by Bryn Mawr and Haverford professors from different disciplines, this course is offered yearly on alternate campuses.

Division III: Humanities

Counts toward Gender and Sexuality Studies concentration

1.0 units

Dalke, A., Edwards, K.

#### **GNST B403 Supervised Work**

1.0 units

Francl, M., Schulz, M., Glassman, H.

#### **GNST B425 Praxis III - Independent Study**

Counts toward Praxis Program concentration 1.0 units Levine,S., Dalke,A., Brodfuehrer,P., Takenaka,A., Steffensen,I., Stahnke,R., Torday,D., Croll,E., Mudd,S., Wright,N.

#### **GEOLOGY**

Students may complete a major or minor in Geology. Within the major, students may complete concentrations in geoarchaeology or geochemistry.

#### **Faculty**

Don Barber, Associate Professor Selby Cull, Assistant Professor Lynne Elkins, Lecturer

#### **Honors**

Honors are awarded to students who have outstanding academic records in geology and allied felds, and whose research is judged by the faculty of the department to be of the highest quality.

#### **Minor Requirements**

A minor in geology consists of two of the 100-level geology courses, and any four of the 200- or 300-level courses offered by the department.

#### **Concentration in Geoarchaeology**

The geoarchaeology concentration allows students majoring in anthropology, archaeology, or geology to explore the connections among these felds with respect to how our human ancestors interacted with past environments, and how traces of human behavior are preserved in the physical environment. In geology, the geoarchaeology concentration consists of 13 courses: GEOL 101 or 102 or 103; 202, 203, 204, 205, 270, and 399; two semesters of chemistry; two semesters of math, statistics or computational methods; either ARCH 101 or ANTH 101; and one 200- or 300-level elective from among current offerings in Anthropology or Classical and Near Eastern Archaeology. Paperwork for the concentration should be fled at the same time as the major work plan. For course planning advice, consult with Don Barber (Geology), Rick Davis (Anthropology), or Peter Magee (Archaeology).

#### **Concentration in Geochemistry**

The geochemistry concentration encourages students majoring either in geology or in chemistry to design a course of study that emphasizes earth chemistry. In geology this concentration includes at least: GEOL 101, 103, 202, 205; 302 or 305; and CHEM 101 or 103, 104 and 221, or 222. Additional chemistry courses might include 211 (Organic Chemistry). Other courses that complement this concentration are: calculus, linear algebra, computer programming, and computer modeling. Paperwork for the concentration should be fled at the same time as the major work plan. For course planning advice, contact Pedro Marenco, Lynne Elkins (Geology), or Sharon Burgmayer (Chemistry).

#### **GEOL B101 How the Earth Works**

An introduction to the study of planet Earth, the materials of which it is made, the forces that shape its surface and interior, the relationship of geological processes to people, and the application of geological knowledge to the search for useful materials. Laboratory and feldwork focus on learning the tools for geological investigations and applying them to the local area and selected areas around the world. Three lectures and one afternoon of

laboratory or feldwork a week. One required one-day feld trip on a weekend.
Division II with Lab
Scientifc Investigation (SI)
1.0 units
Elkins,L.

#### **GEOL B102 Earth History**

The history of the Earth from its beginning and the evolution of the living forms that have populated it. Three lectures, one afternoon of laboratory a week. A required two-day (Sat.-Sun.) feld trip is taken in April. Division II with Lab Scientifc Investigation (SI) 1.0 units Marenco, P., Elkins, L.

#### **GEOL B103 Earth Systems and the Environment**

This integrated approach to studying the Earth focuses on interactions among geology, oceanography, and biology. Also discussed are the consequences of population growth, industrial development, and human land use. Two lectures and one afternoon of laboratory or feldwork per week. A required one-day feld trip is taken in April.

Division II with Lab
Scientifc Investigation (SI)
CROSS-LISTED AS CITY-B103
Counts toward Environmental Studies minor
1.0 units
Barber, D., Elkins, L.
Not offered in 2011-12.

#### **GEOL B115 Living with Volcanoes**

This course explores how people have long lived alongside, in the shadow of, and at times directly on top of active volcanoes. Volcanic centers are hosts to sporadic and diff cult-to-predict destructive and explosive activity, persistent and damaging passive degassing, vibrant ecosystems, and important geothermal energy systems. The goals of this class are to examine the scientif c basis for understanding volcanoes and predicting their behavior; to study the role of volcanoes in history and lore across human societies; and to examine our complicated relationship with them in the modern world. Prerequisite: Freshman standing.

0.5 units Elkins,L. *Not offered in 2011-12.* 

#### **GEOL B120 Origin and Early Evolution of Life**

Where and how did life originate on Earth? What are the minimum conditions for life to arise, and persist, on any planet? Scientists are closer now than ever before to answering these intriguing questions. In this course, we will explore the fundamental requirements for life; criti-

cally examine many of the hypotheses that have been proposed to explain the origin of life on Earth; survey the fossil, geochemical, and molecular evidence for early life, from the earliest-known examples through the "Cambrian Explosion"; and propose means of identifying life and its effects elsewhere in the universe. Two lectures per week, plus a one-day feldtrip.

Division II: Natural Science 0.5 units Marenco,K. Not offered in 2011-12.

#### **GEOL B125 Geology in Film**

Geologic processes make for great flm storylines, but flmmakers take great liberty with how they depict scientifc ôfactsö and scientists. We will explore how and why flmmakers choose to deviate from science reality. We will study and view one flm per week and discuss its issues from a geologist's perspective. Prerequisite: Freshman standing.

Division II: Natural Science 0.5 units Marenco,P.

### GEOL B130 Life in the Hothouse: Earth's Future Climate

An overview of Earth's climate in the 22nd century (year 2100 and beyond) based on the current scientifc consensus. In addition to describing the forecast conditions, we discuss the scientifc basis for these predictions and their associated uncertainties, and how climate forecasts have been communicated to the public to date.

Prerequisite: Freshman standing. Division II: Natural Science 0.5 units Barber,D.

#### **GEOL B202 Mineralogy and Crystal Chemistry**

The crystal chemistry of representative minerals, descriptive and determinative mineralogy, as well as the relationship between the physical properties of minerals and their structures and chemical compositions. The occurrence and petrography of typical mineral associations and rocks is also covered. Lecture three hours, laboratory at least three hours a week. One required feld trip on a weekend. Prerequisite: introductory course in geology or chemistry (both recommended).

Division II with Lab Scientifc Investigation (SI) 1.0 units Cull,S.

#### **GEOL B203 Invertebrate Paleobiology**

Biology, evolution, ecology, and morphology of the major marine invertebrate fossil groups. Three lectures and one three-hour laboratory a week. A semester-long research project culminating in a scientifc manuscript will be based on material collected on a two-day trip to the Tertiary deposits of the Chesapeake Bay.

Division II with Lab 1.0 units Marenco,P.

#### **GEOL B204 Structural Geology**

An introduction to the study of rock deformation in the Earth's lithosphere viewed from all scales - from the microscopic (atomic scale) to the macroscopic (continental scale). This class focuses on building a foundation of knowledge and understanding that will allow students to broaden their appreciation and understanding of the complexity of the Earth system and the links between geologic structures at all scales and plate tectonics. Three lectures and three hours of laboratory a week, plus weekend feld trips. Prerequisites: GEOL 101 and MATH 101.

Division II with Lab 1.0 units Weil,A.

### **GEOL B205 Sedimentary Materials and Environments**

An introduction to sediment transport, depositional processes, and stratigraphic analysis, with emphasis on interpretation of sedimentary sequences and the reconstruction of past environments. Three lectures and one lab a week, plus a weekend feld trip. Prerequisite: GEOL 101, 102, 103 or instructor permission. Recommended: GEOL 202 and 203.

Division II with Lab Counts toward Environmental Studies minor 1.0 units Barber,D.

#### **GEOL B206 Energy Resources and Sustainability**

An examination of issues concerning the supply of energy and raw materials required by humanity. This includes an investigation of the geological framework that determines resource availability, and of the social, economic, and political considerations related to energy production and resource development. Two 90-minute lectures a week. Prerequisite: one year of college science

Division II: Natural Science Counts toward Environmental Studies minor 1.0 units Barber,D. *Not offered in 2011-12.* 

#### **GEOL B209 Natural Hazards**

A quantitative approach to understanding the earth processes that impact human societies. We consider the past, current, and future hazards presented by

#### 204 Geology

geologic processes, including earthquakes, volcanoes,

#### **GEOL B310 Introduction to Geophysics**

An overview covering how geophysical observations of the Earth's magnetic feld, gravity feld, heat fow, radioactivity, and seismic waves provide a means to study plate tectonics. Also covered are the geophysical techniques used in mineral and energy resources exploration, and in the monitoring of groundwater, earthquakes and volcanoes. Three class hours a week. Prerequisites: GEOL 101 and PHYS 101, and 102. 1.0 units

Weil,A.

Not offered in 2011-12.

#### **GEOL B312 Quaternary Geology**

The Quaternary Period comprises the last 1.8 million years of Earth history, an interval dominated by climate fuctuations and the waxing and waning of large northern hemisphere ice sheets. This course covers the many types of geological evidence used to reconstruct Quaternary climate variability. Three class hours a week, including hands-on data analysis exercises. Prerequisite: GEOL 102, or 103 and 205, or permission of instructor.

Counts toward Environmental Studies minor 1.0 units Barber,D. *Not offered in 2011-12.* 

#### **GEOL B314 Marine Geology**

An introduction to the structure of ocean basins, and the marine sedimentary record. Includes an overview of physical, biological, and chemical oceanography, and modern coastal processes such as shoreline erosion. Meets twice weekly for a combination of lecture, discussion, and hands-on exercises, including one day-long feld trip. Prerequisite: GEOL 101, 102 or 103, and 205, or permission of instructor.

Counts toward Environmental Studies minor 1.0 units Barber, D.

#### **GEOL B328 Analysis of Geospatial Data Using GIS**

An introduction to analysis of geospatial data, theory, and the practice of geospatial reasoning. As part of this introduction students will gain experience in using one or more GIS software packages and be introduced to data gathering in the feld by remote sensing. Each student is expected to undertake an independent project that uses the approaches and tools presented.

CROSS-LISTED AS CITY-B328
CROSS-LISTED AS ARCH-B328
CROSS-LISTED AS BIOL-B328
Counts toward Environmental Studies minor
1.0 units
Staff
Not offered in 2011-12.

#### **GEOL B350 Advanced Topics in Geology**

The geologic histories of the solid bodies in the Solar System: rocky planets, icy moons, asteroids, and comets. How and why these bodies vary in volcanism, tectonics, atmospheric dynamics, aqueous environments, and other planetary processes. Students will read and discuss primary literature, and examine data from on-going NASA planetary missions. Prerequisites: advanced standing in geology, astronomy, or physics, or permission of the instructor.

1.0 units Cull,S.

#### **GEOL B399 Senior Thesis**

An independent project in the feld, laboratory, or library culminating in a written report and oral presentation. Required for all geology majors in the spring semester of the senior year.

1.0 units Barber, D.

#### **GEOL B403 Independent Research**

1.0 units Staff

#### **GERMAN AND GERMAN STUDIES**

Students may complete a major or minor in German and German Studies.

#### Chairs

Imke Meyer, Professor and Co-Chair Ulrich Schönherr, Associate Professor and Co-Chair

#### Faculty at Bryn Mawr College

David Kenosian, Lecturer Imke Meyer, Professor and Co-Chair Azade Seyhan, Professor

#### Faculty at Haverford College

Imke Brust, Assistant Professor

Ulrich Schönherr, Associate Professor and Co-Chair (on leave semesters I and II)

Henning Wrage, Visiting Assistant Professor

The Bryn Mawr-Haverford Bi-College Department of German draws upon the expertise of the German faculty at both Bryn Mawr and Haverford Colleges to offer a broadly conceived German Studies program, incorporating a variety of courses and major options. The purpose of the major in German and German Studies is to lay the foundation for a critical understanding of German culture in its contemporary global context and its larger political, social, and intellectual history. To this end we encourage a thorough and comparative study of the German language and culture through its linguistic and literary history, systems of thought, institutions, political confgurations, and arts and sciences.

The German program aims, by means of various methodological approaches to the study of another language. to foster critical thinking, expository writing skills, understanding of the diversity of culture(s), and the ability to respond creatively to the challenges posed by cultural difference in an increasingly global world. Course offerings are intended to serve both students with particular interests in German literature and literary theory and i ic ane ond

th Ä d n at least one faculty member with whom she has done coursework, and at least one other faculty member must read some of the student's advanced work and agree on the excellence of the work in order for departmental honors to be awarded. If there is a sharp difference of opinion, additional readers will serve as needed.

#### **Minor Requirements**

A minor in German and German studies consists of seven units of work. To earn a minor, students are normally required to take GERM 201 or 202, and four additional units covering a reasonable range of study topics, of which at least one unit is at the 300 level. Additional upper-level courses in the broader area of German studies may be counted toward the seven units with the approval of the department.

#### **Study Abroad**

Students majoring in German are encouraged to spend some time in German-speaking countries in the course of their undergraduate studies. Various possibilities are available: summer work programs, DAAD (German Academic Exchange) scholarships for summer courses at German universities, and selected junior year abroad Programs.

#### **GERM B001 Elementary German**

Meets fve hours a week with the individual class instructor, two hours with student drill instructors. Strong emphasis on communicative competence both in spoken and written German in a larger cultural context. Language Level 1

1.0 units Kenosian,D.

#### **GERM H001 Elementary German**

Henning, Wrage

#### **GERM B002 Elementary German**

Meets fve hours a week with the individual class instructor, two hours with student drill instructors. Strong emphasis on communicative competence both in spoken and written German in a larger cultural context. Language Level 1

1.0 units Kenosian,D.

#### **GERM H002 Elementary German**

Wrage

#### **GERM B101 Intermediate German**

Thorough review of grammar, exercises in composition and conversation. Enforcement of correct grammatical patterns and idiomatic use of language. Study of selected literary and cultural texts and flms from Germanspeaking countries.

Language Level 2 1.0 units Kenosian, D.

#### **GERM H101 Intermediate German**

**Brust** 

#### **GERM B102 Intermediate German**

Thorough review of grammar, exercises in composition and conversation. Enforcement of correct grammatical patterns and idiomatic use of language. Study of selected literary and cultural texts and flms from Germanspeaking countries. Two semesters.

Language Level 2 1.0 units Meyer,I.

#### **GERM H102 Intermediate German**

Brust

#### **GERM H201 Advanced Training: Language, Text and** Context

This course is intended for students who wish to refne their speaking, writing, and reading skills beyond the intermediate level. Designed as a comprehensive introduction to modern German culture, we will discuss a variety of literary, political, and philosophical texts, including feature flms and video materials. In addition, students have the opportunity to enrich the curriculum, by giving class reports on current events of their choice. Weekly grammar reviews will complement these activities.

Brust

#### **GERM B202 Introduction to German Studies**

Interdisciplinary and historical approaches to the study of German language and culture. Selected texts for study are drawn from autobiography, Märchen, satire, philosophical essays and fables, art and flm criticism, discourses of gender, travel writing, cultural productions of minority groups, and scientifc and journalistic writings. Emphasis is on a critical understanding of issues such as linguistic imperialism and exclusion, language and power, gender and language, and ideology and language.

Division I or Division III Critical Interpretation (CI) Cross-Cultural Analysis (CC) 1.0 units Meyer,I.

deutschen Filme über "Halbstarke" (yobs) und Teenager und ihre internationalen Vorbilder. Das letzte Viertel des Seminars wird sich intensiv mit der Veränderung der Jugendkultur durch digitale Medien bis hin zum Computerspiel beschäftigen. (Wrage)

#### **GERM B227 Topics in Modern Planning**

This course examines topics in planning as defined by specific areas (modern European metropoles) or themes (the impact of oil). It is a writing intensive course.

Division I: Social Science CROSS-LISTED AS CITY-B227 CROSS-LISTED AS FREN-B227 CROSS-LISTED AS HART-B227 1.0 units Hein,C. Not offered in 2011-12.

1.0 units

Sevhan.A.

Not offered in 2011-12.

#### **GERM B231 Cultural Profles in Modern Exile**

This course investigates the anthropological, philosophi-

cal, psychological, cultural, and literary aspects of mod-

ern exile. It studies exile as experience and metaphor in

the context of modernity, and examines the structure of

the relationship between imagined/remembered homelands and transnational identities, and the dialectics of language loss and bi- and multi-lingualism. Particular attention is given to the psychocultural dimensions of linguistic exclusion and loss. Readings of works by Julia Alvarez, Anita Desai, Sigmund Freud, Milan Kundera, Friedrich Nietzsche, Salman Rushdie, and others. Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) CROSS-LISTED AS ANTH-B231 CROSS-LISTED AS COML-B231 Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration

#### **GERM B245 Interdisciplinary Approaches to German** Literature and Culture: Sexualities and Gender in Literature and Film

This seminar examines discourses on sexualities and gender advanced by German and Austrian literature and flm in the 20th century. Our analyses of the visual and narrative construction of sexuality and of masculinity and femininity will be framed by discussion of theoretical texts by authors such as Sigmund Freud, Michel Foucault, Adrienne Rich, Laura Mulvey, and Judith Butler. We will screen flms by Leontine Sagan, Liliana Cavani, and Rainer Werner Fassbinder. We'll read literary texts by Arthur Schnitzler, Hermann Hesse, and Ingeborg Bachmann. Class discussions will be held in English.

For German speakers, additional sessions in German will be conducted on a regular basis. Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) CROSS-LISTED AS COML-B245 Counts toward Film Studies minor Counts toward Gender and Sexuality Studies concentration 1.0 units Meyer,I.

#### **GERM B262 Film and the German Literary Imagination**

Course content varies. Topic for Fall 2010: "Austrian Cinema: From the Silent Era to the Present." This course offers an overview of Austrian cinema from the silent era to the present. We will trace the ways in which Austrian flm grapples with the fall of the Habsburg Empire, World War I and its aftermath, Austro-Fascism, the Annexation of Austria by Nazi Germany, World War II, Austria's relation to the Holocaust, shifting notions of national identity after 1945, and Austria's entrance into the European Union. Previous topics include: Travel in Post-War German and Austrian Film; Global Masculinities: The Male Body in Contemporary Cinema.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) Counts toward Film Studies minor Counts toward International Studies minor 1.0 units Meyer,I. Offered at Haverford in 2011-12.

#### **GERM H262 Film and the German Literary Imagination**

Course content varies. Topic for spring 2012: European Film Brust

#### 210 German and German Studies

#### **GERM B303 Modern German Prose**

Division III: Humanities 1.0 units Meyer,I.

#### **Major Requirements**

Requirements in the major are two courses at the introductory level, two courses at the 100 level, two courses at the 200 level, one course at the 300 level (or above) and the Senior Seminar.

Also required are three courses to be distributed as follows: one in Greek history, one in Greek archaeology, and one in Greek philosophy.

By the end of the senior year, majors will be required to have completed a sight translation examination from Greek to English.

Prospective majors in Greek are advised to take Greek in their frst year. For students entering with Greek there is the possibility of completing the requirements for both A.B. and M.A. degrees in four years. Those interested in pursuing advanced degrees are advised to have a frm grounding in Latin.

#### **Minor Requirements**

Requirements for a minor in Greek are two courses at the introductory level, two courses at the 100 level, two courses at the 200 level.

Courses for which a knowledge of Greek is not required are listed under Classical Culture and Society.

#### **GREK B010 Traditional and New Testament Greek**

The frst part of this year-long course will focus on introducing standard (Classical) Greek. Once the grammar has been fully introduced, early in the spring semester, the class will begin to develop facility by reading part of the New Testament, selections from Xenophon and, fnally, a dialogue of Plato.

Language Level 1 1.0 units Sigelman,A.

#### **GREK B011 Traditional and New Testament Greek**

The frst part of this year-long course will focus on introducing standard (Classical) Greek. Once the grammar has been fully introduced, early in the spring semester, the class will begin to develop facility by reading part of the New Testament, selections from Xenophon and, fnally, a dialogue of Plato.

Language Level 1 1.0 units Sigelman,A.

#### **GREK B101 Herodotus**

Greek 101 introduces the student to one of the greatest prose authors of ancient Greece, the historian, Herodotus. The "Father of History," as Herodotus is sometimes called, wrote one of the earliest lengthy prose texts extant in Greek literature, in the Ionian dialect of Greek. The "Father of Lies," as he is also sometimes known, wove into his history a number of fabulous and entertaining anecdotes and tales. His *historie* or inquiry into the events surrounding the invasions by the Persian empire against the Greek city-states set the precedent for all subsequent historical writings.

Division III: Humanities Critical Interpretation (CI) 1.0 units Sigelman, A., Baertschi, A. Not offerediin 2011/12.

**GREK B104 Homer** 

(e.g. literature, religion, philosophy. law, social History); the second term involves the writing and oral presentation of the senior thesis.

CROSS-LISTED AS CSTS-B398 CROSS-LISTED AS LATN-B398 1.0 units Baertschi, A.

#### **GREK B403 Supervised Work**

1.0 units Staff

#### **LATIN**

The major in Latin is designed to acquaint the student with Roman literature, history and culture in all its aspects. Works in Latin language, ranging from its beginnings to the Renaissance, are examined both in their historical context and as infuences on post-classical cultures and societies up to the present day.

#### College Foreign Language Requirement

The College's foreign language requirement may be satisfed by completing LATN 110-112 or 101-102 with an average grade of at least 2.0 or with a grade of 2.0 or better in the second semester.

