# Curriculum for Liberal Education 

A Guide for Students, Advisors \& Faculty

2021-2022

Updated June 1, 2021

## The Curriculum for Liberal Education (CLE) at Virginia Tech STATEMENT OF PURPOSE

## Why We Have It

As a vital component of undergraduate education at Virginia Tech, the Curriculum for Liberal Education (CLE)--required of all undergraduates--empowers our students with a broad base of knowledge and transferable skills. Liberal Education provides students the opportunity for rigorous intellectual encounters with enduring human challenges and important contemporary problems, through wide-ranging exposure to multiple disciplines and ways of knowing.

Through the study of the Sciences, Mathematics, Social Sciences, Histories, Languages and the Arts, the CLE is designed to foster and develop intellectual curiosity and critical thinking; strong analytic, communication, quantitative, and information literacy skills; the capacity for collaboration and creative problem solving; the ability to synthesize and transfer knowledge; intercultural knowledge and understanding; and ethical reasoning and action. The CLE seeks to create the conditions for growing creative and intellectual engagement; civic, personal, and social responsibility; and lifelong learning.

## What Students Will Gain

A liberal education offers 21 st century students the foundations of what they need to live and thrive as citizens in a globally engaged democracy, a knowledge-intensive economy, and a society where new ideas and understandings are essential to progress. The success of today's college students in their communities, workplaces, and across their lifetimes depends upon a complex and transferable set of skills and capacities. In their lives and in their careers, our students must be prepared to grasp complex problems, develop a global perspective on the diversity of human experience and knowledge, respond to changing demands, and articulate innovative responses and solutions. Today's students are very likely to change jobs and even careers several times over the course of their lives; and certainly, their roles and responsibilities in their families and communities will change and evolve over their lifetimes as well.

The breadth of a rigorous liberal education combined with the depth of specialized study in the student's primary academic discipline(s)--and evidenced in a demonstrated capacity to adapt and transfer knowledge, skills, and responsibilities to new settings and questions--is essential to the education of the whole student and sets the stage for a lifetime of learning and growth.
Because the Curriculum for Liberal Education is a "living curriculum," there will be some changes from year to year. Courses added to the CLE offerings are generally available to students immediately after being approved. Some requirements of the CLE are phased
in over a multi-year period. Thus, it is essential that students continue to consult with their advisors. Please visit the CLE homepage at http://www.cle.prov.vt.edu/ for more information about the CLE, and for previous years' guides.

## CLE Areas of Study:

1. Writing and Discourse ....................................................................................................... 6 credit hours required
2. Ideas, Cultural Traditions, and Values ............................................................................. 6 credit hours required
3. Society and Human Behavior ............................................................................................ 6 credit hours required
4. Scientific Reasoning and Discovery ........................................................................... 6 or 8 credit hours required*
5. Quantitative and Symbolic Reasoning ............................................................................ 6 credit hours required
6. Creativity and Aesthetic Experience .......................................................................... 1 or 3 credit hours required*
7. Critical Issues in a Global Context ................................................................................... 3 credit hours required
*Students should consult with their advisors about specific college or departmental requirements in these areas.

## Undergraduate Advising at Virginia Tech

Definition: Advising at Virginia Tech is a collaborative process between student and advisor leading to the exchange of information that encourages the individual student to make responsible academic and career decisions.

Philosophy: Virginia Tech demonstrates a commitment to advising through recognizing and supporting the needs of students and advisors. Each undergraduate student at the University is provided information and assistance, which aids the individual student in making responsible academic and career decisions. Each advisor is provided the necessary tools to respond to student needs and the opportunity to be recognized and rewarded for exemplary advising. Virginia Tech, in support of this philosophy, will provide student-focused advising and assist students in developing skills that lead them to take active responsibility for the advising process.

Statement of University Responsibility - Senior leaders will provide leadership by:

- Reviewing the advising process to assess the impact of the recommendations implemented;
- Providing information for students, advisors, parents, and other constituents that clearly explains responsibilities and expectations related to advising;
- Making information available about advising for all new faculty and appropriate staff;
- Collecting and disseminating information that contributes to effective advising;
- Assisting students in clarification of academic and long term goals;
- Supporting initiatives to enhance the use of technology in advising;
- Providing support for a web-based interactive advising support system for students, advisors, parents, and other constituents; and
- Supporting a Virginia Tech plan that would effectively assess, recognize, and reward advising in the annual professional evaluation.

Statement of Student Responsibility - The student shares responsibility for developing an advising partnership with the advisor.
Over time, the partnership results in increased responsibility for the student. Students are responsible for:

- Communicating goals, needs, wants, and concerns to the advisor in a respectful and sincere manner;
- Keeping abreast of their own academic progress and requirements related to their academic programs;
- Making, keeping, and being prepared for appointments with the advisor;
- Informing the advisor of changes in plans and/or circumstances that might impact academic performance;
- Knowing departmental procedures regarding changing advisors; and
- Bringing any concerns regarding the quality of advising to the attention of the advisor.

Statement of Advisor Responsibility - The advisor shares responsibility for developing an advising partnership with each student. Advisors are responsible for:

- Communicating with students and delivering individualized and accurate information in a professional and sincere manner;
- Being informed and providing accurate information about current academic policies and procedures;
- Keeping appointments and being available for assistance;
- Providing appropriate referrals, contacts, and information;
- Doing appropriate follow-up with students; and
- Seeking out and taking advantage of opportunities for professional development.


## Planning a Program of Study in the Curriculum for Liberal Education (CLE) FAQ....and answers

1. What is the purpose of the Curriculum for Liberal Education (CLE)?

See the Statement of Purpose.
2. What unifies courses in the Curriculum for Liberal Education (CLE)?

The subjects of CLE courses vary by discipline, but they are unified by a focus on distinctive modes of inquiry and discourse, critical thinking, problem solving, and effective communication.
3. Is there any way $I$ can be exempt from meeting these requirements?

No, all students must complete the requirements of the CLE.
4. How many credits are required?

Students must take 36 to 44 credit hours of CLE courses in seven (7) areas of study. There will be some variation in the number of credit hours required in each area, depending on your college or major. Also, a course taken to satisfy another area will simultaneously satisfy the Area 7 requirement if it is listed under Area 7. Area 7 courses may also overlap with requirements in majors, minors or areas of concentration.
5. Are the Curriculum for Liberal Education (CLE) requirements the same in all majors and colleges at Virginia Tech? No, there are differences among the colleges in how the CLE is to be fulfilled. For example, some colleges and departments specify that certain CLE courses must be taken for particular majors. Some colleges also have additional requirements that go beyond the Curriculum for Liberal Education. Some basic information is provided in this Guide, but you should always consult with your advisor about the CLE requirements in your college or department when planning your program of study and before registering for courses.
6. How do I choose among Curriculum for Liberal Education (CLE) courses?

Some of your choices will depend upon your major; for instance, though all students take Freshman Writing in Area 1, many colleges and departments require their students to take specific mathematics courses from those listed in Area 5. Some majors
have several specific CLE requirements; others leave most of the choices up to you. Your academic advisor can help you to identify your options.
7. Where do I go to obtain more information about the Curriculum for Liberal Education (CLE) requirements for my college or department?
Your academic advisor, the undergraduate office of your college, and the Undergraduate Catalog are the best sources of information. You should always consult your advisor when planning your program of study.
8. May I use Advanced Placement credits to meet Curriculum for Liberal Education (CLE) requirements?

Yes, Advanced Placement credits can be used in several areas of the CLE. However, in order to get the full benefit and best quality from your undergraduate education, it is wise to take CLE courses. For example, if you place out of a course you might take a more advanced course in the same area of study. Additional information about Advanced Placement can be found at: www.registrar.vt.edu/registration/tests_for_credit. php.
9. If I am a transfer student, must I complete the Curriculum for Liberal Education (CLE) requirements?

Yes, all students graduating from Virginia Tech must fulfill the CLE requirements. Courses taken at other institutions may be transferred to Virginia Tech and may count for credit if they are equivalent to the courses we offer here. Such decisions are determined by an analysis of your transcript when you enter Virginia Tech. Transfer students will graduate under the University CLE requirements in effect for the class level (Freshman, Sophomore, Junior, Senior) at which they enter Virginia Tech. Transfer students should consult with the Associate Dean for Undergraduate Programs (or Academic Affairs) in their college to make a precise determination of the CLE requirements that they must fulfill. Additional transfer information can be found at: www.registrar.vt.edu/tranguide/
10. While enrolled at Virginia Tech, may I take CLE courses at another college or university and transfer them here? Yes, provided that the courses you take are equivalent to specific CLE courses taught at Virginia Tech. Some colleges require that you obtain authorization from your academic dean before you take courses elsewhere if you intend to transfer those courses to Virginia Tech. Credit, but not grades, can be transferred. Check with your Advisor.

## 11. Should I take only CLE courses in the first year?

No. You will also want to take other courses that are appropriate for freshmen in your major, or foundational courses such as College Success Strategies that may be of help in your success in college.

## 12. How long does it take to complete the CLE requirements?

The CLE is the equivalent of about one full year's academic work, or about $25 \%$ of your degree. However, most students complete most or all CLE requirements over at least a two-year period, usually in the freshman and sophomore years. It is not wise to take all CLE courses together, but to integrate them from the very beginning with your program of study in the major. Although you may want to take some upper-level CLE courses as a junior or senior, you should not wait until your senior year to complete most of your CLE requirements, because this is the time when you most need to concentrate on completing your major.