#### **Major Requirements**

Requirements for the major are two courses at the 100 level, two literature courses at the 200 level, two literature courses at the 300 level, HIST 207 or 208, Senior Seminar, and two courses to be selected from the following: Classical and Near Eastern Archaeology at the 100 level or above; Greek at the 100 level or above; French, Italian or Spanish at the 200 level or above. Courses taken at the Intercollegiate Center for Classical Studies in Rome are accepted as part of the major. By the end of the senior year, majors will be required to have completed successfully a sight translation examination from Latin to English.

Students who place into 200-level courses in their frst year may be eligible to participate in the A.B./M.A. program. Those interested should consult the department as soon as possible.

#### **Minor Requirements**

Requirements for the minor are normally six courses, including one at the 300 level. For non-majors, two literature courses at the 200 level must be taken as a prerequisite for admission to a 300-level course. Courses for which knowledge of Latin is not required are listed under Classical Culture and Society.

#### **LATN B001 Elementary Latin**

Basic grammar, composition, and Latin readings, including classical prose and poetry. Language Level 1 1.0 units Conybeare, C.

#### **LATN B002 Elementary Latin**

Basic grammar, composition, and Latin readings, including classical prose and poetry. Language Level 1 1.0 units Scott,R.

#### LATN B110 Introduction to Latin Literature I

While poetry is not neglected, the course privileges prose readings from the late republican era to the high Roman empire to consolidate students' command of Latin grammar and to foster an appreciation of polished, literary style. There are three required meetings a week and an optional fourth hour for sight reading and additional discussion.

Language Level 2 1.0 units Scott,R.

#### LATN B112 Introduction to Latin Literature II

In the second semester of the sequence, readings in prose and poetry are frequently drawn from a period, suc t m

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#### **LATN B203 Medieval Latin Literature**

This course challenges students with some proficiency in Latin to move beyond the canon of classical texts. We read highlights of Latin literature from late antiquity and the 12th century, including excerpts from Augustine's *Confessions*, Prudentius' *Psychomachia*, and the letters of Abelard and Heloise. Also of interest to students of theology and religious studies.

Division III: Humanities Critical Interpretation (CI) 1.0 units Conybeare,C.

#### **LATN B205 Latin Style**

A study of Latin prose style based on readings and exercises in composition. Offered to students wishing to fulfil the requirements for teacher certification in Latin or to fulfill one of the requirements in the major.

Division III: Humanities 1.0 units
Barrenechea,F.
Not offered in 2011-12.

#### **LATN B312 Roman Satire**

Division III: Humanities 1.0 units Conybeare,C. *Not offered in 2011-12.* 

#### **LATN B350 Topics in Latin Literature**

Open only to advanced undergraduates, this course includes a weekly seminar and a translation session. Three-fourths of the reading will be from primary sources. One additional hour TBA Prerequisite: a 200-level Latin course. Current topic description: Readings in the poetry of Statius. Current topic description: When Rome was sacked in 410 CE, how did people respond? Was this the collapse of the Roman empire - or was the heart of empire already elsewhere? We shall address this question particularly through Christian eyes, reading Augustine's sermons and Jerome's letters from the period, and paying special attention to Augustine's magisterial elaboration, in the City of God, of the issues at stake.

Division III: Humanities 1.0 units

Conybeare, C., Baertschi, A.

#### **LATN B398 Senior Seminar**

The frst term of this course is a bi-college team-taught seminar devoted to readings in and discussion of selected topics in the various sub-felds of Classical Studies (e.g. literature, religion, philosophy. law, social History); the second term involves the writing and oral presentation of the senior thesis.

CROSS-LISTED AS CSTS-B398

CROSS-LISTED AS GREK-B398 1.0 units Baertschi, A.

#### **LATN B403 Supervised Work**

1.0 units

#### **CLASSICAL LANGUAGES**

The major in classical languages is designed for the student who wishes to divide her time between the two languages and literatures.

#### **Major Requirements**

In addition to the Senior Seminar, the requirements for the major are eight courses in Greek and Latin, including at least two at the 200 level in one language and two at the 300 level in the other, and two courses in ancient history and/or classical archaeology. There are two fnal examinations: a sight translation from Greek to English, and another from Latin to English.

#### **CLASSICAL CULTURE AND SOCIETY**

The major provides a broad yet individually structured background for students whose interest in the ancient classical world is general and who wish to pursue more specialized work in one or more particular areas.

#### **Major Requirements**

The requirements for the major, in addition to the Senior Seminar, are nine courses distributed as follows:

- Two courses in either Latin or Greek beyond the elementary level
- · One course in Greek and/or Roman history
- Three courses, at least two of which are at the 200 level or higher, in one of the following concentrations: archaeology and art history, philosophy and religion, literature and the classical tradition, or history and society
- Three electives, at least one of which is at the 200 level or higher, and one of which must be among the courses counted toward the history/society concentration (except in the case of students in that concentration)

#### **Minor Requirements**

For the minor, six courses drawn from the range of courses counted toward the major are required. Of these, two must be in Greek or Latin beyond the elementary level and at least one must be in classical culture and society at the 200 level.

#### **CSTS B110 The World Through Classical Eyes**

A survey of the ways in which the ancient Greeks and Romans perceived and constructed their physical and social world. The evidence of ancient texts and monuments will form the basis for exploring such subjects as cosmology, geography, travel and commerce, ancient ethnography and anthropology, the idea of natural and artifcial wonders, and the self-definition of the classical cultures in the context of the oikoumene, the "inhabited www.rldc/tencat3 s

Digvission laber of the properties CRRIOSS-LISTEND AS AIRCH-B110CR CROSS-LISTED AS CITY-B110 1.0 units

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AS ARCH-B110

in our modern world? This course will address these questions by exploring the historic development of the concept of utopia.

Division III: Humanities

1.0 units Sigelman,A.

#### CSTS B231 Medicine, Magic and Miracles in the Middle Ages

An exploration of the history of health and disease, healing and medical practice in the medieval period, emphasizing Dar as-Islam and the Latin Christian West. Using methods from intellectual cultural and social history, themes include: theories of health and disease; varieties of medical practice; rationalities of various practices; views of the body and disease; medical practitioners. No previous course work in medieval history is required.

Division I or Division III

CROSS-LISTED AS HIST-B231

CROSS-LISTED AS ARCH-B231

1.0 units Truitt,E.

Not offered in 2011-12.

#### **CSTS B234 Picturing Women in Classical Antiquity**

We investigate representations of women in different media in ancient Greece and Rome, examining the cultural stereotypes of women and the gender roles that they reinforce. We also study the daily life of women in the ancient world, the objects that they were associated with in life and death and their occupations.

Division III: Humanities

CROSS-LISTED AS ARCH-B234 CROSS-LISTED AS HART-B234

Counts toward Gender and Sexuality Studies concentration

1.0 units

Lindenlauf.A.

Not offered in 2011-12.

#### CSTS B248 Reception of Classical Literature in the **Hispanic World**

A survey of the reception of Classical literature in the Spanish-speaking world. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their classical models, to examine what is culturally unique about their choice of authors, themes, and adaptation of the material.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) CROSS-LISTED AS COML-B248 CROSS-LISTED AS SPAN-B248

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units Barrenechea, F. Not offered in 2011-12.

#### CSTS B255 Show and Spectacle in Ancient Greece and Rome

A survey of public entertainment in the ancient world, including theater and dramatic festivals, athletic competitions, games and gladiatorial combats, and processions and sacrifces. Drawing on literary sources, with attention to art and the archaeology and topography, we will explore the social, political and religious contexts of ancient spectacle. Special consideration will be given to modern equivalents of staged entertainment and representation of ancient spectacle in contemporary flm and interpretive approaches such as gaze studies and carnivalesque.

Division III: Humanities Cross-Cultural Analysis (CC) CROSS-LISTED AS ARCH-B255 CROSS-LISTED AS CITY-B260 CROSS-LISTED AS HIST-B285 1.0 units Baertschi, A. Not offered in 2011-12.

## **CSTS B274 From Myth to Modern Cinema**

This is a topics course. Topics vary. Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS COML-B274 1.0 units Baertschi.A. Not offered in 2011-12.

## CSTS B359 Topics in Classical Art and Archaeology

A research-oriented course taught in seminar format, treating issues of current interest in Greek and Roman art and archaeology. Prerequisites: 200-level coursework in some aspect of classical or related cultures, archeology or art history.

Division III: Humanities

CROSS-LISTED AS ARCH-B359 **CROSS-LISTED AS HART-B358** 

1.0 units

Donohue.A.

Not offered in 2011-12.

#### **CSTS B364 Magical Mechanisms**

A reading and research seminar focused on different examples of artifcial life in medieval cultures. Primary sources will be from a variety of genres, and secondary sources will include signifcant theoretical works in art

## **CITY B205 Social Inequality**

Introduction to the major sociological theories of gender, racial-ethnic, and class inequality with emphasis on the relationships among these forms of stratification in the contemporary United States, including the role of the upper class(es), inequality between and within families, in the work place, and in the educational system. Division I: Social Science
CROSS-LISTED AS SOCL-B205
Counts toward Gender and Sexuality Studies concentration
1.0 units
Osirim,M.

#### **CITY B206 Statistical Methods in Economics**

An introduction to econometric terminology and reasoning. Topics include descriptive statistics, probability, and statistical inference. Particular emphasis is placed on regression analysis and on the use of data to address economic issues. The required computational techniques are developed as part of the course. Prerequi-

#### **CITY B214 Public Finance**

Analysis of government's role in resource allocation, emphasizing effects of tax and expenditure programs on income distribution and economic effciency. Topics include sources of ineffciency in markets and possible government responses; federal budget composition; social insurance and antipoverty programs; U.S. tax structure and incidence. Prerequisites: ECON B105 or H101.

Division I: Social Science CROSS-LISTED AS ECON-B214 1.0 units Weinberg,M.

### **CITY B215 Urban Economics**

Micro- and macroeconomic theory applied to urban eco

#### **CITY B228 Problems in Architectural Design**

A continuation of CITY 226 at a more advanced level. Prerequisites: CITY 226 or other comparable design work and permission of instructor.

Division III: Humanities

1.0 units

Voith, D., Olshin, S.

#### **CITY B229 Topics in Comparative Urbanism**

This is a topics course. Topics vary. Enrollment limited to 20 with preference to Cities majors. Current topic description: Conquest, subordination, hybridities, resistance and post-colonial reconfgurations have shaped cities and citizens worldwide for millennia. Beginning from the work of Fanon, we explore political economics, architecture, planning, culture, and social struggle via British rule (Hong Kong, Belfast), French domination (Paris, North Africa) and dialectics of the U.S.-Mexico border. The class entails systematic comparison through research, discussion and writing. Limit 20, pref soph/ junior majors

Division I: Social Science Inquiry into the Past (IP) Cross-Cultural Analysis (CC)

CROSS-LISTED AS ANTH-B229

CROSS-LISTED AS EAST-B229

CROSS-LISTED AS HART-B229

CROSS-LISTED AS SOCL-B230

Counts toward Environmental Studies minor Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration

1.0 units

McDonogh, G.

#### **CITY B234 Environmental Economics**

Introduction to the use of economic analysis explain the underlying behavioral causes of environmental and natural resource problems and to evaluate policy responses to them. Topics may include air and water pollution; the economic theory of externalities, public goods and the depletion of resources; cost-beneft analysis; valuing nonmarket benefts and costs; economic justice; and sustainable development. Prerequisites: ECON B105, or H101 and H102. Division I: Social Science

CROSS-LISTED AS ECON-B234

1.0 units

Ross, D., Rock, M.

Not offered in 2011-12.

### **CITY B237 Urbanization in Africa**

The course examines the cultural, environmental, economic, political, and social factors that contributed to the expansion and transformation of preindustrial cities, colonial cities, and cities today. We will examine various themes, such as the relationship between cities and

societies; migration and social change; urban space,

health problems, city life, and women.

Division I: Social Science CROSS-LISTED AS HIST-B237

Counts toward Africana Studies concentration Counts toward Environmental Studies minor

1.0 units

Ngalamulume,K.

#### **CITY B238 The Economics of Globalization**

The course examines the cultural, environmental, economic, political, and social factors that contributed to the expansion and transformation of preindustrial cities, colonial cities, and cities today. We will examine various themes, such as the relationship between cities and societies; migration and social change; urban space, health problems, city life, and women.

Division I: Social Science

CROSS-LISTEAD AS ECONASS2B6ON-B236

1.0 units Ceglowski, J.

Not offered in 2011-12.

### **CITY B247 Topics in German Cultural Studies**

This is a topics course. Course content varies. Current topic description: Topic for Spring 2011: Kafka's Prague. German and European Writing from the Czech Metropolis. Prague of the late 19th century became for some European writers an icon of modernizing Europe. In this course, we will explore the representations of the spaces of Prague from 1890 until 1920 to trace how German-speaking Jewish and gentile artists and thinkers attempted to negotiate the cultural, linguistic and political contradictions of a city undergoing rapid transformations.

Division I or Division III CROSS-LISTED AS GERM-B223 CROSS-LISTED AS HIST-B247 1.0 units Kenosian, D. Not offered in 2011-12.

#### **CITY B248 Modern Middle East Cities**

Taking advantage of the considerable new scholarship on cities, the course will draw from diverse felds to bring different methods to the study of Middle Eastern cities and urbanization. The course will treat the negotiation of state control, urban planning and its alterations in urban practices, social movements and new spaces of politics, competing architectural visions, globalizations, and new local identities. It will treat such topics as Islamic charities in Cairo, shopping malls as public space in Dubai City, Islamic politics in public space in Istanbul, the restructuring of Beirut, and ideas of modernity in the

#### **CITY B255 Survey of American Architecture**

An examination of landmarks, patterns, landscapes, designers, and motives in the creation of the American built environment over four centuries. The course will address the master narrative of the traditional survey course, while also probing the relation of this canon to the wider realms of building in the United States. Division III: Humanities Inquiry into the Past (IP)

Critical Interpretation (CI)
CROSS-LISTED AS HART-B255
1.0 units
Steffensen,I.

Not offered in 2011-12.

#### **CITY B257 The British Empire**

Focusing on the Atlantic slave trade and the slave plantation mode of production, this course explores English colonization, and the emergence and the decline of British Empire in the Americas and Caribbean from the 17th through the late 20th centuries. It tracks some of the intersecting and overlapping routes and roots connecting histories and politics within and between these "new" world locations. It also tracks the further and proliferating links between developments in these regions and the histories and politics of regions in the "old" world, from the north Atlantic to the South China sea. Division I: Social Science

Division I: Social Science CROSS-LISTED AS HIST-B257 1.0 units Kale,M.

## CITY B258 L'Espace réinventé

The cityscape is a dominant fgure in the 19th and 20th century, at a time where the notion of "writing the city" really develops, infuencing and even structuring beliefs. Urban theory and cultural criticism will supplement literary analysis as we consider how novelists Mercier, Rétif de la Bretonne, Balzac, Hugo, and Zola, and poets Baudelaire and Rimbaud have sought to make visible, through novelistic and lyric voices, the evolution of the perception of the city as architectural, social, and political body since the end of the 18th century.

## CITY B269 Black America in Sociological Perspective

This course provides sociological perspectives on various issues affecting black America: the legacy of slavery; the formation of urban ghettos; the struggle for civil rights; the continuing significance of discrimination; the problems of crime and criminal justice; educational under-performance; entrepreneurial and business activities; the social roles of black intellectuals, athletes, entertainers, and creative artists.

will be placed on historical images and texts, and on creating engaging informational experiences that are transparent to their evidentiary basis.

Division I or Division III 1.0 units Cohen,J.

## CITY B308 Topics in Photography: Photography and War

Examining photographic practices between the 1850's and the 1970's, this seminar seeks to move beyond the refective analysis of the city in the image and as the subject of representation to the relationship between photography and urbanization. Taking up various theories and models it explores how making records and reorganization of space developed as related means of modernization.

Division III: Humanities CROSS-LISTED AS HART-B308 1.0 units Schwartz,S. *Not offered in 2011-12.* 

#### **CITY B312 Topics in Medieval Art**

Current topic description: Sacred Spaces of Islam. Through case studies of specific cultural groups and their architectural traditions, this seminar traces the development of Islamic sacred space during the seventh to the twentieth centuries, from North America to India. Readings address both the historical contexts in which buildings were produced as well as the rituals and beliefs that gave them meaning. Critical texts from architectural theory provide students with a foundation in the methods and concepts that have shaped scholarly discourse on sacred space in the modern era.

Division III: Humanities CROSS-LISTED AS HART-B311 CROSS-LISTED AS HIST-B311 1.0 units Walker,A.

#### **CITY B314 The Economics of Social Policy**

Introduces students to the economic rationale behind government programs and the evaluation of government programs. Topics include health insurance, social security, unemployment and disability insurance, and education. Additionally, the instructor and students will jointly select topics of special interest to the class. Emphasis will be placed on the use of statistics to evaluate social policy. Prerequisites: ECON 200 and 203.

Division I: Social Science CROSS-LISTED AS ECON-B314 1.0 units Weinberg,M.

## CITY B319 Advanced Topics in German Cultural Studies

This is a topics course. Course content varies. Topic for 2011-12 is The Transnational Cosmopolitanism of Swiss Literature.

Division III: Humanities CROSS-LISTED AS GERM-B321 CROSS-LISTED AS COML-B321 CROSS-LISTED AS HART-B348 1.0 units Hertel,C., Meyer,I. Not offered in 2011-12.

#### **CITY B321 Technology and Politics**

An analysis of the complex role of technology in political and social life. We focus on the relationship between technological development and democratic governance. Discussion of theoretical approaches is supplemented by case studies of particular issues, such as electoral politics, warfare and terrorism, social networking and citizen mobilization, climate change, agriculture and food safety.

CROSS-LISTED AS POLS-B321 Counts toward Environmental Studies minor 1.0 units Hager,C. Not offered in 2011-12.

#### **CITY B322 Topics in German Literature**

Course content varies. Topic for Fall 2010: "Leaps of Faith: Religion in German Literature and Culture." This course focuses on discourses on religion in German literature and culture. We will analyze representations of Judaism, Christianity, and Islam in German literature. We will also discuss representations of religious institutions, as well as representations of the role these institutions play within German society at various points in history. We will pay particular attention to the intersections of discourses on religion with discourses on family, gender, class, and race. One additional hour of target language instruction TBA. Previous topics include: Decadent Munich: 1890-1925.

#### **CITY B324 Economics of Discrimination & Inequality**

Explores the causes and consequences of discrimination and inequality in economic markets. Topics include economic theories of discrimination and inequality, evidence of contemporary race- and gender-based inequality, detecting discrimination, and identifying sources of racial and gender inequality. Additionally, the instructor and students will jointly select supplementary topics of specific interest to the class. Possible topics include: discrimination in historical markets, disparity in legal treatments, issues of family structure, and education gaps. Prerequisites: At least one 200-level applied microeconomics elective, Economics 203 or 204, and Economics 200 or 202.

Division III: Humanities CROSS-LISTED AS ECON-324 1.0 units Lanning, J.

Stroud, E.

#### **CITY B325 Topics in Social History**

This a topics course that explores various themes in American social history. Course content varies. Current topic description: This course examines the emerging visibility of queer subjects in the American context as well the processes by which such visibility occurs. How is queer history made? Who makes it? What constitutes a meaningful moment in this history? Who gets to appear in American history and what voice are queer subjects allowed to offer to the narration of the national past? This course is linked to the Flexner lecture series in November 2011 with Judith Butler. Division I or Division III CROSS-LISTED AS HIST-B325 1.0 units

### CVVY B'328 Analysis & Geospatial Data Using GIS

An introduction to analysis of geospatial data, theory, and the practice of geospatial reasoning. As part of

# CITY B345 Advanced Topics in Environment and Society

This is a topics course. Topics vary. Division I: Social Science CROSS-LISTED AS SOCL-B346 Counts toward Environmental Studies minor 1.0 units Simpson,R., Hayes-Conroy,A., Stroud,E. *Not offered in 2011-12.* 

#### CITY B348 Culture and Ethnic Confict

An examination of the role of culture in the origin, escalation, and settlement of ethnic conficts. This course examines the politics of culture and how it constrains and offers opportunities for ethnic confict and cooperation. The role of narratives, rituals, and symbols is emphasized in examining political contestation over cultural representations and expressions such as parades, holy sites, public dress, museums, monuments, and language in culturally framed ethnic conficts from all regions of the world. Prerequisites: two courses in the social sciences.

CROSS-LISTED AS POLS-B348
Counts toward Peace & Confict Studies concentration
1.0 units
Ross,M.
Not offered in 2011-12.

#### CITY B355 Topics in the History of London

Selected topics of social, literary, and architectural
WK Dp Toricom (The Selection of the Condition of the

# **HEBR B283 Introduction to the Politics of the Modern Middle East and North Africa**

This course is a multidisciplinary approach to understanding the politics of the region, using works of history, political science, political economy, flm, and fction as well as primary sources. The course will concern itself with three broad areas: the legacy of colonialism and the importance of international forces; the role of Islam in politics; and the political and social effects of particular economic conditions, policies, and practices.

Division I: Social Science CROSS-LISTED AS POLS-B283 CROSS-LISTED AS HIST-B283 Counts toward Middle East Studies concentration 1.0 units Harrold,D.

#### **HEBR B310 Topics in German Literature**

This is a topics course. Course content varies. One additional hour of target language instruction TBA. Division III: Humanities CROSS-LISTED AS GERM-B310 1.0 units Meyer,I. Not offered in 2011-12.