## 13. I've heard of something called "Satisfactory Progress." How does this relate to the CLE?

There are two checkpoints, according to the University's definition of "Satisfactory Progress," by which students must have successfully completed a certain number of credits within the Curriculum for Liberal Education. (1) by the time you have attempted 36 semester credits, you must have completed 12 credits of CLE requirements. (2) by the time you have attempted 72 semester credits, you must have completed at least 24 credits of CLE requirements. For further information, be sure to see "Student's Responsibility - Satisfactory Progress Toward Degree" in the Undergraduate Catalog. Departments also set criteria for satisfactory progress within their majors; students should check with the department or their advisor.

## 14. Do I need to plan the whole CLE program at once?

No, but you should be thinking about which courses you would like to take from each area. Look over the options for each area to see which courses interest you most - keeping in mind the specific requirements of your major and the fact that not all CLE courses are offered every term. Your advisor can help you.

## 15. Who teaches the CLE courses?

Members of all faculty ranks participate in the development and instruction of CLE classes.

## 16. Can I take Honors Courses to satisfy CLE requirements?

Each semester, sections of some CLE courses are designated as "Honors" sections. Students in the University Honors Program may register for these sections (although they are not required to do so) and may use them to fulfill their CLE requirements. One Honors course, English 1204H, may be taken both by students in the University Honors Program and by other qualified students who are placed in the course prior to summer orientation; students who take this course should be aware that for them, this one course will satisfy the Freshman Writing requirement.
17. May I take my CLE courses pass/fail?

Courses taken on a pass/fail basis may not be used to fulfill CLE requirements unless the course is offered ONLY on a pass/fail basis.
18. What if I don't get a CLE course that I requested?

Try again during the student drop-add periods. If you are unsuccessful in adding the course, you can plan to register for it the next time it is offered, or you can consult with your advisor about an alternative course.
19. What if the second course in a sequence is not offered during the semester in which I want to take it?

You or your advisor can check with the department offering the course to see when it will next be offered and adjust your overall course plans accordingly.
20. May I take additional CLE courses, even if I have completed the requirements?

Yes, your college may require some CLE courses in addition to the ones necessary to satisfy the requirements. You may also choose to take some additional CLE courses as electives. Your advisor can tell you how additional CLE courses would count toward your degree.
21. Does the university have a foreign language requirement?

Yes, the foreign language requirement is described in the Undergraduate Catalog. Requirements vary by college or department. Consult with your advisor.
22. Can some CLE requirements be fulfilled through study-abroad programs?

Yes, the university has a Center for European Studies and Architecture near Lugano, Switzerland, and many other study abroad opportunities. Check with your advisor to determine if your college or department offers study-abroad programs that carry CLE credit.
23. What are "Depth Studies"?

Most colleges require students to complete an approved two-course combination in one or two areas of the CLE. In other areas students are allowed to choose 2 courses from among any of the approved CLE courses. Check with your advisor or an academic dean about specific requirements for your college.

## 24. Can CLE courses count toward more than one area simultaneously?

Generally, no. While there are some courses which do meet requirements in more than one area, they can only count toward one CLE area at a time. The only exception to this rule is that some Area 7 courses may simultaneously fulfill the requirements of another area in addition to Area 7. Courses approved for CLE Areas 2-7 may also fulfill the Writing Intensive requirement if so indicated.

## Area 1: Writing and Discourse

6 credit hours ( 2 courses) selected from first-year writing courses. Students should consult with an advisor.

## Goals for students in Area 1:

1. Understand the use of words as basic tools of thought;
2. Engage in defining, developing, and understanding ideas through the process of writing;
3. Understand modes of verbal discourse that are central to college-level academic work, such as argument, interpretation, analysis, and metaphor;
4. Develop clear and effective prose through attention to style, grammar, and other elements of composition;
5. Engage in planning, inventing, editing, and revising as elements of the writing process;
6. Read texts and write analytical and interpretive prose as a reciprocal means of expanding powers of understanding and imagination; and
7. Participate in verbal discussion of texts and ideas as an essential element of discourse and communication.

Area 1 requirements reflect the centrality of discourse in the larger intellectual community. Our first-year writing courses introduce students to the interrelated and shared modes of verbal communication that are distinctive to college life - argument, interpretation, analysis, and metaphor - and whose various usages substantially delineate what it means to become broadly educated. These beginning courses should be thought of as the springboard for further writing and discourse throughout the undergraduate curriculum, especially in the disciplinary concentration.

In order to enable students to meet the aims of both liberal education and of professional preparation, we include writing in many courses throughout the university, even if it may not be the main intellectual capacity emphasized in the course. Students are encouraged to seek out courses that offer frequent opportunities for writing and related forms of discourse, both for the enhanced learning these courses can offer and for their benefit in terms of professional preparation. Many courses in the Curriculum for Liberal Education build upon the writing and oral skills that are the direct goal of Area 1 by including a significant writing component and by encouraging the achievement of excellence in communicating ideas and knowledge.

Formerly, the CLE required writing-intensive (WI) courses to support the development of students' writing skills across the undergraduate career. To better facilitate and broaden this goal, the requirement evolved into a departmental requirement for Visual, Spoken and Written Expression (ViEWS). Development of these competencies may be fostered through specific courses in the major, courses outside the major, and/or previously designated WI courses.

Students may meet the first-year writing requirement in one of three ways:

1. By successful completion of the two-semester sequence, ENGL 1105-1106 or COMM 1015-1016
2. By successful completion of ENGL 1106 for students who are awarded Advanced Standing (based on standardized test scores and high school class rank) and are placed in ENGL 1106. Advanced Standing students who complete ENGL 1106 at Virginia Tech in the first enrollment with a C- or better receive Advanced Standing credit for ENGL 1105;
3. By successful completion of 1204 H for students who meet University Honors Standards or English Department Honors Standards. Honors students who successfully complete ENGL 1204H at Virginia Tech in the first enrollment with a C- or better receive Advanced Standing credit for ENGL 1105.

In addition, Virginia Tech accepts ETS Advanced Placement credit for the Freshman Writing sequence.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COMM | 1015 | Communication Skills |  |  |  |
| COMM | 1016 | Communication Skills |  | COMM-1015/UG/P |  |
| ENGL | 1105 | First-Year Writing |  |  |  |
| ENGL | 1106 | First-Year Writing |  | ENGL-1105/UG/P |  |
| ENGL | $1204 H$ | Honors Freshman English |  |  | Placement by the English <br> Department required. |

## Area 2: Ideas, Cultural Traditions, and Values

6 credit hours ( 2 courses) selected from approved CLE courses

## Goals for students in Area 2:

1. Examine some of the formative ideas and cultural traditions that have shaped Western experience;
2. Study classic and contemporary texts that have influenced or exemplified currents in Western thought and imagination;
3. Gain an understanding of some aspects of human achievement and experience that have been persistently overlooked in mainstream Western culture, including those of women, minorities, and non-Western peoples;
4. Analyze creative works of various mediums in both the arts and technology from the viewpoints of cultural meanings and influence;
5. Gain acquaintance with historical traditions and with humanistic methods of studying and interpreting them;
6. Consider the contributions of philosophical, ethical, or religious systems to human life;
7. Recognize how the interaction of tradition and innovation nourishes both individuality and community;
8. Gain critical and appreciative perspective upon one's own culture by studying other historical periods and other cultural traditions;
9. Study the life, thought, and creative activity of men and women of achievement in various fields of human endeavor.

Every student should be introduced to some of the ideas, cultural traditions, and values that have shaped the human world we now inhabit. An educated person sees the present in connection with the past, and understands that presently prevailing values and meanings derive from the creative thought and action of men and women who have preceded us. A study of influential texts, ideas, representative works of art and technology, and the development of cultural traditions begins to free the student from the superficial fads of the moment and from narrow provincialisms. By examining some of the enduring ideas about human nature and achievement past and present, the individual gains a greater degree of self-knowledge and is better able to formulate worthwhile aims and commitments.

Courses in this curricular area take the human condition and human values as their main focus, while dealing with a range of subject matters: philosophy, literature and communication, history, religion, the arts, and technology. Most of these courses deal with some aspect of Western cultural experience in its numerous varieties. Relatively neglected dimensions of this experience such as the experience of women and minorities will be acknowledged and dealt with, both as an integral aspect of many existing courses and in separate courses which focus directly upon these dimensions. The foreign language courses approved for Area 2 explore the literatures of other countries in their cultural contexts. Moreover, since we are living in an increasingly global cultural context, courses are included that introduce the student to formative non-Western ideas, arts, and traditions as well.

All of the following courses are approved for the Curriculum for Liberal Education for Area 2. If your college requires "depth studies" in this Area, you may choose one of the course combinations, or courses in a sequence (course number ending with 5 and 6 ; for example ART 2385 and ART 2386). Colleges may also recommend particular combinations of courses. Sequenced courses may be taken individually, unless listed together on one line. Some courses noted in this section can be counted for Area 6 credit; remember that they CANNOT be used to count for BOTH Area 2 and Area 6 for an individual student.

Some of these courses are not offered every term. Check the catalog and timetable for relevant offerings.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ADV | 2134 | Intro to Health Communication | CMST 2134 |  |  |
| AFST | 1714 | Intro African American Studies |  |  |  |
| AFST | 1814 | Intro to African Studies |  |  |  |
| AFST | 2204 | Race \& Gender in Rel \& Cult | RLCL 2204, <br> WGS 2204 |  |  |
| AFST | 2275 | African-American History | HIST 2275 |  |  |
| AFST | 2276 | African-American History | HIST 2276 |  |  |
| AFST | 3864 | Development and Hum in Africa | HIST 3864, |  |  |
| AFST | 2044 | Contmpry African Amer Theatre | ENGL 2044, <br> TA 2044 |  |  |
| AINS | 1104 | Intro American Indian Studies |  |  |  |
| AINS | 2414 | Identity \& Inclusion in Agric | ALCE 2414 | ENGL-1106/UG/P |  |
| AINS | 3174 | Native American History | HIST 3174 |  |  |
| ALCE | 2414 | Identity \& Inclusion in Agric | AINS 2414 | ENGL-1106/UG/P |  |
| ALS | 4204 | Concepts Comm Food Systems |  | ALS-2204/UG/P |  |
| APS | 1704 | Intro to Appalachian Studies | HUM 1704 |  |  |
| APS | 2124 | Music Traditions in Appalachia | MUS 2124 |  |  |
| APS | 2404 | Folk Cultures in Appalachia | HUM 2404 |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| APS | 2434 | Cult Politics Music Appalachia |  |  |  |
| APS | 4414 | Issues in Appalachian Studies | HUM 4414 | HUM-1704/UG/P OR APS-1704/UG/P |  |
| ARBC | 2774 | Arab Culture and Civilization |  |  | Taught in English. |
| ARBC | 3304 | Modern Arabic Lit in Trans |  |  | Taught in English. |
| ARBC | 3474 | Topics in Arab Cinema |  |  | Taught in English. Variable content. <br> May be repeated 2 times with different content for a maximum of 6 credits. |
| ARCH | 2114 | Sustainability by Design | UAP 2114 |  |  |
| ARCH | 3115 | Histories of Architecture |  | ARCH-1015/UG/P |  |
| ARCH | 3116 | Histories of Architecture |  | ARCH-3115/UG/P |  |
| ART | 1104 | Language of Visual Arts |  |  |  |
| ART | 1334 | Visual Arts and Culture |  |  | Does not count towards the art history major. |
| ART | 2385 | Surv Hist West Art |  |  |  |
| ART | 2386 | Surv Hist West Art |  |  |  |
| ART | 3054 | Islamic Art and Architecture |  |  |  |
| ART | 3064 | Arts of China and Japan |  |  |  |
| ART | 3074 | Egyptian Art and Architecture |  |  |  |
| ART | 3084 | Greek Art and Architecture |  | ART-2385/UG/P |  |
| ART | 3094 | Early Mod Global Vis Culture |  |  |  |
| ART | 3174 | Introduction to Archaeology |  |  |  |
| ART | 3184 | Roman Art and Architecture |  |  |  |
| ART | 3284 | Medieval Art and Architecture |  |  |  |
| ART | 3384 | Renaissance Art |  |  |  |
| ART | 3484 | Baroque Art and Arch |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART | 3584 | 19th Century Art |  |  |  |
| ART | 3684 | African-American Art |  |  |  |
| ART | 3884 | American Art to 1914 |  |  |  |
| ART | 4104 | Interpretation of Visual Arts |  | ART-1104/UG/P AND <br> Six credits of social sciences from Pathways Minor in the Visual Arts and Society checksheet | Capstone seminar for the Pathways Minor in the Visual Arts and Society. |
| BIT | 4164 | Future of Security | $\begin{gathered} \text { CS 4164, } \\ \text { PSCI } 4164 \end{gathered}$ | $\begin{gathered} \hline \text { PSCI-2164/UG/P OR } \\ \text { BIT-2164/UG/P OR CS- } \\ 2164 / \mathrm{UG} / \mathrm{P} \\ \hline \end{gathered}$ |  |
| BIT | 4604 | Data Gov, Privacy, Ethics |  | BIT-2405/UG/P OR CMDA-2014/UG/P OR CS-1114/UG/P OR CS1054/UG/P OR CS1064/UG/P |  |
| CHN | 2734 | Chinese Culture and Civ |  |  | Taught in English. |
| CHN | 3474 | Topics in Chinese Cinema |  |  |  |
| CINE | 4144 | Topics in Cinema Studies |  |  | May be repeated 2 times with different content for a maximum of 9 credits. |
| CLA | 1134 | Ancient Mediterranean World | RLCL 1134 |  |  |
| CLA | 2224 | Ancient Greek and Roman Women | HIST 2224 |  |  |
| CLA | 2234 | Classics in the Modern World | HIST 2234 |  |  |
| CLA | 2244 | Cities of Rome | HIST 2244 |  |  |
| CLA | 2434 | Fairytale, Folklore, and Magic |  |  | Taught in English. |
| CLA | 2444 | Greek and Roman Myth | $\begin{gathered} \text { ENGL 2444, } \\ \text { RLCL } 2444 \end{gathered}$ |  | Taught in English. |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CLA | 2454 | Classical Lit in Tran | ENGL 2454 |  | May be repeated for credit with different content. Taught in English. |
| CLA | 2464 | Myth, Philosophy, Video Games |  |  |  |
| CMST | 2064 | The Rhetorical Tradition |  |  |  |
| CRIM | 2504 | Crime \& Punishment Amer Hist | HIST 2504 |  |  |
| CS | 4164 | Future of Security | BIT 4164, PSCI 4164 | $\begin{gathered} \hline \text { PSCI-2164/UG/P OR } \\ \text { BIT-2164/UG/P OR CS- } \\ \text { 2164/UG/P } \\ \hline \end{gathered}$ |  |
| DANC | 2004 | Anatomy for Performers |  |  |  |
| DANC | 2014 | Introduction to Dance History |  |  |  |
| DANC | 2024 | Intro to Dance Techniques |  |  | May be repeated once with different content for a maximum of 6 credits. |
| DANC | 2104 | Moving Body, Moving Mind | HNFE 2104 |  |  |
| DANC | 3024 | Int/Adv Dance Techniques |  | DANC-2024/UG/P | May be repeated 3 times with different content for a maximum of 9 credits. |
| ECON | 2894 | Intro Philosophy Politics Econ | $\begin{aligned} & \text { PHIL 2894, } \\ & \text { PSCI } 2894 \end{aligned}$ |  |  |
| ECON | 4884 | Adv Philosophy Politics Econ | PHIL 4884, PSCI 4884 | $\begin{gathered} \text { PHIL-2894/UG/P OR } \\ \text { PSCI-2894/UG/P OR } \\ \text { ECON-2894/UG/P AND } \\ \text { Senior standing } \\ \hline \end{gathered}$ |  |
| ENGL | 1604 | Introduction to Poetry |  |  |  |
| ENGL | 1614 | Introduction to Short Fiction |  |  |  |
| ENGL | 1624 | Intro to Detective Fiction |  |  |  |
| ENGL | 1634 | Introduction to Shakespeare |  |  |  |
| ENGL | 1644 | Intro to World Literature |  |  |  |

\(\left.\begin{array}{|c|c|c|c|c|c|}\hline SUBJECT \& COURSE \& COURSE TITLE \& CROSSLIST \& PREREQUISITES \& OTHER INFO <br>
\hline ENGL \& 1654 \& Intro to Science Fiction \& \& \& <br>
\hline ENGL \& 1664 \& Intro to Women's Literature \& \& \& <br>
\hline ENGL \& 1704 \& The Harry Potter Phenomenon \& \& \& <br>
\hline ENGL \& 2044 \& Contmpry African Amer Theatre \& AFST 2044, <br>