#### **HEBR B380 Topics in Contemporary Art**

This is a topics course. Course content varies. Current topic description: Even as "performance art" came to stand as a dynamic site of aesthetic experimentation and critical inquiry, it was only the most explicit instance of the ethical and political claims to "representation" at work and at play across a history of 20th century visual practice. Portraiture and photography, video and flm, became sites and situations of expressions and subversions of categorical identities. It will be the challenge of the seminar to immerse students in the project of re-thinking the aesthetic and ethical implications of the bodies that structure visual modernity and its inheritance.

Division III: Humanities

courses be taken with Bryn Mawr history faculty, as it is with one of them that majors will work on their senior thesis.)

Only two 100-level courses may be counted toward the major. Credit toward the major is not given for either the Advanced Placement examination or the International Baccalaureate.

#### **Honors**

Majors with cumulative GPAs of at least 3.0 (general) and 3.5 (history) at the end of their senior year, and who achieve a grade of at least 3.7 on their senior thesis, qualify for departmental honors.

#### **Minor Requirements**

The requirement for the minor is six courses, at least four of which must be taken in the Bryn Mawr Department of History, and include one 100-level course, at least one 300-level course within the department, and two additional history courses within the department.

#### **HIST B101 The Historical Imagination**

Explores some of the ways people have thought about, represented, and used the past across time and space. Introduces students to modern historical practices and debates through examination and discussion of texts and archives that range from scholarly monographs and documents to monuments, oral traditions, and other media.

Division I or Division III Critical Interpretation (CI) 1.0 units Kale,M. Not offered in 2011-12.

#### **HIST B102 Introduction to African Civilizations**

The course introduces students to African societies, cultures, and political economies in historical perspective, with emphasis on change and responses among African people living in Africa and outside. Counts toward Africana Studies.

Division I: Social Science Inquiry into the Past (IP) Critical Interpretation (CI) Counts toward Africana Studies concentration 1.0 units Ngalamulume,K.

## **HIST B118 Comparative Media Revolutions**

A comparison of technology and "media revolutions" and social change through exploring the historiography of the printing press, radio and the internet. What historical explanations are given for the development of these technologies? What kind of agency is ascribed to them?

Are media inherently revolutionary, or can they be tools for stabilization and consolidation as well?

Division I or Division III

Inquiry into the Past (IP)

1.0 units

Spohrer.J.

#### **HIST B125 The Discovery of Europe**

This course is designed to introduce students to the discipline of history through a critical, historical examination of the idea of Europe. When and why have Europeans thought of themselves as such? How have the boundaries of Europe been drawn? Does Europe really exist? Division III: Humanities Inquiry into the Past (IP)

1.0 units Spohrer,J. Not offered in 2011-12.

Not offered in 2011-12.

#### HIST B127 Indigenous Leaders 1452-1750

Studies the experiences of indigenous men and women who exercised local authority in the systems established by European colonizers. In return for places in the colonial administrations, these leaders performed a range of tasks. At the same time they served as imperial officials, they exercised "traditional" forms of authority within their communities, often free of European presence. These figures provide a lens through which early modern colonialism is studied.

Division I or Division III
Cross-Cultural Analysis (CC)
Counts toward Latin American, Latino and Iberian
Peoples and Cultures concentration
Counts toward Peace & Confict Studies concentration
1.0 units
Gallup-Diaz,I.
Not offered in 2011-12.

## **HIST B128 Crusade, Conversion and Conquest**

A thematic focus course exploring the nature of Christian religious expansion and confict in the medieval period. Based around primary sources with some background readings, topics include: early medieval Christianity and conversion; the Crusades and development of the doctrines of "just war" and "holy war"; the rise of military order such as the Templars and the Teutonic Kings; and later medieval attempts to convert and colonize Eastern Europe.

Division I or Division III Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Truitt,E. Not offered in 2011-12. Roman culture and society as presented in the surviving ancient evidence, both literary and archaeological. Division I or Division III CROSS-LISTED AS CSTS-B208 1.0 units Scott,R. Not offered in 2011-12.

#### **HIST B211 Medieval World**

Italy in the High and Late Middle Ages examines cultural developments in the Italian peninsula through an intensive examination of translated primary sources of various genres-narrative chronicles, diaries, legal opinions, saints' lives etc—as well as paintings, frescoes and other examples of visual material culture.

Division I or Division III 1.0 units Radhakrishnan,M. *Not offered in 2011-12*.

1.0 units Gallup-Diaz,I.

## HIST B212 Pirates, Travelers, and Natural Historians: 1492-1750

In the early modern period, conquistadors, missionaries, travelers, pirates, and natural historians wrote interesting texts in which they tried to integrate the New World into their existing frameworks of knowledge. This intellectual endeavor was an adjunct to the physical conquest of American space, and provides a framework though which we will explore the processes of imperial competition, state formation, and indigenous and African resistance to colonialism.

Inquiry into the Past (IP)

Counts toward Environmental Studies minor

## HIST B214 The Historical Roots of Women in Genetics and Embryology

As a more focused version of the course from previous years, we will examine the role that women scientists and technicians played in the development of genetics and embryology from the late-19th to the mid-20th century. The course will look at the work and lives of well known and lesser known individuals, asking how factors such as their educational experiences and mentor relationships played a role in their contributions. One facet of the course will be to look at the Bryn Mawr Biology Department from the founding of the College into the mid-20th century.

Division II: Natural Science CROSS-LISTED AS BIOL-B214 Counts toward Gender and Sexuality Studies concentration 1.0 units Davis,G.

Not offered in 2011-12.

## HIST B216 Post Communist Transitions in Eastern Europe

This comparison of pre- and post-communist social formations in Eastern Europe in specific nation-states considers how social changes infuenced spheres of life, such as family, morality, religion, economic institutions and nationalism. The course will take an interdisciplinary perspective, drawing from literature of social sciences, especially anthropology. Prerequisite: an introductory social science course, or permission of the instructor.

Division I: Social Science CROSS-LISTED AS ANTH-B226 1.0 units Hyánková,T. Not offered in 2011-12.

#### **HIST B220 Topics in Modern Chinese Literature**

This a topics course. This course explores modern China from the early 20th century to the present through its literature, art and flms, reading them as commentaries of their own time. Topics vary.

Division III: Humanities

#### **HIST B240 Modern Middle East Cities**

Taking advantage of the considerable new scholarship on cities, the course will draw from diverse felds to bring different methods to the study of Middle Eastern cities and urbanization. The course will treat the negotiation of state control, urban planning and its alterations in urban practices, social movements and new spaces of politics, competing architectural visions, globalizations, and new local identities. It will treat such topics as Islamic charities in Cairo, shopping malls as public space in Dubai City, Islamic politics in public space in Istanbul, the restructuring of Beirut, and ideas of modernity in the construction of Tel Aviv.

Division I: Social Science CROSS-LISTED AS POLS-B248 CROSS-LISTED AS CITY-B248 CROSS-LISTED AS HEBR-B248 Counts toward Middle East Studies concentration 1.0 units Harrold,D. Not offered in 2011-12.

#### HIST B241 American Politics and Society: 1890-1945

This course examines the frst half of the 20th century in depth. While the 20th century has often been called the American Century (usually by Americans), this century can truthfully be looked to as the moment when American infuence and power, for good and ill, came to be felt on a national and global scale. While much of this "bigfoot" quality is associated with the post WWII period, one cannot understand the America of today - in the early 21st century - without looking at the earlier period. This course looks closely at the political, social, and cultural developments that helped shape America in these pivotal years.

Division III: Humanities Inquiry into the Past (IP) 1.0 units Ullman,S.

## HIST B242 American Politics and Society: 1940 to the Present

How did we get here? This course looks at the amazing transformation of America in the years 1940 to today. From a country devastated by economic crisis and wedded to isolationism prior to WW II, America became an unchallenged international powerhouse. Massive grass roots resistance forced the United States to abandon racial apartheid, open opportunities to women, and reinvent its very definition as it incorporated immigrants from around the globe. And in the same period, American music and flm broke free from their staid moorings and permanently altered global culture. We will explore the political, social, and cultural factors that created recent American history.

Division I or Division III Inquiry into the Past (IP) 1.0 units Ullman,S.

#### **HIST B243 Atlantic Cultures**

The course explores the process of self-emancipation by slaves in the early modern Atlantic World. What was the nature of the communities that free blacks forged?

past? This course is linked to the Flexner lecture series in November 2011 with Judith Butler.
Division I or Division III
CROSS-LISTED AS CITY-B325
1.0 units
Ullman,S.

#### **HIST B326 Topics in Chinese History and Culture**

This is a topics course. Course content varies. Division III: Humanities CROSS-LISTED AS EAST-B325 1.0 units Jiang, Y. Not offered in 2011-12.

## HIST B336 Social and Cultural History of Medicine in Africa

The course will focus on the issues of public health history, social and cultural history of disease as well as the issues of the history of medicine. We will explore various themes, such as the indigenous theories of disease and therapies; disease, imperialism and medicine; medical pluralism in contemporary Africa; the emerging diseases, medical education, women in medicine, and differential access to health care. We will also explore the questions regarding the sources of African history and their quality.

Division I: Social Science Counts toward Africana Studies concentration 1.0 units Ngalamulume,K.

### **HIST B337 Topics in African History**

This is a topics course. Topics vary. Enrollment limited to 15 students. Current topic description: History and politics of humanitarian aid. This course examines the consequences of the Cold War, civil wars and wars of independence in Africa as well as the humanitarian effort led by NGOs.

Division I: Social Science Counts toward Africana Studies concentration 1.0 units Ngalamulume,K.

# HIST B345 Advanced Topics in Environment and Society

This course will examine the meaning of "nature" and "environment" and how we understand our own relationship to it. We explore the social factors that shape how people define nature as variously savage or bountiful, a site of danger or entertainment, toxic or unspoiled, a force that controls human fates or a resource for humans to manipulate.

Division I: Social Science

CROSS-LISTED AS CITY-B345
Counts toward Environmental Studies minor
1.0 units
Hayes-Conroy,A., Stroud,E.
Not offered in 2011-12.

#### **HIST B349 Topics in Comparative History**

This is a topics course. Topics vary. Current topic description: This course will explore, in national and international contexts, the political economy, history and practice of post-colonial development aid, focusing (not exclusively) on the countries of South Asia (Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka) and considering interventions, collaborations, conficts and impacts of institutions ranging from local or "grassroots" NGOs to multi-lateral orgs like United Nations agencies, the World Bank, etc.

Division I or Division III Counts toward Africana Studies concentration 1.0 units Kale,M.

#### **HIST B352 China's Environment**

This seminar explores China's environmental issues from a historical perspective. It begins by considering a range of analytical approaches, and then explores three general periods in China's environmental changes, imperial times, Mao's socialist experiments during the frst thirty years of the People's Republic, and the post-Mao reforms. Prerequisite: Sophomore standing. Division I: Social Science

sources will include significant theoretical works in art history, critical theory and science studies. Prerequisite: at least one course in medieval studies, or the permission of the instructor.

A senior paper, based on independent research and using scholarly methods of historical and/or critical interpretation must be submitted at the end of the spring semester. Generally 25-40 pages in length, the senior paper represent the culmination of the departmental experience.

#### **Honors**

Seniors whose work is outstanding will be invited to submit an honors thesis instead of the senior paper. Two or three faculty members discuss the completed thesis with the honors candidate in a one-hour oral examination.

#### **Minor Requirements**

A minor in history of art requires six units: one or two 100-level courses and four or fve others selected in consultation with the major adviser.

### **HART B100 The Stuff of Art**

An introduction to chemistry through fine arts, this course emphasizes the close relationship of the fine arts, especially painting, to the development of chemistry and its practice. The historical role of the material

of chemistry, will be discussed, as well as the synergy between these areas. Relevant principles of chemistry will be illustrated through the handling, synthesis and/ or transformations of the material. This course does not count towards chemistry major requirements, and is not suitable for premedical programs. Lecture 90 minutes, laboratory three hours a week. Enrollment limited to 20. Division II with Lab CROSS-LISTED AS CHEM-B100 1.0 units

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### **HART B206 Hellenistic and Roman Sculpture**

This course surveys the sculpture produced from the fourth century B.C.E. to the fourth century C.E., the period beginning with the death of Alexander the Great that saw the transformation of the classical world through the rise of Rome and the establishment and expansion of the Roman Empire. Style, iconography, and production will be studied in the contexts of the culture of the Hellenistic kingdoms, the Roman appropriation of Greek culture, the role of art in Roman society, and the significance of Hellenistic and Roman sculpture in the post-antique classical tradition.

Division III: Humanities CROSS-LISTED AS ARCH-B206 1.0 units Donohue,A. Not offered in 2011-12.

#### **HART B209 Topics in Chinese Cultural History**

This is a topics course. Topics vary. Current course description: The Chinese Visual Imagination Division III: Humanities CROSS-LISTED AS EAST-B210 1.0 units Lin,P.

#### **HART B210 Medieval Art**

An overview of artistic production in Europe antiquity to the 14th century. Special attention will be paid to problems of interpretation and recent developments in art-historical scholarship. Division III: Humanities

## **HART B227 Topics in Modern Planning**

This course examines topics in planning as defined by specific areas (modern European metropoles) or themes (the impact of oil). It is a writing intensive course. Division I: Social Science CROSS-LISTED AS CITY-B227 CROSS-LISTED AS FREN-B227 CROSS-LISTED AS GERM-B227 1.0 units Hein,C.

Inquiry into the Past (IP) Critical Interpretation (CI) Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units McKim-Smith,G.

#### **HART B242 Material Identities in Latin America 1820** - 2010

Revolutions in Latin America begin around 1810. By the 20th and 21st centuries, there is an international viewership for the works of Latin American artists, and in the 21st century the production of Latina and Latino artists living in the United States becomes particularly important.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units McKim-Smith,G.

#### **HART B250 Nineteenth-Century Art in France**

Close attention is selectively given to the work of Cézanne, Courbet, David, Degas, Delacroix, Géricault, Ingres, Manet, and Monet. Extensive readings in art criticism are required. Division III: Humanities Inquiry into the Past (IP) Critical Interpretation (CI) 1.0 units Levine,S. Not offered in 2011-12.

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The major traditions in Western architecture are illustrated through detailed analysis of selected examples

#### **HART B272 Topics in Early and Medieval China**

This is a topics course. Course content varies. Division III: Humanities CROSS-LISTED AS EAST-B272 CROSS-LISTED AS CITY-B273 1.0 units Lin,P. Not offered in 2011-12.

#### **HART B280 Video Practices: Analog to Digital**

This course explores the history and theory of video art from the late 1960's to the present. The units include: aesthetics; activism; access; performance; and institutional critique. We will refect on early video's "utopian moment" and its manifestation in the current new media revolution. Feminist, people of color and queer productions will constitute the majority of our corpus. Prerequisite: ENGL/HART B205 Intro to Film or consent of the instructor.

Division III: Humanities
CROSS-LISTED AS ENGL-B280
Counts toward Gender and Sexuality Studies
concentration
Counts toward Film Studies minor
1.0 units
Nguyen,H.
Not offered in 2011-12.

#### **HART B282 Arts of Sub-Saharan Africa**

This course examines the significant artistic and architectural traditions of African cultures south of the Sahara in their religious, philosophical, political, and social aspects.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) Counts toward Africana Studies concentration 1.0 units Toure,D.

## HART B299 History of Narrative Cinema, 1945 to present

This course surveys the history of narrative flm from 1945 through the contemporary moment. We will analyze a series of styles and national cinemas in chronological order, including Italian Neorealism, the French New Wave, and other post-war movements and genres. Viewings of canonical flms will be supplemented by more recent examples of global cinema. While historical in approach, this course emphasizes the theory and criticism of the sound flm, and we will consider various methodological approaches to the aesthetic, socio-political, and psychological dimensions of cinema. Fulfills the history requirement or the introductory course requirement for the Film Studies minor.

Division III: Humanities

# HART B348 Advanced Topics in German Cultural Studies

This is a topics course. Course content varies. Topic for 2011-12 is The Transnational Cosmopolitanism of Swiss Literature.

Division III: Humanities

CROSS-LISTED AS GERM-B321 CROSS-LISTED AS CITY-B319 CROSS-LISTED AS COML-B321

Counts toward Gender and Sexuality Studies

concentration

1.0 units

Hertel, C., Meyer, I.

Not offered in 2011-12.

### **HART B350 Topics in Modern Art**

This is a topics course. Topics vary. Current topic description: Portraiture and Self-Portraiture, from sixteenth-century courts to the internet today.

Division III: Humanities

1.0 units Levine,S.

### **HART B354 Topics in Art Criticism**

Individual topics in art-historical methodology, such as art and psychoanalysis, feminism, post-structuralism, or semiotics are treated.

Division III: Humanities

CROSS-LISTED AS COML-B354

CROSS-LISTED AS HEBR-B354

1.0 units

Levine,S.

Not offered in 2011-12.

# HART B355 Topics in the History of London

Selected topics of social, literary, and architectural concern in the history of London, emphasizing London since the 18th century.

Division I or Division III

CROSS-LISTED AS CITY-B355

CROSS-LISTED AS HIST-B355

1.0 units

Cast,D.

Not offered in 2011-12.

# HART B358 Topics in Classical Art and Archaeology

A research-oriented course taught in seminar format, treating issues of current interest in Greek and Roman art and archaeology. Prerequisites: 200-level coursework in some aspect of classical or related cultures, archeology or art history.

Division III: Humanities

CROSS-LISTED AS ARCH-B359 CROSS-LISTED AS CSTS-B359

1.0 units

Donohue,A.

Not offered in 2011-12.

#### **HART B362 The African Art Collection**

This seminar will introduce students to the African art holdings that are part of the Art and Archaeology Collections.

Division III: Humanities

Counts toward Africana Studies concentration

1.0 units

Toure, D.

# HART B367 Asian American Film, Video and New Media

The course explores the role of pleasure in the production, reception, and performance of Asian American identities in flm, video, and the internet, taking as its focus the sexual representation of Asian Americans in works produced by Asian American artists from 1915 to present. In several units of the course, we will study

work and at play across a history of 20th century visual practice. Portraiture and photography, video and flm, became sites and situations of expressions and subversions of categorical identities. It will be the challenge of the seminar to immerse students in the project of re-thinking the aesthetic and ethical implications of the bodies that structure visual modernity and its inheritance.

Division III: Humanities CROSS-LISTED AS GERM-B380 CROSS-LISTED AS HEBR-B380 1.0 units Saltzman,L.

### **HART B397 Junior Seminar**

Designed to introduce majors to the canonical texts in the feld of art history and to formalize their understanding of art history as a discipline. Required of and limited to History of Art majors. Division III: Humanities

1.0 units Levine, S., Hertel, C.

### **HART B399 Senior Conference**

A seminar for the discussion of senior research papers

# INTERNATIONAL STUDIES

Students may complete a minor in International Studies.

#### **Directors**

Cynthia Bisman, Graduate School of Social Work and Social Research

Christine Koggel, Philosophy

# **Steering Committee**

Michael Allen, Political Science

Grace Armstrong, French and Francophone Studies

Cynthia Bisman, Graduate School of Social Work and Social Research

Carola Hein, Growth and Structure of Cities

Yonglin Jiang, East Asian Studies

Madhavi Kale, History

Toba Kerson, Graduate School of Social Work and Social Research

Philip Kilbride, Anthropology

Christine Koggel, Philosophy

Imke Meyer, German and German Studies

Kalala Ngalamulume, History

Mary Osirim, Sociology

Melissa Pashigian, Anthropology

Michael Rock, Economics

International studies is the study of relationships among people and states affected by increasingly permeable borders and facing global issues. The minor in international studies aims to prepare students to be responsible citizens by introducing them to issues of importance in an increasingly interdependent world of global dynamics in politics, economics, ideas, language, and culture. Around the world, international studies programs are preparing students for productive roles in transnational or intergovernmental institutions and in the areas of public policy, governance, business, diplomacy, development, and cultural studies. A goal of the minor is to provide a foundation for students interested in pursuing career opportunities in these areas or in entering graduate programs in international studies.

The minor combines applied and theoretical approaches to international studies and draws from an increasing number of disciplines that are now exploring the descriptive and normative aspects of living in a world impacted by features of globalization. The minor allows students to use the disciplinary methods and materials acquired in their major as a base from which to engage in the necessarily inter- and multidisciplinary course work of

international studies. Finally, the minor employs a broad conception of international studies by incorporating the study of politics, economics, philosophy, and political theory (as captured in the core courses) with the complementary study of specific themes (as captured by each of the fve tracks).

Although language study is not required per se for the minor, students intending to undertake graduate work in international studies should plan to acquire profciency in a foreign language, which is a requirement (at the time of admission or graduation) in the most selective programs here and abroad.

## **Minor Requirements**

Students minoring in International Studies must complete a total of seven courses. Four of these are core courses. Three of these courses form a coherent group coming (one each) from political science, economics, and philosophy and the fourth provides critical inquiry into cultural differences. The core courses form the base from which students can then concentrate their additional study in one of fve tracks: international politics, international economics, social justice, area studies, or language and arts. Within a track, students can choose three electives from among a range of courses drawn from the social sciences and humanities. The three electives should demonstrate coherence and be approved by an adviser from the Center for International Studies.

# **Core courses**

There are a total of four core courses. All students are required to take three courses, one from each of political science, economics, and philosophy. These disciplines have become central to international studies programs. Each of the two sets identifed below form a coherent group of three courses designed to introduce students to the feld as a whole by providing them with resources for studying the most basic elements of globalization in the context of international relations, economics and politics. If one of the core courses from a set is not offered in a given year, substitutions will be made with another allied course, offered at Bryn Mawr or Haverford, with the approval of an adviser from the Center for International Studies.