TA 2044\end{array}\right]\)| Taught in English. |
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| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FR | 2714 | French Culture \& Civ |  |  | Taught in English. |
| FR | 3205 | French Culture \& Civ |  | FR-3105/UG/P AND FR3106/UG/P |  |
| FR | 3206 | French Culture \& Civ |  | FR-3105/UG/P AND FR3106/UG/P |  |
| FR | 3305 | Survey of French Literature |  | FR-3304/UG/P AND FR3105/UG/P AND FR3106/UG/P |  |
| FR | 3306 | Survey of French Literature |  | FR-3304/UG/P AND FR3105/UG/P AND FR3106/UG/P |  |
| FR | 3314 | Intro to Francophone Studies |  | FR-3304/UG/P |  |
| FR | 3424 | Medieval-Renaissance Culture |  | FR-3304/UG/P | Taught in French. |
| FR | 3434 | Baroque-Revolution Culture |  | FR-3304/UG/P | Taught in French. |
| FR | 3444 | Romantic-Belle Epoqué Culture |  | FR-3304/UG/P | Taught in French. |
| FR | 3454 | WWI-Contemporary Culture |  | FR-3304/UG/P | Taught in French. |
| FREC | 2554 | Leading Global Sustainability | LAR 2554, NR 2554 |  |  |
| FREC | 3524 | Environmental Interpretation |  | Junior standing. |  |
| GER | 2724 | German Culture \& Civ |  |  | Taught in English. |
| GER | 3305 | Topics in Germ Cult and Lit |  | (GER-3105/UG/P AND GER-3106/UG/P) OR (GER-3105/UG/P AND GER-3204/UG/P) OR (GER-3105/UG/P AND GER-3306/UG/P) OR (GER-3106/UG/P AND GER-3204/UG/P) OR (GER-3106/UG/P AND GER-3306/UG/P) | Taught in German. May be repeated once for credit with different content for a maximum of 6 credits. |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GER | 3306 | Topics in Germ Cult and Lit |  | GER-3105/UG/P OR GER-3106/UG/P | Taught in German. May be repeated once for credit with different content for a maximum of 6 credits. |
| HD | 1134 | Intro to Disabilities Studies |  |  |  |
| HD | 2014 | Integrative Health Practices |  |  |  |
| HIST | 1014 | Topics in Reacting to the Past |  |  | May be repeated one time with different content for a maximum of 6 credits. |
| HIST | 1024 | Ancient History |  |  |  |
| HIST | 1025 | Intro to European History |  |  |  |
| HIST | 1026 | Intro to European History |  |  |  |
| HIST | 1224 | Conquest Culture in Lat Am Emp |  |  |  |
| HIST | 1764 | History of Rock 'n' Roll |  |  |  |
| HIST | 2054 | Engineering Cultures | STS 2054 |  |  |
| HIST | 2104 | Topics in US History |  |  | Course may be repeated twice for a maximum of 9 credits. |
| HIST | 2114 | Topics Crit Issues Euro Hist |  |  | Course may be repeated twice for a maximum of 9 credits. |
| HIST | 2124 | Topics Crit Issues World Hist |  |  | May be repeated two times with different content for a maximum of 9 credit hours. |
| HIST | 2134 | Topics in History on TV |  |  | May be repeated once with different content for a maximum of 6 credit hours. |
| HIST | 2224 | Ancient Greek and Roman Women | CLA 2224 |  |  |
| HIST | 2234 | Classics in the Modern World | CLA 2234 |  |  |
| HIST | 2244 | Cities of Rome | CLA 2244 |  |  |
| HIST | 2264 | America in the 1960s |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HIST | 2275 | African-American History | AFST 2275 |  |  |
| HIST | 2276 | African-American History | AFST 2276 |  |  |
| HIST | 2374 | Gods and Kings in India | RLCL 2374 |  |  |
| HIST | 2384 | Gandhi and Modern India | RLCL 2384 |  |  |
| HIST | 2494 | Cities in History |  |  |  |
| HIST | 2504 | Crime \& Punishment Amer Hist | CRIM 2504 |  |  |
| HIST | 2604 | Intro Data in Social Context | $\begin{gathered} \hline \text { SOC 2604, } \\ \text { STS } 2604 \end{gathered}$ |  |  |
| HIST | 2624 | Topics Hist Data Soc Context |  |  | May be repeated once for up to 6 hours of credit. |
| HIST | 3054 | The American Civil War |  |  |  |
| HIST | 3114 | History of Capitalism |  |  |  |
| HIST | 3144 | American Environmental History |  |  |  |
| HIST | 3164 | Sexuality in American History |  |  |  |
| HIST | 3174 | Native American History | AINS 3174 |  |  |
| HIST | 3304 | World of Alexander the Great |  |  |  |
| HIST | 3354 | Reform \& Rev Early Mod England |  |  |  |
| HIST | 3374 | French Empire |  |  |  |
| HIST | 3714 | War and Medicine |  |  |  |
| HIST | 3724 | Disease, Med, \& Health |  |  |  |
| HIST | 3864 | Development and Hum in Africa | $\begin{gathered} \hline \text { AFST 3864, } \\ \text { IS } 3864 \\ \hline \end{gathered}$ |  |  |
| HNFE | 2104 | Moving Body, Moving Mind | DANC 2104 |  |  |
| HTM | 3484 | Socio-Cult Impacts of Tourism |  |  |  |
| HUM | 1324 | HUM: Mod World |  |  |  |
| HUM | 1604 | Intro Hum and Arts |  |  |  |
| HUM | 1704 | Intro to Appalachian Studies | APS 1704 |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HUM | 2404 | Folk Cultures in Appalachia | APS 2404 |  |  |
| HUM | 2504 | Intro Amer Studies | RLCL 2504 |  |  |
| HUM | 3034 | Theories of Popular Culture | RLCL 3034 |  |  |
| HUM | 4414 | Issues in Appalachian Studies | APS 4414 | HUM-1704/UG/P OR APS-1704/UG/P |  |
| HUM | 3034H | Theories of Popular Culture | RLCL 3034H |  |  |
| IS | 2484 | Religion and Politics | $\begin{aligned} & \text { PSCI 2484, } \\ & \text { RLCL } 2484 \end{aligned}$ |  |  |
| IS | 3864 | Development and Hum in Africa | AFST 3864, HIST 3864 |  |  |
| ITAL | 3305 | Intro to Ital Lit in Context |  | ITAL-3105/UG/P OR ITAL-3106/UG/P | Taught in Italian. |
| ITAL | 3306 | Intro to Ital Lit in Context |  | ITAL-3105/UG/P OR ITAL-3106/UG/P | Taught in Italian. |
| ITAL | 3474 | Topics in Italian Cinema |  |  | Taught in English. May be repeated, with different content, for a maximum of 6 credit hours. |
| ITDS | 1114 | Design Appreciation |  |  |  |
| JUD | 2134 | Judaism | RLCL 2134 |  |  |
| JUD | 2414 | Hebrew Bible/Old Testament | RLCL 2414 |  |  |
| LAR | 2554 | Leading Global Sustainability | $\begin{gathered} \text { FREC } 2554, \\ \text { NR } 2554 \end{gathered}$ |  |  |
| LAR | 4034 | Evol of the Am Land |  |  |  |
| MGT | 2204 | Global Business of Pop Culture |  |  |  |
| MGT | 4324 | Bus and Prof Ethics | PHIL 4324 |  |  |
| MUS | 1005 | Theory/Fundamentals |  |  |  |
| MUS | 1006 | Theory/Fundamentals |  |  |  |
| MUS | 1104 | Music Appreciation |  |  |  |
| MUS | 2124 | Music Traditions in Appalachia | APS 2124 |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MUS | 2134 | Disability Culture \& the Arts |  |  |  |
| MUS | 3164 | History of Electronic Music |  |  |  |
| MUS | 3814 | Jazz History |  |  |  |
| MUS | 3164H | History of Electronic Music |  |  |  |
| NR | 2554 | Leading Global Sustainability | $\begin{gathered} \text { FREC 2554, } \\ \text { LAR } 2554 \end{gathered}$ |  |  |
| PHIL | 1204 | Knowledge and Reality |  |  |  |
| PHIL | 1304 | Morality and Justice |  |  |  |
| PHIL | 2115 | Ancient/Medieval Philosophy |  |  |  |
| PHIL | 2116 | Ancient/Medieval Philosophy |  |  |  |
| PHIL | 2125 | History of Modern Philosophy |  |  |  |
| PHIL | 2126 | History of Modern Philosophy |  |  |  |
| PHIL | 2304 | Global Ethics |  |  |  |
| PHIL | 2314 | Phil of Sex, Gender, Race |  |  |  |
| PHIL | 2605 | Reason and Revolution |  |  |  |
| PHIL | 2606 | Reason and Revolution |  |  |  |
| PHIL | 2894 | Intro Philosophy Politics Econ | $\begin{gathered} \text { ECON 2894, } \\ \text { PSCI } 2894 \end{gathered}$ |  |  |
| PHIL | 3015 | Political Theory | PSCI 3015 | PSCI-2014/UG/P |  |
| PHIL | 3016 | Political Theory | PSCI 3016 | PSCI-2014/UG/P |  |
| PHIL | 3314 | Ethical Theory |  | 3 Philosophy credits required. |  |
| PHIL | 3334 | Ethics \& Artific Intell |  |  |  |
| PHIL | 3414 | Aesthetics |  |  |  |
| PHIL | 3454 | Philosophy of Religion | RLCL 3454 |  |  |
| PHIL | 4204 | Philosophy of Mind |  | 3 Philosophy credits required. |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHIL | 4214 | Metaphysics |  | 3 Philosophy credits required. |  |
| PHIL | 4224 | Epistemology |  | 3 Philosophy credits required. |  |
| PHIL | 4304 | Political Philosophy |  | 3 Philosophy credits required. |  |
| PHIL | 4324 | Bus and Prof Ethics | MGT 4324 |  |  |
| PHIL | 4334 | Jurisprudence |  | 3 Philosophy credits required. |  |
| PHIL | 4614 | Philosophy of Science |  | One year of science and 3 philosophy credits required. |  |
| PHIL | 4884 | Adv Philosophy Politics Econ | $\begin{aligned} & \text { ECON 4884, } \\ & \text { PSCI } 4884 \end{aligned}$ | ```PHIL-2894/UG/P OR PSCI-2894/UG/P OR ECON-2894/UG/P and senior standing.``` |  |
| PHIL | 1304H | Morality and Justice |  |  |  |
| PSCI | 2484 | Religion and Politics | IS 2484, RLCL 2484 |  |  |
| PSCI | 2894 | Intro Philosophy Politics Econ | ECON 2894, PHIL 2894 |  |  |
| PSCI | 3015 | Political Theory | PHIL 3015 | PSCI-2014/UG/P |  |
| PSCI | 3016 | Political Theory | PHIL 3016 | PSCI-2014/UG/P |  |
| PSCI | 4164 | Future of Security | $\begin{gathered} \text { BIT } 4164, \text { CS } \\ 4164 \end{gathered}$ | PSCI-2164/UG/P OR BIT-2164/UG/P OR CS2164/UG/P |  |
| PSCI | 4884 | Adv Philosophy Politics Econ | ECON 4884, PHIL 4884 | ```PHIL-2894/UG/P OR PSCI-2894/UG/P OR ECON-2894/UG/P and senior standing.``` |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RLCL | 1014 | World Religions |  |  |  |
| RLCL | 1024 | Judaism, Christianity, Islam |  |  |  |
| RLCL | 1034 | Religion and the Modern World |  |  |  |
| RLCL | 1044 | Religious Ethics |  |  |  |
| RLCL | 1134 | Ancient Mediterranean World | CLA 1134 |  |  |
| RLCL | 1214 | The Medieval World |  |  |  |
| RLCL | 1904 | Religion and Culture In Asia |  |  |  |
| RLCL | 2124 | Religion in American Life |  |  |  |
| RLCL | 2134 | Judaism | JUD 2134 |  |  |
| RLCL | 2204 | Race \& Gender in Rel \& Cult | AFST 2204, <br> WGS 2204 |  |  |
| RLCL | 2324 | Islam |  |  |  |
| RLCL | 2374 | Gods and Kings in India | HIST 2374 |  |  |
| RLCL | 2384 | Gandhi and Modern India | HIST 2384 |  |  |
| RLCL | 2414 | Hebrew Bible/Old Testament | JUD 2414 |  |  |
| RLCL | 2424 | New Testament |  |  |  |
| RLCL | 2444 | Greek and Roman Mythology | CLA 2444, |  |  |
| RLCL | 2484 | Religion and Politics | IS 2484, PSCl |  |  |
| RLCL | 2504 | Intro Amer Studies | HUM 2504 |  |  |
| RLCL | 3024 | Religion and Literature | ENGL 3024 |  |  |
| RLCL | 3034 | Theories of Popular Culture | HUM 3034 |  |  |
| RLCL | 3214 | Religion and Culture in India |  |  |  |
| RLCL | 3224 | Religion in China and Japan |  |  |  |
| RLCL | 3414 | Jesus in Earliest Christianity |  |  |  |
| RLCL | 3424 | Christian Orthodoxy and Heresy |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RLCL | 3454 | Philosophy of Religion | PHIL 3454 |  |  |
| RLCL | 1024H | Judaism, Christianity, Islam |  |  |  |
| RLCL | 1034H | Religion and the Modern World |  |  |  |
| RLCL | 1904H | Religion and Culture in Asia |  |  |  |
| RLCL | 3034H | Theories of Popular Culture | HUM 3034H |  |  |
| RUS | 2734 | Intro Rus Culture and Civ |  |  | Taught in English. |
| RUS | 3304 | Survey 19th Century Rus Lit |  | ENGL-1106/UG/P OR ENGL-1204H/UG/P | Taught in English. |
| RUS | 3314 | Survey 20th Century Rus Lit |  | ENGL-1106/UG/P OR ENGL-1204H/UG/P | Taught in English. |
| RUS | 3424 | Topics Rus Lit in Eng | ENGL 3424 | ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P | May be repeated once with different content for a maximum of 6 credits. Readings and lectures in English. |
| RUS | 3434 | The Works of Vladimir Nabokov | ENGL 3434 | ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P | Taught in English. |
| SOC | 2024 | Soc of Race and Ethnicity |  |  | Approved for CLE Area 2 only when taken only in combination with AFST 1714. |
| SOC | 2604 | Intro Data in Social Context | HIST 2604, STS 2604 |  |  |
| SPAN | 2744 | Topics in Spanish Culture |  |  | Taught in English. Course may be repeated, with different topics, for a maximum of 6 credits. |
| SPAN | 2754 | Topics in Spanish Amer Culture |  |  | Taught in English. Course may be repeated, with different topics, for a maximum of 6 credits. |
| SPAN | 2764 | Intro Latino American Studies |  |  | Taught in English. |
| SPAN | 3304 | Intro Hispanic Literature |  | SPAN-3106/UG/P | Taught in Spanish. |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPAN | 3404 | Early Penin Culture \& Lit |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3414 | Modern Penin Culture \& Lit |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3444 | Early Span-Am Culture \& Lit |  | SPAN-3304/UG/P |  |
| SPAN | 3464 | Mod Mexican/Central Am Cult Lt |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3474 | Mod Spanish Caribbean Cult Lit |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3484 | Mod Andean/S Cone Cult Lit |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3514 | Span Medical Professions |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3534 | Spanish Business Professions |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3564 | Community through Service |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPIA | 1024 | Community Service Learning |  |  |  |
| STS | 1504 | Intro Science, Tech, Society |  |  |  |
| STS | 2034 | Intro to Technology and Race |  |  |  |
| STS | 2054 | Engineering Cultures | HIST 2054 |  |  |
| STS | 2154 | The Life Sciences and Society |  |  |  |
| STS | 2254 | Innovation in Context |  |  |  |
| STS | 2354 | Hum, Tech, \& Physical Sciences |  |  |  |
| STS | 2444 | Global Sci \& Tech Policy |  |  |  |
| STS | 2454 | Science Tech \& Environment |  |  |  |
| STS | 2604 | Intro Data in Social Context | $\begin{aligned} & \text { HIST 2604, } \\ & \text { SOC } 2604 \end{aligned}$ |  |  |
| STS | 3104 | Sci \& Tech in Modern Society |  |  |  |
| STS | 3284 | Technology and Disability |  |  |  |
| STS | 3314 | Medical Dilemmas \& Human Exper |  |  |  |
| STS | 4304 | Issues in Sci, Tech, Society |  | Junior standing. | Course repeatable up to 12 hours with different topics. |
| TA | 2014 | Introduction to Theatre |  |  |  |
| TA | 2024 | Introduction to Acting |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TA | 2044 | Contmpry African Amer Theatre | AFST 2044, <br> ENGL 2044 |  |  |
| UAP | 2114 | Sustainability by Design | ARCH 2114 |  |  |
| UAP | 4264 | Environmental Ethics |  | Junior, senior or <br> graduate standing. |  |
| UH | 2554 | Humanities \& Global Citizenship |  |  |  |
| WGS | 1824 | Intro Women's \& Gender Studies |  |  |  |
| WGS | 2204 | Race \& Gender in Rel \& Cult | AFST 2204, <br> RLCL 2204 |  |  |
| WGS | 2224 | Women and Creativity |  | WGS-1824// |  |
| WGS | 2244 | Women and Science |  | WGS-1824// |  |
| WGS | 2254 | Feminist Activism |  | WGS-1824// |  |