POLS B141 Introduction to International Politics ECON B225 Economic Development PHIL B344 Development Ethics

or

PHIL B225 Global Ethical Issues ECON B206 International Trade POLS B391 International Political Economy

To complete the core requirements, students must take one course on cultural differences. This requirement

allows students to acquire a greater appreciation of the signif cance of culture in the global context by providing an awareness of how different values, norms, beliefs, and practices affect possibilities for understanding different cultures and for cross-cultural dialogue and consensus. The course may be selected from (but is not limited to) the following:

ANTH B102 Introduction to Anthropology: Cultural

the forms of language and the arts that are generated through global processes and in turn affect the generation and exchange of ideas in and between different societies and cultures.

A coherent set of courses can be achieved by selecting the three electives from approved lists within a language study or be approved by an adviser from the Center for International Studies.

### **ANTH B102 Introduction to Cultural Anthropology**

An introduction to the methods and theories of cultural anthropology in order to understand and explain cultural similarities and differences among contemporary societies.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Pashigian,M., Weidman,A.

#### CITY B251 La Mosaïque France

A study that opposes the discourse of exclusion, xenophobia, racism and the existence of a mythical, unique French identity by examining 20th-century French people and culture in their richness and variety, based on factors such as gender, class, region, colonization and decolonization, immigration and ethnic background. Films and texts by Begag, Beauvoir, Cardinal, Carles, Duras, Ernaux, Jakez Helias, Modiano, and Zobel. Division III: Humanities CROSS-LISTED AS FREN-B251 1.0 units Cherel,B. *Not offered in 2011-12*.

# COML B211 Primo Levi, the Holocaust and Its Aftermath

A consideration, through analysis and appreciation of his major works, of how the horrifc experience of the Holocaust awakened in Primo Levi a growing awareness of his Jewish heritage and led him to become one of the dominant voices of that tragic historical event, as well as one of the most original new literary fgures of post-World War II Italy. Always in relation to Levi and

D sion III: Humanities
CROSS-LISTED AS ITAL-B211
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Meyer,I.
N offered in 2011-12.

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1.0 un)tc Harm N offered in 2011-12.

# **ITALIAN**

Students may complete a major or minor in Italian.

# Faculty

### ITAL B002 Elementary Italian II

This course is the continuation of ITAL B001 and is intended for students who have started studying Italian the semester before. It aims at giving the students a complete foundation in the Italian language, with particular attention to oral and written communication. The course will be conducted in Italian and will involve the study of all the basic structures of the language phonological, grammatical, syntactical with practice in conversation, reading, composition. Readings are chosen from a wide range of texts, while use of the language is encouraged through role-play, debates, songs, and creative composition. Prerequisite: ITAL B001 or placement.

Language Level 1 1.0 units Troncelliti,G., Perco,G.

#### ITAL B010 Intensive Elementary Italian I

This intensive communicative course is an accelerated introduction to speaking, understanding, reading, and writing. It is intended for students with no previous knowledge of Italian. Aspects of Italian culture and contemporary life also are introduced through the use of video, songs, audio clips, etc. The course is taught completely in Italian, and authentic contemporary materials are used to immerse the student into an integrative linguistic environment. Attendance to the 4 drills classes each week is required. This course meets 9 hours per week.

Language Level 1 1.5 units Perco,G.

# ITAL B011 Intensive Elementary Italian II

This course is the continuation of ITAL B010 and is intended for students who have started studying Italian the semester before. Aspects of Italian culture and contemporary life also are introduced through the use of video, songs, audio clips, etc. The course is taught completely in Italian, and authentic contemporary materials are used to immerse the student into an integrative linguistic environment. Attendance to the 4 drills classes each week is required. This course meets 9 hours per week. Prerequisite: ITAL B010 or placement. Language Level 1 1.5 units

1.5 units Perco,G.

#### ITAL B101 Intermediate Italian

This course provides students with a broader basis for learning to communicate effectively and accurately in Italian. While the principal aspect of the course is to further develop language abilities, the course also

imparts a foundation for the understanding of modern and contemporary Italy. Students will gain an appreciation for Italian culture and be able to communicate orally and in writing in a wide variety of topics. We will read a novel, as well as newspaper and magazine articles to analyze aspects on modern and contemporary Italy. We will also view and discuss Italian flms and discuss internet materials.

Language Level 2 1.0 units Ricci,R.

#### ITAL B102 Intermediate Italian

This course provides students with a broader basis for learning to communicate effectively and accurately in Italian. While the principal aspect of the course is society, concurring to develop distinctive ways of thinking, cultural artifacts (literary works, music, works of art, and so on), and that are at the core of contemporary Italian society. Prerequisite: ITAL105 or 102 or placement

1.0 units Perco,G.

#### ITAL B203 Italian Theater (in Italian)

The course consists of a close reading in Italian of representative theatrical texts from the contemporary stage to the origins of Italian theater in the 16th century, including pieces by Dario Fo, Luigi Pirandello, Carlo Goldoni, the *Commedia dell'arte* and Niccoló Machiavelli. Attention will be paid to the development of language skills through reading out loud, performance, and discussion of both form and content, enhanced by the use of recordings and videos. Attention will also be paid to the development of critical and analytical writing skills through the writing of short reviews and the research and writing of a term paper.

Division III: Humanities 1.0 units McAuliffe,D. *Not offered in 2011-12.* 

### ITAL B204 Manzoni

Why is *I promessi sposi* considered by many the best historical novel in Italian and one of the best in any language? What contribution did Manzoni's novel make

even shines through contemporary best-sellers like Dan Brown's *The Da Vinci Code.* Taught in Italian. Division III: Humanities 1.0 units McAuliffe,D., Ricci,R. *Not offered in 2011-12.* 

#### ITAL B307 Best of Italian Literature

This course focuses on the key role played by Italian culture in the development of the European civilization and Western literature. Many texts found their way to France, Spain, England where they were read, translated, disseminated. This process of assimilation infuenced life, language, politics, and literature. The unique role played by Italian Renaissance on European civilization shines through contemporary best-sellers, *The Da Vinci Code*. Prerequisite: a 200-level course in Italian Division III: Humanities 1.0 units Ricci, R.

### ITAL B310 Italian Popular Fiction

This course explores the Italian *giallo* (detective fction), today one of the most successful literary genres among Italian readers and authors alike. Through a comparative perspective, the course will analyze not only the inter-relationship between this popular genre and "high literature," but also the role of detective fction as a mirror of social anxieties. In Spring 2011, ITAL B310 will be offered in English. Italian majors taking this course for Italian credit will be required to meet for an additional hour with the instructor and to do the readings and writing in Italian. Prerequisites: one literature course at the 200 level.

Division III: Humanitiese CROSS-LISTED AS COML-B310 1.0 umitse Perco,G. Not offered in 2011-12.

### ITAL B322 Reading Italian Literature in inaziansIII

The focus of the course is on *The Decameron*, one of the most entertaining, beloved and imitated prose w@kbisver written. Like Dante's *Divine Comedy*, this O V R human comedy was written not only to delight, but also to instruct by exploring both our spiritual

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# LATIN AMERICAN, LATINO, AND IBERIAN PEOPLES AND CULTURES

Students may complete a concentration in Latin American, Latino, and Iberian Peoples and Cultures.

#### Coordinator

Gary McDonogh, Growth and Structure of Cities

### **Advisory Committee**

Juan Arbona, Growth and Structure of Cities (on leave semesters I and II)

Ignacio Gallup-Diaz, History

James Krippner, History, Haverford College

Gary McDonogh, Growth and Structure of Cities

Gridley McKim-Smith, History of Art

Maria Christina Quintero, Spanish and Comparative Literature

Enrique Sacerio-Garí, Spanish

H. Rosi Song, Spanish (on leave semesters I and II)

Ayumi Takenaka, Sociology (on leave semesters I and II)

Latin American, Latino and Iberian peoples, histories, and cultures have represented both central agents and crucibles of transformations across the entire world for millennia. Global histories and local experiences of colonization, migration, exchange, and revolution allow students and faculty to construct a critical framework of analysis and to explore these dynamic worlds, their peoples and cultures, across many disciplines.

As a concentration, such study must be based in a major in another department, generally Spanish, Growth and Structure of Cities, History, History of Art, Political Science, or Sociology (exceptions can be made in double light the nsajo Paĥduàdd of the otration adviser).

O To fulf II requirements, the student must complete the introductory course, GNST 145 Introduction to Latin American, Latino and Iberian Peoples and Culture, and then plan advanced courses in language, affliated felds and her major that lead to a final project in the major

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Division I or Division III CROSS-LISTED AS HIST-B200 1.0 units Gallup-Diaz,I. Not offered in 2011-12.

### **ANTH B229 Topics in Comparative Urbanism**

This is a topics course. Topics vary. Enrollment limited to 25 with preference to Cities majors.

Division I: Social Science
CROSS-LISTED AS CITY-B229
CROSS-LISTED AS EAST-B229
CROSS-LISTED AS HART-B229
1.0 units
McDonogh,G.
Not offered in 2011-12.

#### **ANTH B231 Cultural Profles in Modern Exile**

This course investigates the anthropological, philosophical, psychological, cultural, and literary aspects of modern exile. It studies exile as experience and metaphor in the context of modernity, and examines the structure of the relationship between imagined/remembered homelands and transnational identities, and the dialectics of language loss and bi- and multi-lingualism. Particular attention is given to the psychocultural dimensions of linguistic exclusion and loss. Readings of works by Julia Alvarez, Anita Desai, Sigmund Freud, Milan Kundera, Friedrich Nietzsche, Salman Rushdie, and others. Division III: Humanities CROSS-LISTED AS GERM-B231 CROSS-LISTED AS COML-B231 1.0 units Seyhan, A. Not offered in 2011-12.

### **ANTH B258 Immigrant Experiences**

The course will examine the causes and consequences of immigration by looking at various immigrant groups in the United States in comparison with Western Europe, Japan, and other parts of the world. How is immigration

# COML B260 Ariel/Caliban y el discurso americano

A study of the transformations of Ariel/Calibán as images of Latin American culture.

Division III: Humanities

CROSS-LISTED AS SPAN-B260

1.0 units

Sacerio-Garí,E.

Not offered in 2011-12.

# **COML B322 Queens, Nuns, and Other Deviants in the Early Modern Iberian World**

Division III: Humanities CROSS-LISTED AS SPAN-B322 1.0 units Quintero,M.

# CSTS B248 Reception of Classical Literature in the Hispanic World

A survey of the reception of Classical literature in the Spanish-speaking world. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side witherica

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grants have on the United States over time. Close attention given to examining the ways immigrants negotiated the pressures of their new surroundings while shaping and redefining American conceptions of national identity and citizenship.

Division I or Division III 1.0 units Martinez-Matsuda,V. Not offered in 20Wt 412.

# **SOCL B230 Topics in Comparative Urbanism**

This is a topics course. Topics vary. Enrollment limited to 25 with preference to Cities majors.

Division I: Social Science

CROSS-LISTED AS CITY-B229

CROSS-LISTED AS ANTH-B229

CROSS-LISTED AS EAST-B229

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Division III: Humanities Critical Interpretation (CI) 1.0 units Staff Not offered in 2011-12.

# SPAN B248 Reception of Classical Literature in the Hispanic World

A survey of the reception of Classical literature in the Spanish-speaking world. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their classical models, to examine what is culturally unique about their choice of authors, themes, and adaptation of the material.

Division III: Humanities CROSS-LISTED AS CSTS-B248 CROSS-LISTED AS COML-B248 1.0 units Barrenechea,F. Not offered in 2011-12.

### SPAN B260 Ariel/Calibán y el discurso Americano

A study of the transformations of Ariel/Calibán as images of Latin American culture.

Division III: Humanities
Inquiry into the Past (IP)
Critical Interpretation (CI)

Inquiry into the Past (IP) Critical Interpretation (CI) CROSS-LISTED AS COML-B260 1.0 units Sacerio-Garí,E. Not offered in 2011-12.

# SPAN B265 Escritoras españolas: entre tradición, renovación y migración

Fiction by women writers from Spain in the 20th and 21st century. Breaking the traditional female stereotypes during and after Franco's dictatorship, the authors explore through their creative writing changing sociopolitical and cultural issues including regional identities and immigration. Topics of discussion include gender marginality, feminist studies and the portrayal of women in contemporary society.

Division III: Humanities Critical Interpretation (CI) 1.0 units Song,H. Not offered in 2011-12.

# **SPAN B307 Cervantes**

A study of themes, structure, and style of Cervantes' masterpiece *Don Quijote* and its impact on world literature. In addition to a close reading of the text and a consideration of narrative theory, the course examines the impact of *Don Quijote* on the visual arts, music, flm, and popular culture.

Division III: Humanities 1.0 units Quintero,M., Saad-Maura,A. *Not offered in 2011-12.* 

SPAN B309 La mujer en la literatura española del Siglo de Oro

# SPAN B331 TransNation: U.S. Latino and Latin **American Queer Diasporas**

This course engages the vanguard of U.S. Latino and Latin American theoretical debates about state formation in the construction of citizenship from the perspective of queer and transgender studies. Explores recent theoretical and cultural works that challenge traditional understandings of gender, sexuality, ethnic identity, nationalism, state-formation, citizenship, and the body. Analyzes the limits of cultural and theoretical interface between U.S. Latino, Latin American and Anglo-American cultural theory.

Division III: Humanities 1.0 units Staff Not offered in 2011-12.

# **LINGUISTICS**

Students may major in Linguistics through the Tri-College Linguistics consortium (Bryn Mawr, Haverford, Swarthmore) and minor in Linguistics at Haverford College.

#### Coordinators

Shizhe Huang, Haverford College, Bi-College Coordinator

Daniel Altshuler, Bryn Mawr College, Tri-College Coordinator

# **Faculty at Haverford College**

Marilyn Boltz, Professor of Psychology

Danielle Macbeth, T. Wistar Brown Professor of Philosophy

Ana López-Sánchez, Assistant Professor of Spanish

# Faculty at Bryn Mawr College

Deepak Kumar, Professor of Computer Science

Amanda Weidman, Assistant Professor of Anthropology

Daniel Altshuler, Visiting Assistant Professor of Linguistics (Tri-College)

### **Faculty at Swarthmore College**

Theodore Fernald, Professor of Linguistics (chair)

Donna Jo Napoli, Professor of Linguistics

K. David Harrison, Associate Professor of Linguistics (on leave 2011-12)

Daniel Altshuler, Visiting Assistant Professor of Linguistics (Tri-College)

Nathan Sanders, Visiting Assistant Professor of Linguistics

Aaron J. Dinkin, Visiting Assistant Professor of Linguistics and Phonetics Lab Coordinator

Shelley DePaul, Instructor

Doreen Kelley, Instructor

Linguistics is the study of language, the medium which allows us to communicate and share our ideas with others. As a discipline, linguistics examines the structural components of sound, form, and meaning, and the precise interplay between them. Modern linguistic inquiry stresses analytical and argumentation skills, which will prepare students for future pursuits in any feld where such skills are essential.

Linguistics is also relevant to other disciplines, such as psychology, philosophy, sociology, and anthropology.

# **MATHEMATICS**

Students may complete a major or minor in Mathematics. With the major, students may complete the requirements for secondary school certification. Majors may complete an M.A. in Mathematics, if accepted into the combined A.B./M.A. program, or may enter the 3-2 Program in Engineering and Applied Science at the California Institute of Technology.

# **Faculty**

Emi Arima, Instructor

Leslie Cheng, Associate Professor and Chair

Victor Donnay, Professor

Helen Grundman, Professor

Peter Kasius, Instructor

Paul Melvin, Professor

Amy Myers, Lecturer

Gregory Schneider, Instructor

Lisa Traynor, Professor (on leave semester II)

The Mathematics curriculum is designed to expose

# MATH B261 Introduction to Harmonic Analysis and Wavelets

A frst introduction to harmonic analysis and wavelets.

# **MIDDLE EASTERN STUDIES**

Students may complete a concentration in Middle Eastern Studies.

### Coordinator

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Deborah Harrold, Political Science

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Amiram Amitai, Hebrew and Judaic Studies

Grace Armstrong, French and Francophone Studies

Mehmet-Ali Atac, Classical and Near Eastern Archaeology

Peter Magee, Classical and Near Eastern Archaeology

Marc Ross, Political Science

Azade Seyhan, German and German Studies (on leave semester II)

Camelia Suleiman, Arabic

Sharon Ullman, History

Alicia Walker, History of Art

Courses on the Middle East may contribute to majors in other felds or serve as electives. In addition, students may complete a concentration in Middle East Studies.

The Middle Eastern Studies Program focuses on the stud alÄt

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# **ANTH B261 Palestine and Israeli Society**

Considers the legacy of Palestine and the centrality of the Israeli-Palestinian confict as key in the formation of Israeli society, shaped by ongoing political confict. New ethnographic writings disclose themes like Zionism, Holocaust, immigration, religion, Palestinian citizenry, Middle Eastern Jews and military occupation and resulting emerging debates among different social sectors and populations. Also considers constitution of ethnographic felds and the shaping of anthropological investigations by arenas of confict. Prerequisites: sophomore standing and POLS B111 or ANTH B101 or B102 or permission of the instructor.

Division I: Social Science Cross-Cultural Analysis (CC) CROSS-LISTED AS HEBR-B261 CROSS-LISTED AS HIST-B261 1.0 units

NeumamT. dle E ä the shap e ñ Not offered in 2011-12.

Division III 1.0 units Magee, P. Not offered in 2011-12.

#### ARCH B230 Classical & Near Eastern Archeology

A survey of the art and archaeology of ancient Egypt from the Pre-Dynastic through the Graeco-Roman periods, with special emphasis on Egypt's Empire and its outside connections, especially the Aegean and Near Eastern worlds. Inquiry into the Past (IP) Division III 1.0 units Ataç, M.M.

# **ARCH B240 Archaeology and History of Ancient** Mesopotamia

A survey of the material culture of ancient Mesopotamia, modern Iraq, from the earliest phases of state formation (circa 3500 B.C.E.) through the Achaemenid Persian occupation of the Near East (circa 331 B.C.E.). Emphasis will be on art, artifacts, monuments, religion, kingship, and the cuneiform tradition. The survival of the cultural legacy of Mesopotamia into later ancient and Islamic traditions will also be addressed.

Division III: Humanities Inquiry into the Past (IP) Cross-Cultural Analysis (CC) 1.0 units Evans, J., Ataç, M-A. Not offered in 2011-12.

### **ARCH B244 Great Empires of the Ancient Near East**

A survey of the history, material culture, political and religious ideologies of, and interactions among, the fve great empires of the ancient Near East of the second and frst millennia B.C.E.: New Kingdom Egypt, the Hittite Empire in Anatolia, the Assyrian and Babylonian Empires in Mesopotamia, and the Persian Empire in Iran. Division III Inquiry into the Past (IP) Cross-Cultural Analysis (CC) 1.0 units Ataç, M.A.

# ARCH B355 Archaeology of the Achaemenid Empire in Cross Cultural Context

The Achaemenid Empire (538-332 B.C.E.) ruled the largest landmass of any of the ancient Near Eastern Empires. Attempts by archaeologists to understand the manner in which authority was asserted over this area

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) 1.0 units Amitai,A. Not offered in 2011-12.

#### **HEBR B248 Modern Middle East Cities**

Division I: Social Science CROSS-LISTED AS POLS-B248 CROSS-LISTED AS CITY-B248 1.0 units Harrold,D. Not offered in 2011-12.

#### **HEBR B261 Palestine and Israeli Society**

Considers the legacy of Palestine and the centrality of the Israeli-Palestinian confict as key in the formation of Israeli society, shaped by ongoing political confict. New ethnographic writings disclose themes like Zionism, Holocaust, immigration, religion, Palestinian citizenry, Middle Eastern Jews and military occupation and resulting emerging debates among different social sectors and populations. Also considers constitution of ethnographic felds and the shaping of anthropological investigations by arenas of confict. Prerequisites: sophomore standing and POLS B111 or ANTH B101 or B102 or permission of the instructor.

Division I: Social Science CROSS-LISTED AS ANTH-B261 CROSS-LISTED AS HIST-B261 1.0 units Neuman,T. Not offered in 2011-12.

# HEBR B283 Introduction to the Politics of the Modern Middle East and North Africa

This course is a multidisciplinary approach to understanding the politics of the region, using works of history, political science, political economy, flm, and fction as well as primary sources. The course will concern itself with three broad areas: the legacy of colonialism and the importance of international forces; the role of Islam in politics; and the political and social effects of particular economic conditions, policies, and practices. Division I: Social Science
CROSS-LISTED AS POLS-B283
CROSS-LISTED AS HIST-B283

1.0 units Harrold,D.

#### **HIST B240 Modern Middle East Cities**

Taking advantage of the considerable new scholarship on cities, the course will draw from diverse felds to bring different methods to the study of Middle Eastern cities and urbanization. The course will treat the negotiation of state control, urban planning and its alterations in urban practices, social movements and new spaces of politics,

# **HIST B288 The Political Economy of the Middle East** and North Africa

Division I: Social Science CROSS-LISTED AS POLS-B288 1.0 units Harrold.D. Not offered in 2011-12.

# HART B311 Topics in Medieval Art. Sacred Spaces in Islam: Religious Architecture of the Islamic World

Through case studies of specific cultural groups and their architectural traditions, this seminar traces the development of Islamic sacred space during the seventh to the twentieth centuries, from North America to India. Readings address both the historical contexts in which buildings were produced as well as the rituals and beliefs that gave them meaning. Critical texts from architectural theory provide students with a foundation in the methods and concepts that have shaped scholarly discourse on sacred space in the modern era. Division III.

CROSS-LISTED AS CITY-B312 **CROSS-LISTED AS HIST-B311** Walker, A.W.

# HIST B382 Religious Fundamentalism in the Global

Through a comparison of Jewish, Islamic, Christian and Hindu political movements, the course seeks to investigate the religious turn in national and transnational contexts. We will also seek to fnd commonalities and differences in religious movements, and religious regimes, while considering the aspects of globalization which usher in new kinds of transnational affliation. Prerequisite: An introductory course in Anthropology, Political Science or History or permission of the instructor. Division I or Division III CROSS-LISTED AS ANTH-B382 CROSS-LISTED AS POLS-B382 1.0 units Neuman,T. Not offered in 2011-12.

# **POLS B248 Modern Middle East Cities**

Taking advantage of the considerable new scholarship on cities, the course will draw from diverse felds to bring different methods to the study of Middle Eastern cities and urbanization. The course will treat the negotiation of state control, urban planning and its alterations in urban practices, social movements and new spaces of politics, competing architectural visions, globalizations, and new local identities. It will treat such topics as Islamic charities in Cairo, shopping malls as public space in Dubai City, Islamic politics in public space in Istanbul, the restructuring of Beirut, and ideas of modernity in the construction of Tel Aviv.

Division I: Social Science Cross-Cultural Analysis (CC) CROSS-LISTED AS CITY-B248 CROSS-LISTED AS HEBR-B248 CROSS-LISTED AS HIST-B240 1.0 units Harrold, D. Not offered in 2011-12.

# POLS B278 Oil, Politics, Society, and Economics

Examines the role oil has played in transforming societies, in shaping national politics, and in the distribution of wealth within and between nations. Rentier states and authoritarianism, the historical relationships between oil companies and states, monopolies, boycotts, sanctions and demands for succession, and issues of social justice mark the political economy of oil.

Division I: Social Science CROSS-LISTED AS HIST-B278 Counts toward Environmental Studies minor 1.0 unitis Harrold.D. Not offered in 2011-12.

### POLS B282 The Exotic Other: Gender and Sexuality in the Middle East

This course is concerned with the meanings of gender and sexuality in the Middle East, with particular attention to the construction of tradition, its performance, reinscription, and transformation, and to Western interpreta

# POLS B287 Media and Politics: The Middle East Transformed

The events of 2011 transformed the Middle East, overthrowing or threatening regimes across the region. The course will focus on the media technologies, the political actors, and international events that produced these changes, as well as examine works on political transitions, revolutions, and social movements. Prerequisite: A previous social science or history course is strongly recommended, or a previous course on media.

Division I: Social Science

1.0 units Harrold, D.

# POLS B288 The Political Economy of the Middle East and North Africa

This comparative approach considers historical constructions, the power of economic ideas, domestic politics and resources, and international regimes. Specific areas of focus include theories that seek to explain the economic/political conditions, left, nationalist and liberal, as well as the exceptional growth of the Gulf economies. Prerequisite: at least one other course on the Middle East or a strong area expertise in another region such as Latin America or China with permission of the instructor.

Division I: Social Science CROSS-LISTED AS HIST-B288 1.0 units Harrold,D. Not offered in 2011-12.

# POLS B382 Religious Fundamentalism in the Global Era

Through a comparison of Jewish, Islamic, Christian and Hindu political movements, the course seeks to investigate the religious turn in national and transnational contexts. We will also seek to find commonalities and differences in religious movements, and religious regimes, while considering the aspects of globalization which usher in new kinds of transnational affliation. Prerequisite: An introductory course in Anthropology, Political Science or History or permission of the instructor.

Division I or Division III CROSS-LISTED AS ANTH-B382 CROSS-LISTED AS HIST-B382 1.0 units

Neuman,T.

Not offered in 2011-12.

# POLS B383 Two Hundred Years of Islamic Reform, Radicalism, and Revolution

This course will examine the transformation of Islamic politics in the past two hundred years, emphasizing historical accounts, comparative analysis of developments in different parts of the Islamic world. Topics covered

include the rationalist Salafy movement; the so-called conservative movements (Sanussi of Libya, the Mahdi in the Sudan, and the Wahhabi movement in Arabia); the Caliphate movement; contemporary debates over Islamic constitutions; among others. The course is not restricted to the Middle East or Arab world. Prerequisites: a course on Islam and modern European history, or an earlier course on the Modern Middle East or 19th-century India, or permission of instructor.

Division I: Social Science CROSS-LISTED AS HIST-B383

1.0 units Harrold,D.

Not offered in 2011-12.

Middle Eastern Studies courses currently available at Haverford include:

Fall 2011

ANTH H361 Advanced Topics in Enthnopgraphic Area

Studies: National Imaginaries in the Middle

East

HIST H356 Sex, Law and the State in Europe and the

Ottoman Empire

POLS H256 Evolution of the Jihadi Movement

RELG H108 Vocabularies of Islam

RELG H248 The Quran

SOCL H233 Topics in Sociology: Islamic Modernism

Spring 2012

HIST H270 From Empire to Nation: The Ottoman

World Transformed

POLS H357 International Relations Theory: Confict in

the Middle East

RELG H307 Imagining Islam: Icon, Object and Image

RELG H353 Seminar in Islamic, Philosophy and

Theology: Hidden Knowledge and Islamic

Revolutions

# **MUSIC**

Students may complete a major or minor in Music at Haverford College

# **Faculty**

Ingrid Arauco, Associate Professor (on leave semester I)

Christine Cacioppo, Visiting Instructor

Curt Cacioppo, Professor, Chairperson (on leave semester II)

Richard Freedman, Professor (on leave semesters I and II)

Heidi Jacob, Associate Professor, Director of the Haverford-Bryn Mawr Orchestral Program

Thomas Lloyd, Associate Professor, Director of the Haverford-Bryn Mawr Choral Program

Andrew Oster, Visiting Assistant Professor

The music curriculum is designed to deepen understanding of musical form and expression through development of skills in composition and performance joined with analysis of musical works and their place in various cultures. A major in music provides a foundation for further study leading to a career in music.

The composition/theory program stresses proficiency in aural, keyboard and vocal skills, and written harmony and counterpoint. Composition following important historical models and experimentation with contemporary styles are emphasized.

The musicology program, which emphasizes European, North American, and Asian traditions, considers music in the rich context of its social, religious, and aesthetic surroundings.

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# **Special Programs and Funds**

The Music Department Guest Artists Series presents distinguished and emerging performers in public concerts, master classes, lecture-demonstrations, reading sessions, and informal encounters. Among artists recently featured have been Native American futist Mary Youngblood, the Daedalus Quartet, pianist Charles Abramovic, violinist Arnold Steinhardt, and the Network for New Music.

The William Heartt Reese Music Fund was established in 1977 to honor William Heartt Reese, professor of music and conductor of the glee club and orchestra at Haverford from 1947 to 1975. The fund supports applied music lessons for students enrolled in the department's private study program.

The John H. Davison '51 Fund for Student Composers supports new works by student composers. This fund recognizes John's 40 years of teaching and musical creativity at Haverford. The Orpheus Prize is awarded for exceptional achievement in the practice of tonal harmony.

The Kessinger Family Fund for Asian Performing Arts (administered jointly with the John Hurford '60 Humanities Center) sponsors musical performances and lecture-demonstrations that enrich Haverford's crosscultural programs. Since its inception in 1997, the fund has sponsored visits by artists representing traditions of South, Central, and East Asia, and Indonesia.

#### THEORY AND COMPOSITION

#### **MUSC H110 Musicianship and Literature**

Intensive introduction to the notational and theoretical materials of music, complemented by work in sight-singing and keyboard harmony. Discussion of musical forms and techniques of melody writing and harmonization; short projects in composition.

Arauco,I.

### **MUSC H203 Tonal Harmony I**

The harmonic vocabulary and compositional techniques of Bach, Haydn, Mozart, Beethoven, Schubert, and others. Emphasis is on composing melodies, constructing phrases, and harmonizing in four parts. Composition of minute and trio, set of variations, or other homophonic piece is the final project. Three class hours plus laboratory period covering related aural and keyboard harmony skills. Prerequisite: Music 110 or consent. Cacioppo, C.

# **MUSC H204 Tonal Harmony II**

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# **MUSICOLOGY**

# **MUSC H111 Introduction to Western Music**

A survey of the European musical tradition from the

# **MUSC H480 Independent Study**

Prerequisite: Approval of department and consent of instructor. Jacob,H.

# **DIVERSE TRADITIONS**

# MUSC H227 Jazz and the Politics of Culture

A study of jazz and its social meanings. Starting with an overview of jazz styles and European idioms closely

# **Concentration Requirements**

- At least one semester of introductory-level work in both psychology and biology. Introductory biology must be taken with a lab component.
- Core course in neural and behavioral sciences, either Behavioral Neuroscience (PSYC 218 at Bryn Mawr) or Biological Psychology (PSYC 217 at Haverford) or Neurobiology and Behavior (BIOL 202 at Bryn Mawr).

Requirements 1 and 2 must be completed before the senior year.

- 3. Three elective credits. Two of these credits must be from List A, neuroscience courses. One of the List A credits must be from outside the major department. The third elective credit may be from either List A or List B (affliate courses) but it must be taken outside the major department.
- Senior seminar for concentrators (BIOL 396/PSYC 396 at Bryn Mawr).
- 5. Two semesters of senior research, in a manner consistent with the requirements of the major department.

### **List of Courses**

#### List A: Neuroscience courses

**BIOL B244 Behavioral Endocrinology** 

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# PEACE, CONFLICT, AND SOCIAL JUSTICE STUDIES

Students may complete a concentration in Peace, Confict, and Social Justice Studies.

#### Coordinator

Alison Cook-Sather, Bryn Mawr/Haverford Education Program

# **Advisory Faculty**

Michael Allen, Political Science

Alison Cook-Sather, Bryn Mawr/Haverford Education Program

Deborah Harrold, Political Science

Clark McCauley, Psychology (on leave semester I)

Mary Osirim, Sociology

Michael Rock, Economics

The Peace, Confict, and Social Justice Studies program refects Bryn Mawr's interest in the study of conficts, peacemaking, and social justice and offers students the opportunity to design a course of study, to sustain a thematic focus across disciplinary boundaries, and to enrich their major program in the process. Students are encouraged to draw courses from the programs at Haverford (http://www.haverford.edu/pjhr) and Swarthmore (http://www.swarthmore.edu/x20631.xml) as well.

Students in the concentration can pursue a wide range of theoretical and substantive interests concerning questions such as: intra-state and international causes of confict; cooperative and competitive strategies of negotiation and bargaining; intergroup relations and the role of culturally constituted institutions and practices in confict management; social movements; protests and revolutions; the role of religion in social confict and its mitigation; human rights and transitional justice in post confict societies; and social justice and identity questions arising from ethnic, religious and cultural diversity and the implications of these constructions for the distribution of material and symbolic resources in society as well as the practical capacities to engage individuals and groups across constructions of difference by linking practice and theory.

Students in the concentration are encouraged to explore alternative conceptions of peace and social justice in different cultural contexts and historical moments by emphasizing the connections between the intellectual scaffolding needed to analyze the construction of social identities and the social, political and economic implications of these constructions for the distribution of material and symbolic resources within and between societies and the challenges and opportunities to engage individuals and groups to move their communities and societies towards peace and social justice.

# **Concentration Requirements**

Students who wish to take the concentration meet with a faculty advisor by the spring of their sophomore year to develop a plan of study. All concentrators are required to take three core courses: (1) an introductory course, Introduction to Peace, Social Justice and Human Rights at Haverford or Introduction to Peace and Confict Studies at Swarthmore; (2) a 200-level course (Confict and Confict Management, International Law, Politics of Humanitarianism, or Forgiveness, Mourning, and Mercy in Law and Politics), and (3) a project involving community participation and refection by participation impbi-Memester meetings, attendance at lectures/work

#### ANTH B200 The Atlantic World 1492-1800

The aim of this course is to provide an understanding of the way in which peoples, goods, and ideas from Africa, Europe, and the Americas came together to form an interconnected Atlantic World system. The course is designed to chart the manner in which an integrated system was created in the Americas in the early modern period, rather than to treat the history of the Atlantic World as nothing more than an expanded version of North American, Caribbean, or Latin American history. Division I or Division III CROSS-LISTED AS HIST-B200

which usher in new kinds of transnational affliation. Prerequisite: An introductory course in Anthropology, Political Science or History or permission of the instructor. Division I or Division III CROSS-LISTED AS ANTH-B382 CROSS-LISTED AS POLS-B382 1.0 units SEAM DII Not offered in 2011-12.

## POLS B316 The Politics of Ethnic, Racial, and **National Groups**

An analysis of ethnic and racial confict and cooperation that will compare and contrast the experiences of regional and immigrant minorities in Europe. Particular attention is paid to the processes of group identifcation and political organization; the politicization of racial and ethnic identity; patterns of confict and cooperation between minorities and the majority population over time; and different paths to citizenship. The course will examine the experiences of white ethnic groups, African-Americans, Hispanic Americans, Asian Americans as well as Islamic, African, Asian, and regional national groups in Europe.

1.0 units Ross,M. Not offered in 2011-12.

## POLS B347 Advanced Issues in Peace and Confict Studies: Utopias, Dystopias, and Peace

An in-depth examination of crucial issues and particular cases of interest to advanced students in peace and confict studies through common readings and student projects. Various important theories of confict and confict management are compared and students undertake semester-long feld research. The second half of the semester focuses on student research topics with continued exploration of confict-resolution theories and research methods. Prerequisite: POLS 206, 111, or Haverford's POLS 247. CROSS-LISTED AS ANTH-B347

1.0 units Staff Not offered in 2011-12.

#### POLS B348 Culture and Ethnic Confict

An examination of the role of culture in the origin, escalation, and settlement of ethnic conficts. This course examines the politics of culture and how it constrains

objectives of the course is to provide students with the critical tools necessary for an informed reading of texts. Division III: Humanities
CROSS-LISTED AS GERM-B209
CROSS-LISTED AS COML-B209
1.0 units
Seyhan,A.
Not offered in 2011-12.

#### PHIL B211 Theory of Knowledge

Varieties of realism and relativism address questions about what sorts of things exist and the constraints on our knowledge of them. The aim of this course is to develop a sense of how these theories interrelate, and to instill philosophical skills in the critical evaluation of them. Discussions will be based on contemporary readings.

Division III: Humanities Critical Interpretation (CI) 1.0 units Krausz,M.

#### **PHIL B212 Metaphysics**

Metaphysics is inquiry into basic features of the world and ourselves. This course considers two topics of metaphysics, free will and personal identity, and their relationship. What is free will and are we free? Is freedom compatible with determinism? Does moral responsibility require free will? What makes someone the same person over time? Can a person survive without their body? Is the recognition of others required to be a person? Division III: Humanities
Critical Interpretation (CI)
1.0 units
Wallhagen,M.
Not offered in 2011-12.

#### **PHIL B221 Ethics**

An introduction to ethics by way of an examination of moral theories and a discussion of important ancient, modern, and contemporary texts which established theories such as virtue ethics, deontology, utilitarianism, relativism, emotivism, care ethics. This course considers questions concerning freedom, responsibility, and obligation. How should we live our lives and interact with others? How should we think about ethics in a global context? Is ethics independent of culture? A variety of practical issues such as reproductive rights, euthanasia, animal rights and the environment will be considered. Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) Counts toward Gender and Sexuality Studies concentration 1.0 units Koggel,C.

#### **PHIL B222 Aesthetics Nature and Experience of Art**

Prerequisite: One introductory course in philosophy. Here are some questions we will discuss in this course: What sort of thing is a work of art? Can criticism in the arts be objective? Do such cultural entities answer to more than one admissible interpretation? What is the role of a creator's intentions in fxing upon admissible interpretations? What is the nature of aesthetic experience? What is creativity in the arts? Readings will be drawn from contemporary sources.

Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS COML-B222 1.0 units Krausz.M.

#### **PHIL B225 Global Ethical Issues**

The need for a critical analysis of what justice is and requires has become urgent in a context of increasing globalization, the emergence of new forms of confict and war, high rates of poverty within and across borders and the prospect of environmental devastation. This course examines prevailing theories and issues of justice as well as approaches and challenges by non-western, post-colonial, feminist, race, class, and disability theorists.

Division III: Humanities
Critical Interpretation (CI)
Cross-Cultural Analysis (CC)
CROSS-LISTED AS POLS-B225
Counts toward Gender and Sexuality Studies concentration
Counts toward International Studies minor
1.0 units
Koggel,C.

## PHIL B228 Introduction to Political Philosophy: Ancient and Early Modern

An introduction to the fundamental problems of political philosophy, especially the relationship between political life and the human good or goods. Readings from Aristotle, Hobbes, Machiavelli, Plato, and Rousseau. Division III: Humanities CROSS-LISTED AS POLS-B228 1.0 units Salkever,S.

#### PHIL B229 Concepts of the Self

In this course, we will discuss several related philosophical questions about the nature of the self, introspection, self-knowledge, and personal identity. What kind of thing is the self? Is the self identical with your body or something distinct from it? What is introspection? What are you conscious of when you are self-conscious? How does knowledge of your own thoughts, sensations,

### **PHIL B252 Feminist Theory**

Beliefs that gender discrimination has been eliminated and women have achieved equality have become commonplace. We challenge these assumptions examining the concepts of patriarchy, sexism, and oppression. Exploring concepts central to feminist theory, we attend to the history of feminist theory and contemporary accounts of women's place and status in different societies, varied experiences, and the impact of the phenomenon of globalization. We then explore the relevance of gender to philosophical questions about identity and agency with respect to moral, social and political theory. Prerequisite: one course in philosophy or permission of instructor.

Division III: Humanities
Critical Interpretation (CI)
Cross-Cultural Analysis (CC)
CROSS-LISTED AS POLS-B253
Counts toward Gender and Sexuality Studies concentration
1.0 units
Koggel,C.
Not offered in 2011-12.

## PHIL B253 Theory in Practice: Critical Discourses in the Humanities

This seminar provides exposure to infuential 20th-century French thinkers. It will examine three major

CROSS-LISTED AS COML-B293 CROSS-LISTED AS ENGL-B292 1.0 units Seyhan,A. Not offered in 2011-12.

PHIL B300 Nietzsche, Kant, Plato: Modes of **Practical Philosophy** 

will examine varieties of relativism and their absolutistic counterparts. Readings will be drawn from contemporary sources.

Division III: Humanities Counts toward International Studies minor

1.0 units Krausz,M.

### PHIL B327 Political Philosophy in the 20th Century

A study of 20th- and 21st-century extensions of three traditions in Western political philosophy: the adherents of the German and English ideas of freedomund the founders of classical naturalism. Authors read include Hannah Arendt, Michel Foucault, Jürgen Habermas, and John Rawls. Topics include and

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moral theory in the liberal tradition. We then turn to feminist revisions to and expansions of these early accounts of care ethics -- including contemporary work exploring the implications and applications of feminist ethics for issues in the contemporary global context. Division III: Humanities CROSS-LISTED AS POLS-B352

1.0 units Koggel,C.

Not offered in 2011-12.

## PHIL B371 Topics in Legal and Political Philosophy

This is a topic course. Topics vary. Division I or Division III CROSS-LISTED AS POLS-B371 1.0 units Elkins,J. Not offered in 2011-12.

## PHIL B372 Introduction to Artificial Intelligence

Survey of Artifcial Intelligence (AI), the study of how to

## **PHYSICS**

Students may complete a major or minor in Physics. Within the major, students may complete a minor in educational studies or complete the requirements for secondary education certification. Students may complete an M.A. in the combined A.B./M.A. program.

#### **Faculty**

James Battat, Assistant Professor

Peter Beckmann, Professor and Chair

Xuemei Cheng, Assistant Professor

Dan Cross, Lecturer

Mark Matlin, Senior Lecturer

Elizabeth McCormack, Professor (on leave semesters I and II)

Michael Noel, Associate Professor

Michael Schulz, Assistant Professor

The courses in Physics emphasize the concepts and techniques that have led to our present way of modeling the physical world. They are designed both to relate the individual parts of physics to the whole and to treat the various subjects in depth. Opportunities exist for interdisciplinary work and for participation by qualifed majors in research with members of the faculty and their graduate students. In addition, qualifed seniors may take graduate courses.

# Required Introductory Courses for the Major and Minor

The introductory courses required for the physics major and minor are PHYS 121 and PHYS 122 (or PHYS 101 and 102) and MATH 101 and MATH 102. Students are encouraged to place out of MATH 101 and 102 if that is appropriate. Although College credit is given for a score of 4 or 5 on the AP tests and for a score of 5 or above on the IB examination, the AP and IB courses are not equivalent to PHYS 121 and PHYS 122 and advanced placement will not, in general, be given. However, students with a particularly strong background in physics are encouraged to take the departmental advanced placement examination either during the summer before entering Bryn Mawr or just prior to, or during, the frst week of classes. Then, the department can place students in the appropriate course. Students are not given credit for courses they place out of as a result of taking this placement exam. It is best for a student considering a physics major to complete the introductory requirements in the frst year. However, the major sequence is designed so that a student who completes the introductory sequence by the end of the sophomore year can major in physics.