## Area 3: Society and Human Behavior

6 credit hours ( 2 courses) selected from approved CLE courses

## Goals for students in Area 3:

1. Examine distinctive quantitative and qualitative modes of inquiry appropriate to the scientific study of societal institutions, patterns of culture, and human behavior;
2. Understand specific patterns and processes that affect the organization of society and the relationship between the individual and society;
3. Investigate institutions, systems, and ideologies in the realms of government, family, community, economy, education, science, religion, and other dimensions of culture;
4. Investigate human psychological and developmental processes through quantitative and qualitative methodologies;
5. Compare alternative theories about human society, culture, and behavior;
6. Examine patterns that involve inclusion and exclusion pertaining to race, class, community, gender and ethnic identity, and other forms of social grouping.

Human beings are not only participants in the world of human culture; we are also observers of it. The cultivation of systematic approaches to the study of humanity is one of the great achievements of the human intellect. Every student should therefore be introduced to the sciences of society and human behavior, a goal that can be accomplished through several avenues: through the study of psychology; through the study of social structures such as government, family, community, or economy; or through more wideranging examination of social patterns and processes. Such studies may examine past as well as present, non-Western as well as Western societies.

Courses in this curricular area are best characterized by their methods of study and theoretical frameworks. They look for regularities in human behavior rather than giving primary attention to the unique or non-repeatable aspects of life. When varied human values and allegiances nevertheless make their appearance within these disciplines, they do so more as objects to be investigated than as commitments to be honored.

All of the following courses are approved for the Curriculum for Liberal Education for Area 3. If your college requires "depth studies" in this Area, you may choose one of the course combinations, or courses in sequence (course number ending with 5 and 6 ; for example, AAEC 1005 and 1006). Colleges may also recommend particular combinations of courses. Sequenced courses may be taken individually, unless listed together on one line.