### **Major Requirements**

Beyond the two introductory physics courses and the two introductory mathematics courses, nine additional courses are required for the major. (Haverford courses may be substituted for Bryn Mawr courses where appropriate.) Six of the nine courses must be PHYS 201, 214, 306, 331, and MATH 201, 203. The remaining three courses must be chosen from among the other 300-level physics courses, one of which may be substituted with any one course from among ASTR 320, 321, and 333, or any 300-level math course.

The department has been very successful in preparchFul in physic n physic

3rd Year

## **PHYS B131 How Things Work**

In this half-semester course students will explore the physical principles that govern the objects and activi-

### PHYS B163 The Big Bang

PHYS 133 but without the laboratory. Half-semester course; offered frst half Spring 2012. Division II: Natural Science 0.5 units Schulz,M.

PHYS B164 Particle Physics, Nuclear Physics, and People: The Challenges of Modeling Physical Systems Beyond the Human Realm

PHYS 134 but without the laboratory. Half-semester course; offered second half Spring 2012. Division II: Natural Science 0.5 units Beckmann, P.

#### **PHYS B201 Electromagnetism**

The lecture and material covers electrostatics, electric currents, magnetic felds, electromagnetic induction, Maxwell's equations, electromagnetic waves. Scalar and vector felds and vector calculus are introduced and developed as needed. The laboratory involves passive and active circuits and analog and digital electronics. Lecture three hours, laboratory three hours. Prerequisite: PHYS 102 or 122. Corequisite: MATH 201. Division II with Lab and Quantitative Skills Scientif c Investigation (SI) 1.0 units

#### PHYS B214 An Introduction to Quantum Mechanics

An introduction to the principles governing systems at the atomic scale and below. Topics include the experimental basis of quantum mechanics, wave-particle duality, Schrödinger's e î YSB and Å acysio î YSB ics

**PHYS B309 Advanced Electromagnetic Theory** 

proaches to the study of politics: historical/interpretive, quantitative/deductive, and philosophical. Using these approaches, students examine political life in a variety of contexts, from neighborhoods to global systems, asking questions about the ways humans have addressed the organization of society, the management of conficts, or the structure of power and authority.

## **Course Requirements**

The Political Science major consists of a minimum of 10 courses:

- a) Political Science 101;
- b) Two concentrations, at least one of which should be

#### **Haverford Political Science Courses**

All Haverford Political Science courses will count toward the Bryn Mawr minor, the same is generally true for courses at Swarthmore and the University of Pennsylvania. Everyone minoring in Political Science at Bryn Mawr must take at least three courses in Political Science at Bryn Mawr.

## **Course Designations**

Almost every course offered in the Political Science Department at Bryn Mawr and Haverford will count for at least one of the four felds, and some may count for more than one. (No single course, however, may be counted as part of more than one feld of concentration.) Many courses offered at Swarthmore and Penn will also count towards these. If there are courses offered at Bryn Mawr of Haverford that are not found on the list below, students should consult their advisor or the Political Science Department Chair to determine the proper designation. Designation for courses offered at Swarthmore and Penn should be discussed with a student's advisor, or if she does not have an advisor, with the Political Science Chair.

#### **Identity and Difference**

- 123 American Politics: Difference and Discrimination (H)
- 131 Comparative Politics
- 206 Confict & Confict Management
- 220 Constitutional Law
- 229 Latino Politics in the U.S. (H)
- 228 Introduction to Political Philosophy: Ancient and Early Modern
- 231 Introduction to Political Philosophy: Modern
- 245 Philosophy of Law
- 248 Modern Middle East Cities
- 282 The Exotic Other
- 285 Religion and the Limits of Liberalism (H)
- 286 Religion and American Public Life (H)
- 287 Media and Politics: The Middle East Transformed
- 316 Ethnic Group Politics—Identity and confict
- 320 Democracy in America (H)
- 336 Democracy and Democratization (H)
- 345 Islam, Democracy and Development (H)
- 348 Culture and Ethnic Confict identity and confict
- 358 Political Psychology and Ethnic Confict
- 370 Becoming a People: Power, Justice, and the Political (H)

- 345 Islam, Democracy and Development (H)
- 354 Comparative Social Movements: Power, Protest, and Mobilization
- 375 Perspectives on Work and Family in the U.S.
- 378 Origins of American Constitutionalism
- 385 Democracy and Development

## Interdependence and Confict

151 International Politics (H)

#### **POLS B101 Introduction to Political Science**

This course, which is required of all majors, is designed to introduce students to the study of politics in general and to the four thematic categories around which the major is structured: identity and difference, policy formation and political action, interdependence and confict, and political theory. The course introduces different but related approaches to understanding political phenomena, and fo cuses in particular on some central questions and problems of democracy politics.

Division I: Social Science 1.0 units Ross,M., Allen,M., Hager,C., Elkins,J.

## POLS B111 Introduction to Peace and Confict Studies

A broad and interdisciplinary overview of the study of confict management. Areas to be introduced will include interpersonal confict and confict management, alternative dispute resolution and the law, community confict and mediation, organizational, intergroup, and international confict, and confict management. This course will also serve as a foundation course for students in or considering the peace and confict studies concentration. Division I: Social Science

CROSS-LISTED AS ANTH-B111

Counts toward Peace & Confict Studies concentration 1.0 units

Neuman,T.

Not offered in 2011-12.

### **POLS B121 Introduction to American Politics**

An introduction to the major features and characteristics of the American political system. Features examined include voting and elections; the institutions of government (Congress, the Presidency, the courts and the bureaucracy); the policy-making process; and the role of groups (interest groups, women, and ethnic and racial minorities) in the political process. Enrollment is limited to 35 students.

Division I: Social Science 1.0 units Golden,M.

### **POLS B131 Comparative Politics**

An introduction to the comparative study of political systems. A sampling of major questions addressed by comparative approaches such as why authority structures differ across countries; how major issues such as inequality, environmental degradation, and ethno-nationalism arise in different polities, and why governmental responses to those issues differ so widely. Comparisons are made across time and space. Emphasis is placed on institutional, cultural, and historical explanations. Enrollment is limited to 35 students.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Hager,C., Harrold,D. *Not offered in 2011-12.* 

## POLS B205 European Politics: Between Unification and Dissolution

An analysis of the accelerating process of European unification and the increasing political divisiveness within individual European countries. We focus on the evolution of the state-society relationship in selected countries and the emergence of new sources of confict in recent years. These are placed in the context of a changing international scene: the eastward expansion of the European Union, European social and economic unity and the introduction of the Euro.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Hager,C. Not offered in 2011-12.

## POLS B206 Confict and Confict Management: A Cross-Cultural Approach

This course examines cross-cultural differences in the levels and forms of confict and its management through a wide range of cases and alternative theoreti-

## POLS B217 The State and the Transformation of Confict

State institutions have a profound effect on conficts. State sponsored conficts may be more violent, more deadly and transform society. The state's power may affect confict management, enforcing agreements and providing incentives for cooperation. Weak states may not manage difference or confict; ineffective states may be bypassed by citizens seeking protection or to plunder assets. Readings include theoretical texts as well as empirical accounts of the state's role in structuring and enforcing confict management. Prerequisite: One course in Political Science or social science.

Division I: Social Science

Counts toward Peace & Confict Studies concentration 1.0 units

Harrold, D.

Not offered in 2011

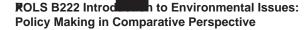
#### POLS B220 C hal Law

A consi of the leading cases and controvers Americ nstitutional law. The course will focus on such ques as the role of the constitution in mediating the rel hip between public and private power with respect lf ÄiffereRce and hielrårchy,Ä and on the role of j review within a c system. Enrollment ited to 35 studen Division I: Social S ents.

Critical Interpretation

1.0 units

Elkins, J., Garfeld, A Not offered in 2011



An exploration of the ways in which different cultural,





#### POLS B238 Science, Technology, and the Good Life

This course considers questions concerning what is science, what is technology, and what is their relationship to each other and to the domains of ethics and politics. We will consider how modern science defined itself in its opposition to Aristotelian science. We will examine the Cartesian and Baconian scientific models and the self-understanding of these models with regard to ethics and politics. Developments in the philosophy of science will be considered, e.g., positivism, phenomenology, feminism, sociology of science. Biotechnology and information technology illustrate fundamental questions. The "science wars" of the 1990s provide debates concerning science, technology, and the good life.

Division III: Humanities CROSS-LISTED AS PHIL-B238 1.0 units Dostal,R. Not offered in 2011-12.

#### **POLS B240 Environmental Ethics**

This course surveys rights- and justice-based justif cations for ethical positions on the environment. It examines approaches such as stewardship, intrinsic value, land ethic, deep ecology, ecofeminism, Asian and aboriginal. It explores issues such as obligations to future generations, to nonhumans and to the biosphere. Division III: Humanities
CROSS-LISTED AS PHIL-B240
Counts toward Environmental Studies minor 1.0 units
Brook,A.
Not offered in 2011-12.

## POLS B241 The Politics of International Law and Institutions

An introduction to international law, which assumes a working knowledge of modern world history and politics since World War II. The origins of modern international legal norms in philosophy and political necessity are explored, showing the schools of thought to which the understandings of these origins give rise. Significant cases are used to illustrate various principles and problems. Prerequisite: POLS 141.

Division I: Social Soie(Cd)
Critical Interpretation (CI)
1.0 units Mitse
Allen,M. ts

## POLS B243 African and Caribbean Perspectives in World Politics

This course makes African and Caribbean voices audible as they create or adopt visions of the world that

CROSS-LISTED AS HIST-B240 Counts toward Middle East Studies concentration 1.0 units Harrold, D. Not offered in 2011-12.

#### **POLS B250 International Politics**

An introduction to international relations, exploring its main subdivisions and theoretical approaches. Phenomena and problems in world politics examined include systems of power management, imperialism, globalization, war, bargaining, and peace. Problems and institutions of international economy and international law are also addressed. This course assumes a reasonable knowledge of modern world history. Enrollment is limited to 30 students.

Division I: Social Science Counts toward International Studies minor Counts toward Peace & Confict Studies concentration 1.0 units Allen,M.

#### POLS B251 Politics and the Mass Media

A consideration of the mass media as a pervasive fact of U.S. political life and how they infuence American politics. Topics include how the media have altered American political institutions and campaigns, how selective attention to particular issues and exclusion of others shape public concerns, and the conditions under which the media directly infuence the content of political beliefs and the behavior of citizens. Prerequisite: one course in political science, preferably POLS 121. Division I: Social Science 1.0 units Chomsky, D.

#### **POLS B253 Feminist Theory**

Beliefs that gender discrimination has been eliminated and women have achieved equality have become commonplace. We challenge these assumptions examining the concepts of patriarchy, sexism, and oppression. Exploring concepts central to feminist theory, we attend to the history of feminist theory and contemporary accounts of women's place and status in different societies, varied experiences, and the impact of the phenomenon of globalization. We then explore the relevance of gender to philosophical questions about identity and agency with respect to moral, social and political theory. Prerequisite: one course in philosophy or permission of instructor.

Division III: Humanities CROSS-LISTED AS PHIL-B252 Counts toward Gender and Sexuality Studies concentraltion 1.0 units Koggel,C. N I I Not offered in 2011-12.

#### **POLS B255 Media and Elections**

Addresses the role of mass media in the electoral process, considering the importance of information for

## 314 Political Science

CROSS-LISTED AS SOCL-B273 1.0 units Albert,R. *Not offered in 2011-12.* 

POLS B278 Oil, Politics, Sociem

I

Counts toward Environmental Studies minor 1.0 units Hager,C. Not offered in 2011-12.

### POLS B316 The Politics of Ethnic, Racial, and **National Groups**

An analysis of ethnic and racial confict and cooperation that will compare and contrast the experiences of regional and immigrant minorities in Europe. Particular attention is paid to the processes of group identifcation and political organization; the politicization of racial and ethnic identity; patterns of confict and cooperation between minorities and the majority population over time; and different paths to citizenship. The course will examine the experiences of white ethnic groups, African-Americans, Hispanic Americans, Asian Americans as well as Islamic, African, Asian, and regional national groups in Europe.

Counts toward Peace & Confict Studies concentration 1.0 units

Ross,M.

Not offered in 2011-12.

### POLS B320 Greek Political Philosophy: Ethics and **Politics**

Plato's philosophizing is "political" in two senses: its frequent explicit concern with the central concepts of politics, and its even more frequent implicit staging of the tensions between philosophy and politics understood as ways of life. We will pursue both aspects via close reading and discussion of several Platonic works including Cleitophon, Menexenus, Meno, Gorgias, Seventh Letter, and Statesman, as well as Euthyphro, Apology, Crito, and Republic. To place Plato in the context of debates within Greek philosophical and political discourse, we will also read some Heraclitus, Parmenides, Thucyundertake semester-long feld research. The second half of the semester focuses on student research topics with continued exploration of confict-resolution theories and research methods. Prerequisite: POLS 206, 111, or Haverford's POLS 247.

CROSS-LISTED AS ANTH-B347

Counts toward Peace & Confict Studies concentration 1.0 units

Neuman,T.

Not offered in 2011-12.

#### POLS B348 Culture and Ethnic Confict

An examination of the role of culture in the origin, escalation, and settlement of ethnic conficts. This course examines the politics of culture and how it constrains and offers opportunities for ethnic confict and cooperation. The role of narratives, rituals, and symbols is emphasized in examining political contestation over cultural representations and expressions such as parades, holy sites, public dress, museums, monuments, and language in culturally framed ethnic conficts from all regions of the world. Prerequisites: two courses in the social sciences.

CROSS-LISTED AS CITY-B348

Counts toward Peace & Confict Studies concentration 1.0 units

Ross,M.

Not offered in 2011-12.

### POLS B352 Feminism and Philosophy

It has been said that one of the most important feminist contributions to theory is its uncovering of the ways in which theory in the Western tradition, whether of knowledge, morality, or politics has a hidden male bias. This course will explore feminist critiques of traditional moral theory by examining early accounts of an ethic of care that challenge the ethic of justice that has dominated moral theory in the liberal tradition. We then turn to feminist revisions to and expansions of these early accounts of care ethics -- including contemporary work exploring the implications and applications of feminist ethics for issues in the contemporary global context.

Division III: Humanities CROSS-LISTED AS PHIL-B352

1.0 units

Koggel,C.

Not offered in 2011-12.

#### **POLS B354 Comparative Social Movements**

A consideration of the conceptualizations of power and "legitimate" and "illegitimate" participation, the political opportunity structure facing potential activists, the mobilizing resources available to them, and the cultural framing within which these processes occur. Specific attention is paid to recent movements within and across countries, such as feminist, environmental, and antiglobalization movements, and to emerging forms of

#### **POLS B391 International Political Economy**

This seminar examines the growing importance of economic issues in world politics and traces the development of the modern world economy from its origins in colonialism and the industrial revolution, through to the globalization of recent decades. Major paradigms in political economy are critically examined. Aspects of and issues in international economic relations such as development, fnance, trade, migration, and foreign investment are examined in the light of selected approaches. One course in International Politics or Economics is required. Preference is given to seniors although juniors are accepted.

1.0 units Allen,M.

#### POLS B392 State in Theory and History

This class connects the felds of historical sociology and international relations to survey the roots of states as the predominant form of political authority, to assess its behavior in global affairs, and to consider its future. Concepts include: class coalitions, democracy, capitalism, socialism, authoritarianism, revolutions, international organizations, and empires. Prerequisites: two courses in Political Science, or Peace and Confict Studies, or permission of the instructor. Enrollment is limited to 18 students.

Division I: Social Science 1.0 units Hoffman,P.

## POLS B393 U.S. Welfare Politics: Theory and Practice

Major theoretical perspectives concerning the welfare state with a focus on social policy politics, including recent welfare reforms and how in an era of globalization there has been a turn to a more restrictive system of social provision. Special attention is paid to the ways class, race, and gender are involved in making of social welfare policy and the role of social welfare policy in reinforcing class, race, and gender inequities. Prerequisite: POLS B121 or SOCL B102.

Division I: Social Science CROSS-LISTED A S SOCL-B393 1.0 units Schram,S.

## POLS B397 Senior Seminar in Environmental Studies

A seminar course that encourages and facilitates environmental problem solving by interdisciplinary teams of ES concentrators. Coursework may take the form of civic engagement (Praxis) projects. Students hone their research, collaboration, and leadership abilities by working on real problems facing our community and the broader world. Students will provide oral and written

progress reports and submit written summaries of their fndings. Collaborative research projects also are possible. Three hours per week.

CROSS-LISTED AS GEOL-B397

CROSS-LISTED AS ANTH-B397

CROSS-LISTED AS BIOL-B397

**CROSS-LISTED AS CITY-B397** 

Counts toward Environmental Studies minor

1.0 units

Hager, C., Barber, D.

Not offered in 2011-12.

#### **POLS B398 Senior Conference**

Required of senior majors. In weekly group meetings as well as individual tutorials, faculty work with students on research strategies, on refining research topics, and on supervising research progress for the senior thesis.

1.0 units

## POLS B399 Senior Essay

1.0 units Golden, M., Salkever, S., Allen, M., Elkins, J.

#### **POLS B403 Supervised Work**

1.0 units Harrold,D., Ross,M., Chomsky,D., Allen,M.

#### POLS B425 Praxis III: Independent Study

Counts toward Praxis Program concentration 1.0 units Golden,M.

## **PSYCHOLOGY**

Students may complete a major or minor in Psychology. Within the major, students may complete a concentration in neural and behavioral sciences.

## **Faculty**

Melissa Alderfer, Lecturer Kimberly Cassidy, Provost and Professor

## Concentration in Neural and Behavioral Sciences

An interdepartmental concentration in Neural and Behavioral Sciences is available as an option to students majoring in either biology or psychology. Students electing this option must fulfll requirements of both the major and the concentration, which is administered by an interdepartmental committee.

For a Psychology major with a concentration in Neural and Behavioral Sciences, students must complete five required courses: PSYC 101, 102 or 105, 205, 212, 218, and one of the following 300-level courses—PSYC 323, 326, 350, 351, or 395.

Five additional psychology courses at the 200, 300, and 400 levels are required to complete the Psychology major with a concentration in Neural and Behavioral Sciences. These should be chosen in consultation with the major adviser to ensure that the distribution of 200-and 300-level courses satisfes the Psychology major requirements. Some of these courses (such as Supervised Research) may also fulfil core major requirements.

These departmental requirements are in addition to the requirements for the Neural and Behavioral Sciences concentration.

### **Minor in Computational Methods**

Students majoring in psychology can minor in computational methods. Requirements for the minor are listed in Computer Science.

## **Haverford College Courses**

Certain courses currently offered at Haverford College may be substituted for the equivalent Bryn Mawr courses for purposes of the Bryn Mawr psychology major.

Introductory psychology at Haverford may be substituted for 101/102/105. PSYC 200 at Haverford may be substituted for PSYC 205. The following courses at Haverford will count as 200-level courses for the major: PSYC 213 (Memory and Cognition), PSYCH 215 (Introduction to Personality Psychology), PSYC 217 (Biological Psychology), PSYC 224 (Social Psychology), PSYC 238 (Psychology of Language), PSYC 260 (Cognitive Neuroscience).

The following Haverford courses will count as 300-level courses for the major: PSYC 214 (Psychology of Adolescence), PSYC 220 (The Psychology of Time), PSYC 221 (The Primate Origins of Society), PSYC 222 (Evolution and Behavior), PSYCH 225 (Self and Identity), PSYC 240 (Psychology of Pain and Pain Inhibition), PSYC 250 (Biopsychology of Emotion and Personality), PSYC 311 (Advanced Personality Psychology: Freud),

PSYC 325 (The Psychology of Close Relationships), PSYC 340 (Human Neuropsychology), PSYC 350 (Biopsychology of Stress), PSYC 370 (Neuroscience of Mental Illness). Students who take Haverford courses with the half credit laboratory attachments may count the lab portion of the course toward fulf lling the advanced lab requirement for the Bryn Mawr major.

#### **PSYC B101 Experimental Psychology**

Both PSYC 101 and 102 present psychology as a natural science and provide a survey of methods, facts, and principles relating to basic psychological processes. Topics covered in 101 include neural bases of behavior, learning and motivation, and psychosocial development and abnormal psychology. Topics covered in 102 include human cognition, cognitive development, individual differences, and social psychology. Lecture three hours and laboratory four hours a week (for both 101 and 102).

Division II with Lab 1.0 units Thomas,E., Rescorla,L. Not offered in 2011-12.

#### **PSYC B102 Experimental Psychology**

Both PSYC 101 and 102 present psychology as a natural science and provide a survey of methods, facts, and principles relating to basic psychological processes. Topics covered in 101 include neural bases of behavior, learning and motivation, and psychosocial development and abnormal psychology. Topics covered in 102 include human cognition, cognitive development, individual differences, and social psychology. Lecture three hours and laboratory four hours a week (for both 101 and 102).

Division II with Lab 1.0 units McCauley,C., Myers,L. Not offered in 2011-12.

#### **PSYC B105 Introductory Psychology**

How do biological predispositions, life experiences, social and cultural phenomena contribute to human and animal behavior? This biopsychosocial theme will be examined by studying both "normal" and "abnormal" behaviors in domains such as perception, cognition, learning, motivation, emotion, and social interaction, thereby providing an overview of psychology's many areas of inquiry.

Division II with Lab Scientifc Investigation (SI) Counts toward Neural & Behavioral Science concentration 1.0 units Rescorla,L., Thomas,E.

#### **PSYC B120 Psychology of Terrorism**

Overview of the psychology of terrorism. Cases include Al Qaeda, People's Will, and Weather Underground. This is a half semester (quarter) course.

Division I: Social Science

0.5 units McCauley,C.

### **PSYC B125 Psychology of Genocide**

Introduction to the psychology of genocide, including perpetrators, leaders, and sympathizers. Cases include Holocaust, Rwanda, and Cambodia. This is a half semester (quarter) course.

Division I: Social Science

0.5 units McCauley, C.

#### **PSYC B201 Learning /Behavior Analysis**

This course covers the basic principles of behavior, and their application to the understanding of the human condition. Topics include the distinction between closedloop (selection by consequences) and open-loop (elicitation and adjunctive behavior) relations, the distinction between contingency-shaped behavior and behavior under instructional control, discrimination and concept formation, choice, functional analysis of verbal behavior and awareness and problem solving. Behavior Analysis is presented as a distinct research methodology with a distinct language, as well as a distinct theoretical approach within psychology.

Division II: Natural Science Scientifc Investigation (SI) 1.0 units Neuman,P.

#### **PSYC B203 Educational Psychology**

Topics in the psychology of human cognitive, social, and affective behavior are examined and related to educational practice. Issues covered include learning theories. memory, attention, thinking, motivation, social/emotional issues in adolescence, and assessment/learning disabilities. This course provides a Praxis Level I opportunity. Classroom observation is required. Prerequisite: Introductory Psychology (either PSYC 101, 102, or 105). Division I: Social Science

Counts toward Praxis Program concentration 1.0 units Cassidy, K.

#### **PSYC B205 Experimental Methods and Statistics**

An introduction to experimental design, general research methodology, and the analysis and interpretation of data. Emphasis will be placed on issues involved with conducting psychological research. Topics include descriptive and inferential statistics, experimental design and validity, analysis of variance, and correlation and regression. Each statistical method will also be executed using computers. Lecture three hours, laboratory 90 minutes a week.

Division I or Quantitative Skills Scientifc Investigation (SI) Quantitative Methods (QM) 1.0 units Thapar, A.

#### **PSYC B206 Developmental Psychology**

A topical survey of psychological development from infancy through adolescence, focusing on the interaction of personal and environmental factors in the ontogeny of perception, language, cognition, and social interactions within the family and with peers. Topics include developmental theories; infant perception; attachment; language development; theory of mind; memory development; peer relations, schools and the family as contexts of development; and identity and the adolescent transition. Prerequisite: Introductory Psychology (PSYC 101,102, or 105).

Division I: Social Science 1.0 units Wozniak,R.

#### **PSYC B208 Social Psychology**

A survey of theories and data in the study of human social behavior. Special attention to methodological issues of general importance in the conduct and evaluation of research with humans. Topics include group dynamics (conformity, leadership, encounter groups, crowd behavior, intergroup confict); attitude change (consistency theories, attitudes and behavior, mass media persuasion); and person perception (stereotyping, essentializing, moral judgment). Participation in a research project is required. Prerequisite: One of the Introductory Psychology courses (PSYC 101, 102 or 105) or the permission of the instructor Division I: Social Science Scientifc Investigation (SI)

1.0 units McCauley, C.

## **PSYC B209 Abnormal Psychology**

This course examines the experience, origins, and consequences of psychological problems. What do we mean by abnormal behavior or psychopathology? How is psychopathology assessed and classifed? How do psychologists study and treat it? What causes psychological diffculties and what are their consequences?

orientation are considered. Prerequisite: junior, senior or graduate status and any 200-level survey course. 1.0 units Thapar, A., Nath, S. Not offered in 2011-12.

#### **PSYC B310 Advanced Developmental Psychology**

This course details theory and research relating to the development of children and adolescents with family, school, and cultural contexts. We examine topics including (but not limited to): developmental theory, infant perception, language, attachment, self-awareness, social cognition, symbolic thought, memory, parent-child relations, peer relations, and gender issues. Prerequisite: PSYC 206 or permission of the instructor. 1.0 units Wozniak, R., Myers, L. Not offered in 2011-12.

### **PSYC B312 History of Modern American Psychology**

An examination of major 20th-century trends in American psychology and their 18th- and 19th-century social and intellectual roots. Topics include physiological and philosophical origins of scientifc psychology; growth of American developmental, comparative, social, and clinical psychology; and the cognitive revolution. PrerequiAn important focus of the course is on the identification of biological, social, and psychological risk and protective factors for psychopathology and the implications of these factors for prevention and treatment efforts. The role of family-based risk and protective factors, such as marital confict and parenting quality, will be emphasized. Prerequisite: PSYC 206 or 209.

1.0 units Rescorla,L.

# **PSYC B352 Advanced Topics in Developmental Psychology**

This is a topics course. Topics vary. Prerequisite: PSYC 206 or the consent of the instructor. Division II with Lab 1.0 units Myers,L. Not offered in 2011-12.

# PSYC B358 Political Psychology of Group Identification

This seminar will explore the common interests of psychologists and political scientists in the phenomena of group identification. The focus will be identification with ethnic and national groups, with special attention to the ways in which research on small-group dynamics can help us understand identification and confict for these larger groups. The seminar will review mak

### **RELIGION**

Students may complete a major in Religion at Haverford College

#### **Faculty**

Tracey Hucks, Associate Professor Terrence Johnson, Assistant Professor Kenneth Koltun-Fromm, Professor Naomi Koltun-Fromm, Associate Professor Anne M. McGuire, Associate Professor Travis Zadeh, Assistant Professor

The Department of Religion at Haverford views religion as a central aspect of human culture and social life. Religions propose interpretations of reality and shape very particular forms of life. In so doing, they make use of many aspects of human culture, including art, architecture, music, literature, science, and philosophy - as well as countless forms of popular culture and daily behavior. Consequently, the fullest and most rewarding study of religion is interdisciplinary in character, drawing upon approaches and methods from disciplines such as anthropology, comparative literature and literary theory, gender theory, history, philosophy, psychology, political science, and sociology.

A central goal of the department is to enable students to become critically informed, independent, and creative

#### **Requirements for Honors**

Honors and High Honors in religion are awarded on the basis of the quality of work in the major and in the Senior Thesis (399b).

#### INTRODUCTORY COURSES

#### **RELG H108 Vocabularies of Islam [A]**

Introduction to the foundational concepts of Islam and the diverse ways in which Muslims understand and practice their religion. Topics include scripture, prophethood, law, ritual, theology, mysticism, and art. Veliji,J.

# RELG H110 Sacred Texts and Religious Traditions [A]

An introduction to Religion through the close reading of selected sacred texts of various religious traditions in their historical, literary, philosophical, and religious contexts.

Staff

Not offered in 2011-12.

# **RELG H118 Hebrew Bible: Literary Text and Historical Context**

The Hebrew Bible, which is fundamental to both Judaism and Christianity, poses several challenges to modern readers. Who wrote it, when, and why? What

religion in shaping the moral and political imaginations of African Americans.

Johnson,T.

**RELG H155 Themes in the Anthropology of Religion** 

Ngwane,Z.

RELG H169 Black Religion and Liberation Thought: An Introduction [A]

# RELG H305 Concentrations Seminar C: Religion, Ethics and Society [C]

Typically offered every Fall. Staff

### **RELG H306 Of Monsters and Marvels: Wonder in Islamic Traditions**

From contemplating the cosmos to encountering the monstrous, this course explores the place of wonder in Islamic traditions through readings from the Qur'an, exegesis, prophetic traditions, popular literature, travel narratives, descriptive geography, philosophy and theology. Prerequisite: Consent Zadeh,T.

Not offered in 2011-12.

# RELG H307 Imagining Islam: Icon, Object, and Image

Explores the place of material and visual culture in Islam, examining how Muslims have conceptualized and deployed material and visual forms of religious expressions in a number of historical contexts. Prerequisite: None

Zadeh,T.

#### **RELG H308 Mystical Literatures of Islam**

Overview of the literary expressions of Islamic mysticism through the study of poetry, philosophy, hagiographies, and anecdotes. Topics include: unio mystica; symbol and structure; love and the erotic; body / gender; language and experience.

Zadeh,T.

Not offered in 2011-12.

#### **RELG H310 Sex and Gender in Japanese Buddhism**

Staff

Not offered in 2011-12.

# RELG H330 Seminar in the Writings of Women of African Descent [C]

This seminar will examine the writings of women of African descent from Africa, North America, and the Caribbean. Using primary and secondary texts from the nineteenth to the twentieth centuries, this course will explore the various religious traditions, denominations, sects, and religious and cultural movements in which women of African descent have historically participated. The course will also analyze the ways in which specifc social conditions and cultural practices have historically infuenced the lives of these women within their specifc geographical contexts.

Hucks,T.

Not offered in 2011-12.

# RELG H343 Seminar in Religions of Antiquity and Biblical Literature [A,B]

McGuire,A.

# RELG H353 Seminar in Islamic Philosophy and Theology: Hidden Knowledge & Islamic Revolutions [B]

This course examines the relationships between hidden knowledge and revolution in Islamic history. The goal of the course will be not only to examine the interrelations between these two phenomena, but also to examine whether theoretical material on oaths and secrecy dominant in the feld of religious studies can correctly capture what is going on in our "Islamic" revolutions. Prerequisite: Consent.

Veliji, J.

#### RELG H360 Seminar in Modern Christian Thought: Dietrich Bonhoffer and Martin Luther King [B,C]

Heckart,J.

#### **RELG H399 Senior Seminar and Thesis [A]**

http://www.haverford.edu/relgion/faculty/jdawson Prerequisite: Open only to Senior Religion Majors. McGuire,A., Hucks,T., Johnson,T., Zadeh,T.

#### **RELG H460 Teaching Assistant [A]**

Prerequisite: Religion majors by consent. Hucks, T., Koltun 0r ., S M

Orchard, Dostoevsky's *The Brothers Karamazov*, Solzhenitsyn's *One Day in the Life of Ivan Denisovich*, Tolstoy's *War and Peace*, and Turgenev's *Sketches from a Hunter's Album*. Discussions address the definition of good and evil, the meaning of freedom, the role of rationality and the irrational in human behavior, and the relationship of art to life. No knowledge of Russian is required.

Division III: Humanities Critical Interpretation (CI) 1.0 units Allen,E. Not offered in 2011-12.

### **RUSS B115 The Golden Age of Russian Literature**

An introduction to the great 19th Century Russian authors and some of their most famous, seminal works, including Pushkin's "The Queen of Spades" and "Eugene Onegin, Media" ehaq

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andn

Division III: Humanities Critical Interpretation (CI) 1.0 units Allen, E.

#### **RUSS B223 Russian and East European Folklore**

This interdisciplinary course introduces students to major issues in Russian and East European folklore including epic tales, fairy tales, calendar and life-cycle rituals, and folk beliefs. The course also presents different theoretical approaches to the interpretation of folk texts as well as emphasizes the infuence of folklore on literature, music, and art. No knowledge of Russian is required.

Division III: Humanities Critical Interpretation (CI) Cross-Cultural Analysis (CC) 1.0 units Bain,S.

### **RUSS B235 The Social Dynamics of Russian**

An examination of the social factors that infuence the language of Russian conversational speech, including contemporary Russian media (flms, television, and the Internet). Basic social strategies that structure a conversation are studied, as well as the implications of gender and education on the form and style of discourse. Prerequisites: RUSS 201, 202, may be taken concurrently. Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Davidson, D., Hayes, N.

#### RUSS B238 The History of Cinema 1895 to 1945 Silent Film: From the United States to Soviet Russia and Beyond

This course will explore cinema from its earliest, most primitive beginnings up to the end of the silent era. While the course will focus on a variety of historical and toevsky, Nabokov, Pushkin, and Tolstoy, are compared to Jane Austen's Pride and Prejudice and other exemplars of the Western novelistic tradition. All readings, lectures, and discussions in English.

Division III: Humanities Critical Interpretation (CI) CROSS-LISTED AS COML-B261 1.0 units Allen,E.

# RUSS B271 Chekhov: His Short Stories and Plays in Translation

A study of Alseuthemes, structure and style of Mekhov's major short stories and plays. The course will also explore the significance of Chekhov's prose and drama in the English-speaking world, where this masterful Russian writer is the most staged playwright after Shakespeare. All readings and lectures in English. Division III: Humanities

Division III: Humanities Critical Interpretation (CI) 1.0 units

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reevaluation of its cultural heritage through neo-primitive art; the Russian avant-garde's mystical, Eastern underpinnings; the primacy of music for avant-garde artists; and the emergence of abstract, dynamic art. 1.0 units

Allen.E.

Not offered in 2011-12.

#### **RUSS B360 Identity and Second Language** Acquisition

Introduces the concept of linguistic identity in relation to other identity facets (i. e. gender, ethnicity, class, and culture) and explores ways in which acquisition of a second language affects self-conception and self-representation. Employs critical discourse analysis to discuss how second language learners construct identities through socialization into new speech communities. No knowledge of Russian is required.

Division III: Humanities 1.0 units Shardakova, M.

Not offered in 2011-12.

#### **RUSS B375 Language and Identity Politics of** Language in Europe and Eurasia

A brief general introduction to the study of language policy and planning with special emphasis on the Russophone world, the newly independent states of the former Soviet Union. Surveys current theoretical approaches to bilingualism and language shift. Analyzes Soviet language and nationality policy using published census data for the Soviet period through 1989. Focus on the current "language situation" and policy challenges for the renewal of functioning native languages and cultures and maintenance of essential language competencies, lingua franca, both within the Russian Federation and in the "Near Abroad."

Division III: Humanities 1.0 units Davidson.D. Not offered in 2011-12.

### **RUSS B380 Seminar in Russian Studies**

An examination of a focused topic in Russian literature such as a particular author, genre, theme, or decade. Introduces students to close reading and detailed critical analysis of Russian literature in the original language. Readings in Russian. Some discussions and lectures in Russian. Prerequisites: RUSS 201 and one 200-level Russian literature course.

Division III: Humanities

1.0 units Hayes, N.

#### RUSS B390 Russian for Pre-Professionals I

This capstone to the overall language course sequence is designed to develop linguistic and cultural proficiency in Russian to the advanced level or higher, preparing students to carry out academic study or research in Russian in a professional feld. Prerequisite: study abroad in Russia for at least one summer, preferably one semester; and/or certifed proficiency levels of 'advanced-low' or 'advanced-mid' in two skills, one of which must be oral profciency.

Division III: Humanities

1.0 units

Prokopenko,O.

#### **RUSS B391 Russian for Pre-Professionals II**

Second part of year long capstone language sequence designed to develop linguistic and cultural proficiency to the "advanced level," preparing students to carry out advanced academic study or research in Russian in a professional feld. Prerequisite: RUSS 390 or equivalent.

Division III: Humanities

1.0 units

Prokopenko,O.

#### **RUSS B398 Senior Essay**

Independent research project designed and conducted under the supervision of a departmental faculty member. May be undertaken in either fall or spring semester of senior year.

1.0 units

Harte,T.

#### **RUSS B399 Senior Conference**

Exploration of an interdisciplinary topic in Russian culture. Topic varies from year to year. Requirements may include short papers, oral presentations, and examinations.

units

Bain.S.

### **RUSS B403 Supervised Work**

1.0 units

Harte, T., Allen, E., Prokopenko, O., Bain, S.

### **SOCIOLOGY**

Students may complete a major or minor in Sociology.

#### **Faculty**

Sylvie Honig, Lecturer

David Karen, Professor

Erika Marquez, Postdoctoral Fellow

Mary Osirim, Dean of Graduate Studies and Professor

Ayumi Takenaka, Associate Professor (on leave semesters I and II)

Robert Washington, Professor and Chair

Nathan Wright, Assistant Professor

The major in Sociology aims to provide understanding of the organization and functioning of modern society by analyzing its major institutions, social groups, and values, and their interrelations with culture an personality. To facilitate these analytical objectives, the department offers rigorous preparation in social theory and problem focused training in quantitative as well as qualitative methodologies.

#### **Major Requirements**

Requirements for the major are SOCL 102, 265, 302, 303, Senior Seminar (398), fve additional courses in sociology (one of which may be at the 100 level and at least one of which must be at the 300 level), and two courses in an allied subject. Allied courses can be chosen from a list provided by the department. Some courses offered by the Graduate School of Social Work and Social Research (GSSWSR) may be eligible for major or minor credit in Sociology. However, no more than two courses from GSSWSR can count for the major or minor in Sociology.

After completing SOCL 303, in which she will write a research proposal during her junior year, the student may submit that proposal to the department for permission to write a senior thesis. If her proposal is accepted, she will enroll in the thesis-oriented senior seminar where she will focus on researching and writing her thesis.

Students who choose not to write a thesis will enroll in the non-thesis senior seminar, which will explore selected issues in a major substantive area of sociology—such as culture, social class, social confict, power, or contemporary social theory. This seminar will require each of the enrolled students to write a term paper.

The Department of Sociology offers concentrations in gender and society, Asian American studies and African American studies. In pursuing these concentrations, majors should inquire about the possibility of coursework at

Haverford and Swarthmore Colleges and the University of Pennsylvania.

#### **Minor Requirements**

Requirements for the minor are SOCL 102, 265, 302, and three additional courses within the department. Students may choose electives from courses offered at Haverford College. Bryn Mawr majors should consult their department about major credit for courses taken at other institutions.

#### **Honors**

#### **African American Studies**

Three courses are required for this concentration—at least two of these courses must be in sociology. The remaining course can be in either sociology or an allied feld. Students who pursue this concentration are required to take the core course offered by the Bryn Mawr

#### SOCL B246 Immigrant Experiences: Introduction to **International Migration**

The course will examine the causes and consequences of immigration by looking at various immigrant groups in the United States in comparison with Western Europe, Japan, and other parts of the world. How is immigration induced and perpetuated? How are the types of migration changing (labor migration, refugee fows, return migration, transnationalism)? How do immigrants adapt differently across societies? We will explore scholarly texts, flms, and novels to examine what it means to be an immigrant, what generational and cultural conficts immigrants experience, and how they identify with the new country and the old country.

Division I: Social Science Inquiry into the Past (IP) Cross-Cultural Analysis (CC) CROSS-LISTED AS ANTH-B258 Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration 1.0 units Takenaka, A. Not offered in 2011-12.

#### **SOCL B247 Environmental Social Problems**

This course examines environmental social problems from a constructionist perspective. We will examine how environmental problems become public problems that receive attention, money and widespread concern. Division I: Social Science Counts toward Environmental Studies minor 1.0 units

Staff

Not offered in 2011-12.

#### **SOCL B249 Asian American Communities**

This course is an introduction to the study of Asian American communities that provides comparative analysis of major social issues confronting Asian Americans. Encompassing the varied experiences of Asian Americans and Asians in the Americas, the course examines a broad range of topics—community, migration, race and ethnicity, and identities—as well as what it means to be Asian American and what that teaches us about American society.

Division I: Social Science Inquiry into the Past (IP) Cross-Cultural Analysis (CC) CROSS-LISTED AS ANTH-B249 CROSS-LISTED AS CITY-B249 1.0 units Takenaka, A. Not offered in 2011-12.

#### **SOCL B252 Sociology of Popular Music**

This course explores the production, distribution, and consumption of popular music, paying particular attention to the interrelationships among artists, fans, the music industry, and the societal context. Themes include the tension between mainstream commercial success and artistic independence, popular music and politics, and music consumption and identity, gender, and sexu-

Division I: Social Science Inquiry into the Past (IP) Cross-Cultural Analysis (CC) 1.0 units Wright, N. Not offered in 2011-12.

#### SOCL B257 Marginals and Outsiders: The Sociology of Deviance

An examination of unconventional and criminal behavior from the standpoint of different theoretical perspectives on deviance (e.g., social disorganization, symbolic interaction, structural functionalism, Marxism) with particular emphasis on the labeling and social construction perspectives; and the role of conficts and social movements in changing the normative boundaries of society. Topics will include alcoholism, drug addiction, homicide, homosexuality, mental illness, prostitution, robbery, and white-collar crime.

Division I: Social Science Cross-Cultural Analysis (CC) 1.0 units Washington, R.

#### **SOCL B258 Sociology of Education**

Major sociological theories of the relationships between education and society, focusing on the effects of education on inequality in the United States and the historical development of primary, secondary, and post-secondary education in the United States. Other topics include education and social selection, testing and tracking, and micro- and macro-explanations of differences in educational outcomes. This is a Praxis I course; placements are in local schools.

Division I: Social Science Cross-Cultural Analysis (CC) Counts toward Praxis Program concentration 1.0 units Karen, D.

#### SOCL B262 Who Believes What and Why: The **Sociology of Public Opinion**

This course explores public opinion: what it is, how it is measured, how it is shaped, and how it changes over time. Specifc attention is given to the role of elites, the mass media, and religion in shaping public opinion.

### 340 Sociology

Examples include racial/ethnic civil rights, abortion, gay/lesbian/transgendered sexuality, and inequalities.

Division I: Social Science
Inquiry into the Past (IP)

Cross-Cultural Analysis (CC)

CROSS-LISTED AS POLS-B262

Counts toward Gender and Sexuality Studies concentration

1.0 units

Wright, No

# **SOCL B265 Research Design and Statistical Analysis**

An introduction to the conduct of empirical, especially quantitative, social science inquiry. In consultation with the instructor, students may select research problems to which they apply the research procedures and statistical

techniques introduced duriKg\_theYcotocomodxtTe G‡EMË €0`p FI€iM G‡EMIH Px V•Ltónel Wbkst4%+Lvox k/ Nípvok íAP À€Óvyopxí@•p°€0 /

#### SOCL B287 Urbanism as a Way of Life

How do cities affect our understanding of ourselves as individuals and our perception of the larger group? This course examines the urban experience, which extends far beyond the boundaries of the city itself. An introduction to urban sociology, the course will also make use of history, anthropology, literature and art.