Some of these courses are not offered every term. Check the catalog and timetable for relevant offerings.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEC | 1005 | Econ Food Fiber Sys |  |  |  |
| AAEC | 1006 | Econ Food Fiber Syst |  |  |  |
| AAEC | 3324 | Environment Sustain Dev Econ |  | AAEC-1005/UG/P OR <br> AAEC-1006/UG/P OR <br> ECON-2005/UG/P |  |
| AFST | 2264 | Race Class Gender Sexualities | SOC 2264, <br> WGS 2264 | WGG-1824/UG/P |  |
| AHRM | 2404 | Consumer Rights |  |  |  |
| ARCH | 2114 | Sustainability by Design | UAP 2114 |  |  |
| ART | 3174 | Introduction to Archaeology |  |  |  |
| ART | 3674 | History of Photography |  |  |  |
| AS | 3215 | AF Management \& Leadership |  | AS-2116/UG/P |  |
| BDS | 2005 | Fundamentals of BDS |  | BDS-2005/UG/P AND <br> ECON-2005/UG/P AND <br> PSYC-1004/UG/P |  |
| BDS | 2006 | Fundamentals of BDS | Choice and Behavior | ECON 3134 | ECON-2005/UG/P |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \hline \text { CS-1114/UG/P OR CS- } \\ \text { 1054/UG/P OR CS- } \\ \text { 1064/UG/P } \\ \hline \end{gathered}$ |  |
| BSE | 4554 | Creating the Ecological City | FREC 4554, HORT 4554, LAR 4554, SPIA 4554 | HORT-2134/UG/P OR FREC-2134/UG/P AND senior standing |  |
| CINE | 4144 | Topics in Cinema Studies |  |  | May be repeated 2 times with different content for a maximum of 9 credits. |
| CMST | 2134 | Intro to Health Communication | ADV 2134 |  |  |
| COMM | 1014 | Introduction to Communication |  |  |  |
| COMM | 2084 | Media and Society |  |  |  |
| CRIM | 2504 | Crime \& Punishment Amer Hist | HIST 2504 |  |  |
| CRIM | 4474 | Cyber Criminology |  | $\begin{aligned} & \text { CRIM-3414/UG/P OR } \\ & \text { SOC-3414/UG/P AND } \\ & \text { Junior standing } \\ & \hline \end{aligned}$ |  |
| CS | 2164 | Foundations Security Environ | $\begin{aligned} & \text { BIT 2164, } \\ & \text { PSCI } 2164 \end{aligned}$ |  |  |
| ECON | 1104 | Economics of Gender |  |  |  |
| ECON | 1204 | Economics of Race |  |  | Does not count toward ECON major. |
| ECON | 1214 | Econ Hist: Diversity\&Inclusion |  |  |  |
| ECON | 2005 | Principles of Economics |  |  |  |
| ECON | 2006 | Principles of Economics |  | ECON-2005/UG/P |  |
| ECON | 2894 | Intro Philosophy Politics Econ | $\begin{aligned} & \text { PHIL 2894, } \\ & \text { PSCI } 2894 \end{aligned}$ |  |  |
| ECON | 3034 | Poverty and Discrimination |  | ECON-2005/UG/P |  |
| ECON | 3134 | Choice and Behavior | BDS 3134 | ECON-2005/UG/P |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ECON | 2025H | Honors Principles of Economics |  |  |  |
| ECON | 2026H | Honors Principles of Economics |  | ECON-2025H/UG/P |  |
| EDCI | 2614 | The Reading Mind |  |  |  |
| EDCI | 2674 | Language, Culture, \& Learning |  |  |  |
| EDCI | 3024 | Issues of Schooling in the US |  |  |  |
| EDCI | 3144 | Educ Excptnl Learners | HD 3144 |  |  |
| EDCO | 2004 | Healthy Relationships |  |  |  |
| EDEP | 2444 | Motivating Yourself and Others |  |  |  |
| ENGE | 4094 | Startup: Commercialization | IDS 4094, MGT 4094 |  |  |
| ENGL | 1504 | Introduction to Linguistics |  |  |  |
| ENGL | 1514 | Language and Society |  |  |  |
| ENGL | 3134 | Gender and Linguistics | WGS 3134 | ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P |  |
| ENGL | 3144 | Language \& Ethnicity in the US | RLCL 3144, SOC 3144 | ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P |  |
| FIN | 4014 | Cyberlaw and Policy |  | Junior standing. |  |
| FIW | 2234 | Fish, Fishing, \& Conservation |  |  |  |
| FIW | 2514 | Fish Wildlife Conserv Policy |  |  |  |
| FIW | 4114 | Biodiversity Conservation |  | FIW-2114/UG/P | Cannot be taken for credit by Wildlife Conservation (WLC) majors. |
| FREC | 2134 | Plants \& Greenspaces Urban Com | HORT 2134 |  |  |
| FREC | 2554 | Leading Global Sustainability | LAR 2554, NR 2554 |  |  |
| FREC | 4174 | Climate Chng \& Intl Policy | $\begin{aligned} & \text { IS 4174, } \\ & \text { PSCI } 4174 \end{aligned}$ | FREC-2124/UG/P OR GEOG-1524/UG/P |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FREC | 4454 | Urban and Community Forestry |  | Junior standing. |  |
| FREC | 4554 | Creating the Ecological City | BSE 4554, <br> HORT 4554, <br> LAR 4554, <br> SPIA 4554 | HORT-2134/UG/P OR <br> FREC-2134/UG/P AND <br> senior standing. |  |
| GEOG | 1004 | Intro Human Geography |  |  |  |
| GEOG | 1014 | World Regions |  |  |  |
| GEOG | 1115 | Seeking Sustainability | NR 1115 |  |  |
| GEOG | 1116 | Seeking Sustainability | NR 1116 | GEOG-1115/UG/P OR <br> NR-1115/UG/P |  |
| GEOG | 2004 | Water, Environment \& Society | WATR 2004 |  |  |
| GEOG | 2054 | Introduction to World Politics | IS 2054, <br> PSCI 2054 |  |  |
| GEOG | 2064 | Global Econ and World Politics | IS 2064, <br> PSCI 2064 |  |  |
| GEOG | 2244 | Sustainable Urbanization | SPIA 2244 |  |  |
| HD | 1004 | Human Development I |  |  |  |
| HD | 2004 | HD II: Adulthood \& Aging |  | HD-1004/UG/P |  |
| HD | 2014 | Integrative Health Practices |  |  |  |
| HD | 2304 | Family Relationships |  |  |  |
| HD | 3144 | Educ Excptnl Learners | EDCI 3144 |  |  |
| HIST | 1014 | Topics in Reacting to the Past |  |  |  |
| HIST | 1115 | History of the United States |  |  |  |
| HIST | 1116 | History of the United States |  |  |  |
| HIST | 1215 | Intro to World History |  |  |  |
| HIST | 1216 | Intro to World History |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HIST | 1224 | Conquest Culture in Lat Am Emp |  |  |  |
| HIST | 1354 | Conflict Security in East Asia |  |  |  |
| HIST | 1515 | History of Africa |  |  |  |
| HIST | 1516 | History of Africa |  |  |  |
| HIST | 1764 | History of Rock 'n' Roll |  |  |  |
| HIST | 2104 | Topics in US History |  |  | Course may be repeated twice for a maximum of 9 credits. |
| HIST | 2264 | America in the 1960s |  |  |  |
| HIST | 2374 | Gods and Kings in India | RLCL 2374 |  |  |
| HIST | 2484 | Modern Germany |  |  |  |
| HIST | 2494 | Cities in History |  |  |  |
| HIST | 2504 | Crime \& Punishment Amer Hist | CRIM 2504 |  |  |
| HIST | 2514 | U.S. Food History |  |  |  |
| HIST | 2534 | America at War |  |  |  |
| HIST | 2624 | Topics Hist Data Soc Context |  |  | May be repeated once for up to 6 hours of credit. |
| HIST | 2715 | History of Technology | STS 2715 |  |  |
| HIST | 2716 | History of Technology | STS 2716 |  |  |
| HIST | 3114 | History of Capitalism |  |  |  |
| HIST | 3144 | American Environmental History |  |  |  |
| HIST | 3164 | Sexuality in American History |  |  |  |
| HIST | 3304 | World of Alexander the Great |  |  |  |
| HIST | 3354 | Reform \& Rev Early Mod England |  |  |  |
| HIST | 3374 | French Empire |  |  |  |
| HIST | 3544 | World War II |  |  |  |
| HIST | 3554 | Age of Globalization |  |  |  |
| HIST | 3564 | The Cold War |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HIST | 3705 | History of Science | STS 3705 |  |  |
| HIST | 3706 | History of Science | STS 3706 |  |  |
| HIST | 3724 | Disease, Med, \& Health |  |  |  |
| HNFE | 2314 | Active Transp for Health | SPIA 2314 |  |  |
| HNFE | 2664 | Behav Theory in Hlth Promotion |  |  |  |
| HORT | 2134 | Plants \& Greenspaces Urban Com | FREC 2134 |  |  |
| HORT | 4554 | Creating the Ecological City | BSE 4554, FREC 4554, LAR 4554, SPIA 4554 | HORT-2134/UG/P OR FREC-2134/UG/P AND senior standing |  |
| HTM | 3484 | Socio-Cult Impacts of Tourism |  |  |  |
| IDS | 4094 | Startup: Commercialization | ENGE 4094, MGT 4094 |  |  |
| IS | 1004 | Nations and Nationalities | PSCI 1004 |  |  |
| IS | 1024 | Comp Gov \& Politics | PSCI 1024 |  |  |
| IS | 2054 | Introduction to World Politics | $\begin{gathered} \hline \text { GEOG 2054, } \\ \text { PSCI } 2054 \\ \hline \end{gathered}$ |  |  |
| IS | 2064 | Global Econ and World Politics | $\begin{gathered} \text { GEOG 2064, } \\ \text { PSCI } 2064 \\ \hline \end{gathered}$ |  |  |
| IS | 4174 | Climate Chng \& Intl Policy | $\begin{aligned} & \hline \text { FREC 4174, } \\ & \text { PSCI } 4174 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { FREC-2124/UG/P OR } \\ \text { GEOG-1524/UG/P } \\ \hline \end{gathered}$ |  |
| JMC | 2074 | Introduction to Sports Media |  |  |  |
| LAR | 2554 | Leading Global Sustainability | $\begin{aligned} & \text { FREC 2554, } \\ & \text { NR } 2554 \end{aligned}$ |  |  |
| LAR | 4554 | Creating the Ecological City | $\begin{gathered} \hline \text { BSE 4554, } \\ \text { FREC } 4554 \text {, } \\ \text { HORT 4554, } \\ \text { SPIA } 4554 \end{gathered}$ | HORT-2134/UG/P OR FREC-2134/UG/P AND senior standing. |  |

$\left.\begin{array}{|c|c|c|c|c|c|}\hline \text { SUBJECT } & \text { COURSE } & \text { COURSE TITLE } & \text { CROSSLIST } & \text { PREREQUISITES } & \text { OTHER INFO } \\ \hline \text { LDRS } & 1414 & \text { Citizen Leadership } & & & \begin{array}{c}\text { Membership in the Residential } \\ \text { Leadership Community required. }\end{array} \\ \hline \text { LDRS } & 1424 & \text { Citizen Leadership Praxis } & & \text { LDRS-1414/UG/P } & \\ \hline \text { MGT } & 2064 & \text { Foundations Entrepreneurship } & & & \\ \hline \text { MGT } & 2204 & \text { Global Business of Pop Culture } & & & \\ \hline \text { MGT } & 2354 & \text { Leadership: Mgr \& Entrepreneur } & & \text { Sophomore standing. } & \\ \hline \text { MGT } & 3444 & \text { Multi Diversity in Orgs } & & \text { Junior standing. } & \\ \hline \text { MGT } & 4094 & \text { Startup: Commercialization } & \begin{array}{c}\text { ENGE 4094, } \\ \text { IDS 4094 }\end{array} & & \\ \hline \text { MN } & 4005 & \text { Leadership \& Mgt/Ethics } & & \text { Sophomore standing. } & \\ \hline \text { MN } & 4006 & \text { Leadership \& Mgt/Ethics } & & \text { Sophomore standing. } & \\ \hline \text { NR } & 1115 & \text { Seeking Sustainability } & \text { GEOG 1115 } & & \\ \hline \text { NR } & 1116 & \text { Seeking Sustainability } & \text { GEOG 1116 } & \text { NR-1115/UG/P OR } \\ \text { GEOG-1115/UG/P }\end{array}\right]$