Division I: Social Science CROSS-LISTED AS CITY-B287 1.0 units Staff Not offered in 2011-12.

#### **SOCL B302 Social Theory**

Analysis of classical and modern theorists selected because of their continuing infuence on sociological thought. Among the theoretical conceptions examined are: alienation, bureaucracy, culture, deviance, modern-Vizlatión,6plo Weti, Celig Edn VahÅd €het) bracred, social change, social class, social confict, social psychology of self, and status. Theorists include: Durkheim, Firestone, Gramsci, Marx, Mead, Mills, and Weber. Required of and limited to Bryn Mawr Sociology majors and minors. Division I: Social Science 1.0 units Washington,R.

#### SOCL B303 Junior Conference: Discipline-Based **Intensive Writing**

This course will require students to engage, through reading and writing, a wide range of sociological issues. The emphasis of the course will be to develop a clear,

#### **SOCL B325 Sociology of Culture**

This seminar analyzes the sociological bases and ramifcations of culture—by exploring (1) the role of social forces behind the cultural constructions of television programs, advertisements, journalism, movies, literary works, and politics; and (2) the sociological signif cance of those cultural constructions as normative messages pertaining to race relations, gender relations, class relations, and other spheres of social life.

CROSS-LISTED AS ENGL-B305 1.0 units Washington,R. Not offered in 2011-12.

#### **SOCL B335 Community Based Research**

This course links each student researcher to a community organization to carry out and complete a research project. Students learn the specific needs of the organization and develop the necessary research skills for their particular project. Projects will be available in a variety of local schools and non-profit organizations in Philadelphia and Montgomery County. Students may contact the department in advance for information about the types of participating organizations during a particular semester. Prerequisite: at least one social science course and permission of the instructor.

Counts toward Praxis Program concentration 1.0 units

Karen, D.

#### **SOCL B337 The Genealogical Imagination**

Genealogical research focuses on individuals across generations but requires us to understand individual lives in their social context, as Mills argued in The Sociological Imagination. In this course, we will explore how understanding larger social forces and patterns, such as immigration, urbanization, discrimination, religion, and demographic change, helps us uncover and understand individual lives. Prerequisites: one course in Sociology or permission of the instructor.

Division I: Social Science 1.0 units Simpson,R. Not offered in 2011-12.

# SOCL B338 The New African Diaspora: African and Caribbean Immigrants in the United States

An examination of the socioeconomic experiences of immigrants who arrived in the United States since the landmark legislation of 1965. After exploring issues of development and globalization at "home" leading to migration, the course proceeds with the study of immigration theories. Major attention is given to the emergence of transnational identities and the transformation of communities, particularly in the northeastern United States. Division I: Social Science

CROSS-LISTED AS CITY-B338
Counts toward Africana Studies concentration
1.0 units
Osirim,M.
Not offered in 2011-12.

## SOCL B346 Advanced Topics in Environment and Society

This is a topics course. Topics vary.
Division I: Social Science
CROSS-LISTED AS CITY-B345
Counts toward Environmental Studies minor
1.0 units
Simpson,R.
Not offered in 2011-12.

#### **SOCL B350 Movements for Social Justice**

Throughout human history, powerless groups of people have organized social movements to improve their lives and their societies. Powerful groups and institutions have resisted these efforts in order to maintain their own privilege. Some periods of history have been more likely than others to spawn protest movements. What factors seem most likely to lead to social movements? What determines their success/failure? We will examine 20th-century social movements in the United States to answer these questions. Includes a flm series. Prerequisite: At least one prior social science course or permis-

#### **SOCL B360 Topics in Urban Culture and Society**

This is a topics course. Course content varies. Current topic description: Over two millennia, Barcelona has been capital, subordinate, battleground and arena of visionaries. A center for Catalan culture, a partneradversary in Spain, an edge to Europe and a node for global ties of trade, image and immigration, Barcelona embodies many questions of the modern global city. Through architecture, urbanism, literature, art, ecology and social history, we will explore multiple voices and visions through which Barcelonins and critics re-imagine the city itself.

This is a topics course. Course content varies. Division I: Social Science CROSS-LISTED AS CITY-B360 CROSS-LISTED AS ANTH-B359 **CROSS-LISTED AS HART-B359** Counts toward Environmental Studies minor 1.0 units

McDonogh, G.

#### SOCL B375 Women, Work and Family

As the number of women participating in the paid workforce who are also mothers exceeds 50 percent, it becomes increasingly important to study the issues raised by these dual roles. This seminar will examine the experiences of working and nonworking mothers in the United States, the roles of fathers, the impact of working mothers on children, and the policy implications of women, work, and family.

Division I: Social Science **CROSS-LISTED AS POLS-B375** Counts toward Gender and Sexuality Studies concentration 1.0 units Golden,M.

#### SOCL B393 U.S. Welfare Politics: Theory and **Practice**

Major theoretical perspectives concerning the welfare state with a focus on social policy politics, including recent welfare reforms and how in an era of globaliza-

#### **SPANISH**

Students may complete a major or minor in Spanish. Majors may pursue state certification to teach at the secondary level.

#### **Faculty**

Ines Arribas, Senior Lecturer

Dina Brena, Instructor

Bryan Cameron, Instructor

Kaylea Mayer, Lecturer

Maria Christina Quintero, Professor and Interim Chair

Enrique Sacerio-Garí, Professor

H. Rosi Song, Associate Professor (on leave semesters I and II)

The major in Spanish offers a program of study in the language, literature, and culture of Spain, Latin America, and U.S. Latino communities. The program is designed to develop linguistic competence and critical skills, as well as a profound appreciation of the culture and civilization of the Hispanic world.

The language courses provide solid preparation and practice in spoken and written Spanish, including a thorough review of grammar and vocabulary, supplemented with cultural readings and activities. SPAN 200 and SPAN 202 prepare students for advanced work in literature and cultural studies while improving competence in the language. The introductory literature courses treat a selection of the outstanding works of Spanish and Spanish-American, and U.S. Latino literature in various periods and genres. Three-hundred-level courses deal intensively with individual authors, topics, or periods of special significance.

Students in all courses are encouraged to make use of the Language Learning Center and to supplement their coursework with study in Spain or Spanish America either in the summer or during their junior year. All students who have taken Spanish at other institutions and plan to enroll in Spanish courses at Bryn Mawr must take a placement examination. The exam is offered online by the department. Details are available from the Dean's Offce.

All students who have taken Spanish at other institutions and plan to enroll in Spanish courses at Bryn Mawr must take a placement examination. The exam is offered online by the department. Details are available from the Dean's Offce.

The Department of Spanish also cooperates with the Departments of French and Italian in the Romance Languages major. It also collaborates with the Latin

American, Latino, and Iberian Peoples and Cultures Concentration (LALIPC).

#### **College Foreign Language Requirement**

Before the start of the senior year, each student must complete, with a grade of 2.0 or higher, two units of foreign language. Students may fulfll the requirement by completing two sequential semester-long courses in one language, either at the elementary level or, depending on the result of their language placement test, at the intermediate level. A student who is prepared for advanced work may complete the requirement instead with two advanced free-standing semester-long courses in the foreign language(s) in which she is proficient.

#### **Major Requirements**

Requirements for the Spanish major are SPAN 200 (formerly 110, Temas culturales), SPAN 202 (formerly 120, Análisis literario), four 200-level courses, three 300-level courses, and SPAN 398 (Senior Seminar). Two courses must be in Peninsular literature, and one should focus on pre-1700 literature. Students whose training includes advanced work may, with the permission of the department, be exempted from taking SPAN 200 and/or SPAN 202. SPAN 399 (Senior Essay) is optional for majors with a grade point average of 3.7 who want to graduate with honors, and may not be counted as one of the 300-level requirements. This major program prepares students appropriately for graduate study in Spanish.

Please note: the department offers some courses taught in English. In order to receive major and minor credit, students must do substantial reading and written work in Spanish. No more than two courses taught in English may be applied toward a major, and only one toward a minor.

Independent research (SPAN 403) is offered to students recommended by the department. The work consists of independent reading, conferences, and a long paper.

#### **Honors**

Departmental honors are awarded on the basis of a minimum grade point average of 3.7 in the major, the recommendation of the department and a senior essay (SPAN 399).

#### **Minor Requirements**

Requirements for a minor in Spanish are six courses in Spanish beyond Intermediate Spanish, at least one of which must be at the 300 level. At least one course should be in Peninsular literature.

# Concentration in Latin American, Latino, and Iberian Peoples and Cultures

The Department of Spanish participates with other departments in offering a concentration in Latin American, Latino, and Iberian Peoples and Cultures.

#### **Teacher Certification**

The department also participates in a teacher-certification program. For more information see the description of the Education Program.

#### SPAN B001 Elementary Spanish I

Grammar, composition, conversation, listening comprehension; readings from Spain, Spanish America and the Hispanic community in the United States. Assumes no previous study of Spanish. Additional practice sessions with a language assistant.

Language Level 1

1.0 units

Staff, Mayer,K.

#### SPAN B002 Elementary Spanish II

Grammar, composition, conversation, listening comprehension; readings from Spain, Spanish America and the Hispanic community in the United States. Additional practice sessions with a language assistant. Prerequisite 001 or placement.

M
Language Level 1

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1.0 units 5

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Don Juan Manuel, Matute, Marèa de Zayas, and a number of contemporary writers such as Julián Marèas and Soledad Puértolas. Our approach will include formal and thematic considerations, and attention will be given to social and historical contexts.

Division III: Humanities Critical Interpretation (CI) 1.0 units Quintero,M.

## SPAN B248 Reception of Classical Literature in the Hispanic World

A survey of the reception of Classical literature in the Spanish-speaking world. We read select literary works in translation, ranging from Renaissance Spain to contemporary Latin America, side-by-side with their classical models, to examine what is culturally unique about their choice of authors, themes, and adaptation of the material.

Division III: Humanities

CROSS-LISTED AS CSTS-B248 CROSS-LISTED AS COML-B248

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration

1.0 units Staff

Not offered in 2011-12.

#### SPAN B260 Ariel/Calibán y el discurso Americano

A study of the transformations of Ariel/Calibán as images of Latin American culture. Counts toward the Latin American, Latino and Iberian Peoples and Cultures Concentration.

Division III: Humanities
Inquiry into the Past (IP)
Critical Interpretation (CI)
CROSS-LISTED AS COML-B260
Counts toward Latin American, Latino and Iberian
Peoples and Cultures concentration
1.0 units
Sacerio-Garí,E.
Not offered in 2011-12.

# SPAN B265 Escritoras españolas: entre tradición, renovación y migración

Fiction by women writers from Spain in the 20th and 21st century. Breaking the traditional female stereotypes during and after Franco's dictatorship, the authors explore through their creative writing changing sociopolitical and cultural issues including regional identities and immigration. Topics of discussion include gender marginality, feminist studies and the portrayal of women in contemporary society. Division III: Humanities Critical Interpretation (CI)

Counts toward Gender and Sexuality Studies concentration

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration

1.0 units Sona.H.

Not offered in 2011-12.

#### **SPAN B307 Cervantes**

A study of themes, structure, and style of Cervantes' masterpiece *Don Quijote* and its impact on world literature. In addition to a close reading of the text and a consideration of narrative theory, the course examines the impact of *Don Quijote* on the visual arts, music, flm, and popular culture.

Division III: Humanities

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration

1.0 units

Quintero,M.

Not offered in 2011-12.

### SPAN B309 La mujer en la literatura española del Siglo de Oro

A study of the depiction of women in the fction, drama, and poetry of 16th- and 17th-century Spain. Topics include the construction of gender; the idealization and codification of women's bodies; the politics of feminine enclosure (convent, home, brothel, palace); and the performance of honor. The first half of the course will deal with representations of women by male authors (Calderón, Cervantes, Lope, Quevedo) and the second will be dedicated to women writers such as Teresa de Ávila, Ana Caro, Juana Inés de la Cruz, and María de Zayas. Division III: Humanities

Counts toward Gender and Sexuality Studies concentration

Counts toward Latin American, Latino and Iberian Peoples and Cultures concentration
1.0-\hitsV H tDxV0

Quintero,M.

Pe Å te

progress by focusing on the corporeality of citizenship and migration. Prerequisites: one 200-level Spanish course or permission of the instructor.

Division III: Humanities

1.0 units Staff

Not offered in 2011-12.

# SPAN B311 Crimen y detectives en la narrativa hispánica contemporánea

An analysis of the rise of the hardboiled genre in contemporary Hispanic narrative and its contrast to classic detective fction, as a context for understanding contemporary Spanish and Latin American culture. Discussion of pertinent theoretical implications and the social and political factors that contributed to the genre's evolution and popularity.

Division III: Humanities

CROSS-LISTED AS COML-B312

1.0 units Song,H.

Not offered in-20.11-12.

SPAN B318 Adaptaciones literarias en el cine español

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### **Faculty**

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Gregory W. Dickerson, Ph.D. (Princeton University),

Emeritus of Economics and Harvey Wexler Professor Emeritus

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Fritz Janschka, Akad. Maler (Akademie der Bildenden Künste, Vienna), Professor Emeritus of Fine Art and

### 352 Faculty

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David Cast, Ph.D. (Columbia University), Professor of History of Art on the Eugenia Chase Guild Chair in the Humanities

Janet Ceglowski, Ph.D. (University of California, Berkeley), Professor of Economics on the Harvey Wexler Chair of Economics

Catherine Conybeare, Ph.D. (University of Toronto), Professor of Greek, Latin and Classical Studies and Director of the Graduate Group

Alison Cook-Sather, Ph.D. (University of Pennsylvania), Professor in the Bryn Mawr/Haverford Education Program and Director of Peace, Confict and Social Justice Program

Dan E. Davidson, Ph.D. (Harvard University), Professor of Russian and Director of the Russian Language Institute

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Robert J. Dostal, Ph.D. (Pennsylvania State University), Rufus M. Jones Professor of Philosophy and Acting Chair of East Asian Studies

Michelle Francl, Ph.D. (University of California, Irvine), Professor of Chemistry and Co-Director of Emily Balch Seminars

Karen F. Greif, Ph.D. (California Institute of Technology), Professor of Biology

Helen G. Grundman, Ph.D. (University of California, Berkeley), Professor of Mathematics

E. Jane Hedley, Ph.D. (Bryn Mawr College), K. Laurence Stapleton Professor of English

Carola Hein, Ph.D. (Hochschule für Bildende Künste Hamburg), Professor of Growth and Structure of Cities

Christiane Hertel, Ph.D. (University of Tuebingen), Professor of History of Art

Madhavi Kale, Ph.D. (University of Pennsylvania), Professor of History

David Karen, Ph.D. (Harvard University), Professor of Sociology and Chair of the Faculty

Toba Kerson, DSW (University of Pennsylvania), Professor of Social Work on the Mary Hale Chase Professorship in the Social Sciences

Philip Kilbride, Ph.D. (University of Missouri), Professor of Anthropology

Karl Kirchwey, M.A. (Columbia University), Director and Professor of Creative Writing

Christine Koggel, Ph.D. (Queens College The City University of New YorK), Professor of Philosophy, Harvey Wexler Chair of Philosophy, and Co-Director of the Center for International Studies

Michael Krausz, Ph.D. (University of Toronto), Milton C. Nahm Professor of Philosophy

Deepak Kumar, Ph.D. (University at Buffalo, State University of New Yor), Professor of Computer Science

Steven Z. Levine, Ph.D. (Harvard University), Chair

Clark R. McCauley, Ph.D. (University of Pennsylvania), Professor of Psychology on the Rachel C. Hale Professorship in the Sciences and Director of the Solomon Asch Center for Study of Ethnopolitical Confict

Elizabeth McCormack, Ph.D. (Yale University), Professor of Physics

Gary W. McDonogh, Ph.D. (Johns Hopkins University), Philips acrant Growth Indind Structure of Cities and Coordinator of Latin American, Latino and Iberian Peoples and Culture Program

Gridley McKim-Smith, Ph.D. (Harvard University), Professor of History of Art on the Andrew W. Mellon Foundation Professorship in the Humanities

Paul Melvin, Ph.D. (University of California, Berkeley),

.. . N

Douglas Blank, Ph.D. (Indiana University Bloomington), Chair and Associate Professor of Computer Science

Linda Caruso Haviland, EDD (Temple University), Alice Carter Dickerman Director of the Arts Program and Director and Associate Professor of Dance Pauline Lin, Ph.D. (Harvard University), Assistant Professor of East Asian Studies

Astrid Lindenlauf, Ph.D. (University College London), Assistant Professor of Classical and Near Eastern Archaeology

Pedro J. Marenco, Ph.D. (University of Southern California), Assistant Professor of Geology

Sara Bressi Nath, Ph.D. (University of Pennsylvania), Assistant Professor of Social Work on the Clowes Fund in Science and Public Policy

Hoang Tan Nguyen, Ph.D. (University of California, Berkeley), Assistant Professor of English and Film Studies

Michael B. Schulz, Ph.D. (Stanford University), Assistant Professor of Physics

Michael Sears, Ph.D. (University of Pennsylvania), Assistant Professor of Biology

Asya Sigelman, Ph.D. (Brown University), Assistant Professor of Greek, Latin and Classical Studies

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Jamie K. Taylor, Ph.D. (University of Pennsylvania), Assistant Professor of English on the Helen Taft Manning Fund for British History

Elly Truitt, Ph.D. (Harvard University), Assistant Professor of History

Alicia Wilcox Walker, Ph.D. (Harvard University), Assistant Professor of History of Art

Amanda Weidman, Ph.D. (Columbia University), Assistant Professor of Anthropology

Matthew C. Weinberg, Ph.D. (Princeton University), Assistant Professor of Economics

Nathan Daniel Wright, Ph.D. (Northwestern University), Assistant Professor of Sociology

#### **Other Faculty on Continuing Appointment**

Ines Arribas, Ph.D. (University of Wisconsin-Madison), Senior Lecturer in Spanish

Carol Bower, M.S. (University of Pennsylvania), Senior Lecturer and Head Rowing Coach, Athletics and Physical Education

Jill Breslin, B.A. (The University of Alabama at Birmingham), Instructor and Head Tennis Coach and Club Sport Coordinator, Athletics and Physical Education Andrew Brook, DPHIL (University of Oxford), Ph.D. (University of Alberta), Visiting Professor of Philosophy

Jennefer Callaghan, Ph.D. (Emory University), Director of the Writing Center and Lecturer in English

Bryan Cameron, Ph.D. (University of Pennsylvania), Instructor, Spanish Department

Madeline R. Cantor, M.F.A. (University of Michigan Ann Arbor), Associate Director and Senior Lecturer of Dance

Deborah Ann Charamella, A.B. (Bryn Mawr College), Instructor and Head Basketball Coach, Athletics and Physical Education

Benjamin Cherel, DEA (Université de Grenoble), M.A. (Lycée International Stendha rbor)

Laura Kemper, M.S. (University of Delaware), Lecturer and Assistant Athletic Trainer, Athletics and Physical Education

Alice Lesnick, Ph.D. (University of Pennsylvania), Director and Senior Lecturer in the Bryn Mawr/Haverford Education Program

Marci H. Lippert, M.Ed. (Millersville University), Lecturer and Head Field Hockey Coach, Athletics and Physical Education

Krynn Lukacs, Ph.D. (The University of North Carolina at Chapel Hill), Senior Lecturer in Chemistry on the McPherson Fellowship

Mark Matlin, Ph.D. (University of Maryland), Senior Lecturer and Lab Coordinator of Physics

Kaylea B. Mayer, Ph.D. (Georgetown University), Lecturer in Spanish

Dennis McAuliffe, Ph.D. (New York University), Visiting Associate Professor of Italian

Terry R. McLaughlin, M.S. (Hofstra University), Lecturer and Head Athletic Trainer, Athletics and Physical Education

Amy N. Myers, Ph.D. (Dartmouth College), Lecturer in Mathematics and Math Program Coordinator

Maryellen Nerz-Stormes, Ph.D. (University of Pennsylvania), Senior Lecturer in Chemistry

Paul D. Neuman, Ph.D. (Temple University), Senior Lecturer in Psychology

Giuliana Perco, Ph.D. (Pennsylvania State University), Lecturer in Italian

Camelia Suleiman, Ph.D. (Georgetown University), Visiting Assistant Professor in the Tri-College Arabic Program and Coordinator of the Bi-College Arabic Program

Katie Tarr, M.S. (University of Pennsylvania), Senior Lecturer and Head Lacrosse Coach and Senior Woman's Administrator, Athletics and Physical Education

Daniel P. Torday, M.F.A. (Syracuse University), Visiting Assistant Professor and Director of the Creative Writing Program

Daniela Holt Voith, M.ARCH. (Yale University), Senior Lecturer of Growth and Structure of Cities

Nikki Whitlock, M.S. (West Chester University of Pennsylvania), Lecturer and Head Swimming Coach and Aquatics Manager, Athletics and Physical Education Michelle W Wien, Ph.D. (Harvard University), Lecturer in Biology

Changchun Zhang, M.A. (Villanova University), Instructor of Chinese

Changchun Zhang, M.A. (Xicheng Foreign Languages School), Instructor of Chinese

Jun Zhang, Ph.D. (Yale University), Visiting Assistant Professor of Growth and Structure of Cities

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