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PSCI | 2164 | Foundations Security Environ | $\begin{gathered} \text { BIT 2164, CS } \\ 2164 \end{gathered}$ |  |  |
| PSCI | 2894 | Intro Philosophy Politics Econ | $\begin{gathered} \hline \text { ECON 2894, } \\ \text { PHIL } 2894 \end{gathered}$ |  |  |
| PSCI | 4174 | Climate Chng \& Intl Policy | $\begin{gathered} \text { FREC } 4174, \\ \text { IS } 4174 \end{gathered}$ | FREC-2124/UG/P OR GEOG-1524/UG/P |  |
| PSCI | 29843 | Special Study |  |  |  |
| PSCI | 1024H | Honors Comp Gov \& Politics |  |  |  |
| PSVP | 2044 | Peace and Violence |  |  |  |
| PSYC | 1004 | Introductory Psychology |  |  |  |
| PSYC | 2034 | Developmental Psychology |  | PSYC-1004/UG/P |  |
| PSYC | 2044 | Psychology of Learning |  | PSYC-1004/UG/P |  |
| PSYC | 2054 | Psychology of Personality |  | PSYC-2004/UG/P OR PSYC-1004/UG/P |  |
| PSYC | 2064 | Intro Neuroscience of Behavior |  | PSYC-1004/UG/P |  |
| PSYC | 2084 | Social Psychology |  | PSYC-1004/UG/P |  |
| PSYC | 3014 | Abnormal Psychology |  | PSYC-1004/UG/P |  |
| PSYC | 3024 | Human Behaviors Nat Environ |  | PSYC-1004/UG/P |  |
| PSYC | 4194 | Predicting Social Behavior | BDS 4194 | PSYC-1004/UG/P AND (PSYC-1094/UG/P OR HD-3014/UG/P OR SOC-3204/UG/P) AND (STAT-2004/UG/P OR STAT-3005/UG/P OR STAT-3604/UG/P OR STAT-3615/UG/P OR BIT-2405/UG/P) |  |
| RLCL | 1004 | Intro to Religion \& Culture |  |  |  |
| RLCL | 2054 | Ethnography: Studying Culture | SOC 2054 |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RLCL | 2374 | Gods and Kings in India | HIST 2374 |  |  |
| RLCL | 2514 | Asian American Experience | SOC 2514 |  |  |
| RLCL | 3144 | Language \& Ethnicity in the US | $\begin{aligned} & \text { ENGL 3144, } \\ & \text { SOC } 3144 \end{aligned}$ | ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P |  |
| RLCL | 1004H | Intro to Religion \& Culture |  |  |  |
| SOC | 1004 | Introductory Sociology |  |  |  |
| SOC | 1014 | Intro Social Anthrop |  |  |  |
| SOC | 2004 | Social Problems |  |  |  |
| SOC | 2014 | Soc Intimate Relationships |  |  |  |
| SOC | 2024 | Soc of Race and Ethnicity |  |  | Approved for CLE Area 2 only when taken only in combination with AFST 1714. |
| SOC | 2034 | Diversity Community Engagement |  |  |  |
| SOC | 2054 | Ethnography: Studying Culture | RLCL 2054 |  |  |
| SOC | 2264 | Race Class Gender Sexualities | $\begin{aligned} & \text { AFST 2264, } \\ & \text { WGS } 2264 \end{aligned}$ | WGS-1824/UG/P |  |
| SOC | 2304 | Individual In Society |  |  |  |
| SOC | 2514 | Asian American Experience | RLCL 2514 |  |  |
| SOC | 3004 | Social Inequality |  | SOC-1004// |  |
| SOC | 3144 | Language \& Ethnicity in the US | ENGL 3144, RLCL 3144 | ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P |  |
| SOC | 3314 | Social Movements |  | SOC-1004/UG/P |  |
| SOC | 3404 | Environmental Justice |  |  |  |
| SOC | 3504 | Population Trends and Issues |  | SOC-1004/UG/P |  |
| SPAN | 2774 | Minority Lang \& Span Context |  |  | Taught in English. Does not count toward the Spanish major or minor. |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPAN | 3494 | Intro to Hispanic Linguistics |  | SPAN-3304/UG/P |  |
| SPAN | 3544 | Sounds of Spanish |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPIA | 2024 | Community Systems Thinking |  |  |  |
| SPIA | 2244 | Sustainable Urbanization | GEOG2244 |  |  |
| SPIA | 2314 | Active Transp for Health | HNFE 2314 |  |  |
| SPIA | 2554 | Collaborative Policy \& Plan |  |  |  |
| SPIA | 4554 | Creating the Ecological City | BSE 4554, FREC 4554, HORT 4554, LAR 4554 | HORT-2134/UG/P OR FREC-2134/UG/P and senior standing. |  |
| STL | 2304 | Foundations of STL |  | ENGL-1106/UG/P OR ENGL-1204H/UG/P |  |
| STL | 4324 | Global Aspects of IP |  | Senior standing. |  |
| STS | 2444 | Global Sci \& Tech Policy |  |  |  |
| STS | 2715 | History of Technology | HIST 2715 |  |  |
| STS | 2716 | History of Technology | HIST 2716 |  |  |
| STS | 3314 | Medical Dilemmas \& Human Exper |  |  |  |
| STS | 3334 | Energy and Society |  |  |  |
| STS | 3705 | History of Science | HIST 3705 |  |  |
| STS | 3706 | History of Science | HIST 3706 |  |  |
| STS | 4704 | Gender and Science | WGS 4704 | STS-1504/UG/P OR WGS-2244/UG/P | A 3000 level course in science or engineering may satisfy the prerequisite. |
| UAP | 1024 | Leadership Service Pub Probs |  |  |  |
| UAP | 2014 | Urbanization and Development |  |  |  |
| UAP | 2114 | Sustainability by Design | ARCH 2114 |  |  |
| UAP | 3014 | Urban Policy and Planning |  | UAP-1024/UG/B- |  |
| UH | 2544 | Soc Sci \& Global Citizenship |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| WATR | 2004 | Water, Environment \& Society | GEOG 2004 |  |  |
| WGS | 2264 | Race Class Gender Sexualities | AFST 2264, <br> SOC 2264 | WGS-1824/UG/P |  |
| WGS | 3134 | Gender and Linguistics | ENGL 3134 | ENGL-1106/UG/P OR <br> ENGL-1204H/UG/P OR <br> COMM-1016/UG/P |  |
| WGS | 4704 | Gender and Science | STS 4704 | WGS-2244/UG/P OR <br> STS-1504/UG/P | A 3000 level course in science or <br> engineering may satisfy <br> prerequisite. |

# Area 4: Scientific Reasoning and Discovery 

6 credit hours ( 2 courses) from approved CLE courses Additional 2 lab courses required in some majors

## Goals for students in Area 4:

1. Describe the methods of inquiry that lead to scientific knowledge and be able to distinguish science from pseudoscience;
2. Evaluate the credibility of, use, and misuse of scientific information;
3. Recognize how science is self-correcting through formulation of hypotheses, testing of these hypotheses by carefully designed experiment or by observation, and by appropriate modification of hypotheses;
4. Given a theory or model, make predictions about the results of an experiment or observational study, observe the outcomes, and compare the predictions with the outcomes. Recognize how to reason scientifically, how to make appropriate assumptions, and how to use scientific methods and tools to solve basic problems within natural science;
5. Organize scientific information and data into trends and patterns using spatial, graphical, symbolic, and numerical methods to sort, analyze, and interpret natural phenomena;
6. Communicate effectively the results of a set of scientific experiments or observations;
7. Provide examples of the interdependence between social or ethical issues and developments in science and technology;
8. Give examples of the roles of diverse individuals and approaches in advancing scientific knowledge.

For many students at Virginia Tech, acquiring detailed knowledge of one or more of the natural sciences is essential. But for all students, a liberal education involves the study of what science is, of how it can be conducted, of what it can and cannot tell us about the world. Without scientific study and the experience offered by a laboratory, students perceive only vaguely how and why science functions as a crucial standard for knowledge and inquiry in modern life. The study of a science engages the student in analysis and deduction as well as empirical experimentation - that is, in scientific reasoning and discovery.

The impact of the natural sciences and technology on our globally interdependent world is one of the most important realities we face as we enter the 21 st century. The science courses in the CLE have a special role in educating students about the critical relevance of scientific knowledge to the potentialities and dilemmas of our natural and social environments. All of the following courses are approved for the CLE for Area 4. If your college requires "depth studies" in this Area, you may choose one of the course combinations, or courses in a sequence (course numbers ending with 5 and 6 ; for example, BIOL $1005+1015$ and $1006+1016$ ). Colleges may also recommend particular combinations of courses. Sequenced courses may be taken individually, unless listed together on one line. Lab courses are linked to lecture-discussion courses.

Some of these courses are not offered every term. Check the catalog and timetable for relevant offerings.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ALS | 3404 | Ecological Agriculture |  |  |  |
| BIOL | 1014 | Introduction to Biology |  |  |  |
| BIOL | 1024 | Cancer Causes Treatments Costs |  |  |  |
| BIOL | 1034 | Biology of Sex |  |  |  |
| BIOL | 1054 | Human Biol: Cncpts Curr Issues |  |  |  |
| BIOL | 1064 | Plants and Civilization |  |  |  |
| BIOL | 1105 | Principles of Biology |  |  |  |
| BIOL | 1106 | Principles of Biology |  |  |  |
| BIOL | 1115 | Principles of Biol Lab |  |  |  |
| BIOL | 1116 | Principles of Biol Lab |  |  |  |
| BIOL | 29844 | Special Study |  |  |  |
| BIOL | 1205H | Honors Biology |  |  |  |
| BIOL | 1206H | Honors Biology |  |  |  |
| BMES | 2004 | Concussion Perspectives |  |  |  |
| BMES | 29844 | Special Study |  |  |  |
| CHEM | 1015 | Chemistry in Context |  |  |  |
| CHEM | 1016 | Chemistry in Context |  |  |  |
| CHEM | 1025 | Chemistry in Context Lab |  |  |  |
| CHEM | 1026 | Chemistry in Context Lab |  |  |  |
| CHEM | 1035 | General Chemistry |  |  | Co: MATH 1025 or MATH 1225. |
| CHEM | 1036 | General Chemistry |  | CHEM-1035/UG/P OR CHEM-1055/UG/P OR CHEM-1055H/UG/P | Co: MATH 1025 or MATH 1225. |
| CHEM | 1045 | General Chemistry Laboratory |  |  |  |
| CHEM | 1046 | General Chemistry Laboratory |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM | 3054 | Postconsumer Materials |  |  |  |
| CSES | 2244 | Ag Global Food Sec and Health |  |  |  |
| ENSC | 1015 | Found Environmental Sci |  |  |  |
| ENSC | 1016 | Found Environmental Sci |  |  |  |
| ENT | 2804 | Bees: Biol, Diversity, Sustain |  |  |  |
| FIW | 2234 | Fish, Fishing, \& Conservation |  |  |  |
| FIW | 4114 | Biodiversity Conservation |  | FIW-2114/UG/P | Cannot be taken for credit by <br> Wildlife Conservation (WLC) <br> majors. |
| FREC | 2004 | Forest Ecosystems |  |  |  |
| FREC | 2114 | Ecology of Appalachian Forests |  |  |  |
| FREC | 3734 | Forest Fiber Supply |  | Junior standing. |  |
| FREC | 4444 | Integ Forest Mgt Practicum |  | Senior standing. |  |
| FREC | 4454 | Urban and Community Forestry |  | Junior standing. |  |
| GEOS | 1004 | Introduction to Earth Science |  |  |  |
| GEOS | 1014 | Evolution of Earth-Life System |  |  |  |
| GEOS | 1024 | Earth Resources, Soc, \& Env |  |  |  |
| GEOS | 1034 | Earth's Natural Hazards |  |  |  |
| GEOS | 1054 | Age of Dinosaurs |  |  |  |
| GEOS | 1064 | Climate History |  |  |  |
| GEOS | 1104 | Intro to Earth Sciences Lab |  |  |  |
| GEOS | 1124 | Earth Res, Society \& Env Lab |  |  |  |
| GEOS | 2014 | Mission to the Planets |  |  |  |
| ISC | 1005 | Integrated Sci Reasoning |  |  |  |
| ISC | 1006 | Integrated Sci Reasoning |  |  |  |
| ISC | 1105 | Integrated Science I |  |  |  |
| ISC | 1106 | Integrated Science I |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ISC | 1115 | Integrated Science Lab I |  |  |  |
| ISC | 1116 | Integrated Sceince Lab I |  | ISC-1115/UG/P |  |
| ISC | $1106 H$ | Integrated Science I |  | ISC-1105/UG/P |  |
| LAR | 1254 | Environment \& Natural Systems |  |  |  |
| MSE | 1014 | Mat Science Everyday Life |  |  |  |
| MSE | 29844 | Special Study |  |  |  |
| NEUR | 2464 | Neuroscience and Society |  |  |  |
| PHIL | 1604 | How Science Works |  |  |  |
| PHYS | 1055 | Introduction to Astronomy |  |  |  |
| PHYS | 1056 | Introduction to Astronomy |  |  |  |
| PHYS | 1155 | Astronomy Laboratory |  |  |  |
| PHYS | 1156 | Astronomy Laboratory |  | PHYS-1155// |  |
|  |  |  |  | MATH-1016/UG/P OR |  |
|  |  |  |  |  | MATH-1016H/UG/P OR |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHYS | 2305 | Foundations of Physics |  | (MATH-1205/UG/P OR <br> MATH-1205H/UG/P OR <br> MATH-1225/UG/P) OR <br> (MATH-1206/UG/P OR <br> MATH-1206H/UG/P OR <br> MATH-1226/UG/P) | Co: 2325 or (MATH 1206 or MATH <br> 1206H or MATH 1226) |
| PHYS | 2306 | Foundations of Physics |  | (MATH-1206/UG/P OR <br> MATH-1206H/UG/P OR <br> MATH-1226/UG/P) <br> AND PHYS-2305/UG/P |  |
| PPWS | 2754 | Weeds That Shape Our World |  |  |  |
| UH | 2524 | Nat Sci \& Global Citizenship |  |  |  |

## Area 5: Quantitative and Symbolic Reasoning

6 credit hours ( 2 courses) selected from approved CLE courses

## Goals for students in Area 5:

1. Increase basic competence in quantitative reasoning and problem solving, starting at an appropriate entry level;
2. Understand some fundamental principles of reasoning that are involved in mathematics or logic;
3. Understand quantitative and symbolic reasoning through the study of significant applications of mathematical sciences.

Like writing, mathematics is essential to intellectual inquiry in many areas. It is a basic language of the natural and social sciences and has become a useful tool for research in the humanities. The technological uses of mathematics and related forms of symbolic analysis are of tremendous significance to human society. Furthermore, the history of quantitative and symbolic reasoning as an intellectual discipline is linked with philosophy, the arts, and other aspects of human culture. Thus, a broad education must include these forms of reasoning, both as skills and as central modes of thought. Mathematics, statistics, and certain areas of computer science and philosophy can all contribute to broadening a student's knowledge of quantitative and symbolic reasoning.

A diagnostic formula and testing procedure has been derived to predict readiness for Engineering/Science Calculus at Virginia Tech. A purpose of MATH 1015 is to serve those students who need further preparation. You can obtain information about the math diagnostic test from your advisor.

Many departments throughout the university have specific math sequence requirements. Be sure to check with your advisor about the requirements for your program.

All of the following courses are approved for the Curriculum for Liberal Education for Area 5. If your college requires "depth studies" in this Area, you may choose one of the course combinations, or courses in sequence (course number ending with 5 or 6 ; for example, MATH 1015 and 1016). Colleges may also recommend particular combinations of courses.

Some of these courses are not offered every term. Check the catalog and timetable for relevant offerings.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEC | 2104 | Personal Financial Planning |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACIS | 1004 | Accounting Foundations |  |  |  |
| ALS | 3104 | Animal Breeding and Genetics |  | BIOL-1105/UG/P AND (STAT-2004/UG/P OR STAT-3005/UG/P OR STAT-3615/UG/P) AND (APSC-1454/UG/P OR DASC-2474/UG/P OR DASC-2484/UG/P) |  |
| ART | 3114 | Creative Code |  | ART-1114/UG/P |  |
| BDS | 4194 | Predicting Social Behavior | PSYC 4194 | (PSYC-1094/UG/P OR ECON-3254/UG/P) AND (BIT-2405/UG/P OR STAT-2004/UG/P OR STAT-3604/UG/P OR STAT-3005/UG/P OR STAT-3615/UG/P) |  |
| BIT | 2404 | Multicultural Prob Analytics | MGT 2404 | Sophomore standing |  |
| BIT | 2405 | Bus Stats Analytics \& Model |  | Please consult the catalog as there are many options. |  |
| CEE | 3804 | Computer Applications for CEE |  |  |  |
| CONS | 2304 | Consumer and Family Finances |  |  |  |
| CS | 1014 | Intro Computational Thinking |  |  |  |
| CS | 1044 | Intro Prog in C |  |  |  |
| CS | 1064 | Intro to Programming in Python |  |  |  |
| CS | 2064 | Intermediate Prog in Python |  | CS-1064/UG/P |  |
| CS | 2114 | Softw Des \& Data Structures |  | CS-1114/UG/C |  |
| CS | 3114 | Data Structures and Algorithms |  | CS-2114/UG/C AND CS2505/UG/C AND |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (MATH-2534/UG/P OR MATH-3034/UG/P) |  |
| ECON | 3054 | Introduction to Forecasting |  | STAT-3005/UG/P OR BIT-2405/UG/P |  |
| EDCI | 4244 | Curr \& Instr Middle Math 4-8 |  |  |  |
| FIN | 2114 | Invest \& Financial Literacy |  |  |  |
| FREC | 1004 | Digital Planet | GEOG 1084 |  |  |
| FREC | 3004 | Environmental Informatics |  | (FREC-1044/UG/P OR CMDA-2014/UG/P) and sophomore standing. |  |
| FREC | 3364 | Environmental Silviculture |  | FREC-2324/UG/P |  |
| FREC | 3734 | Forest Fiber Supply |  | Junior standing. |  |
| FREC | 4354 | Forest Soil and Watershed Mgmt |  | CSES-3114/UG/P OR <br> FREC-2004/UG/P OR <br> ENSC-3114/UG/P OR <br> GEOS-3614/UG/P OR <br> CSES-3134/UG/P OR <br> ENSC-3134/UG/P |  |
| GEOG | 1084 | Digital Planet | FREC 1004 |  |  |
| HD | 2104 | Quantitative Community Researc | SOC 2104 |  |  |
| HD | 3024 | Community Analytics |  | Sophomore standing. |  |
| HIST | 2604 | Intro Data in Social Context | SOC 2604, $\text { STS } 2604$ |  |  |
| HTM | 4354 | IT \& Social Media in HTM |  | Sophomore standing. |  |
| ISC | 1105 | Integrated Science I |  |  |  |
| ISC | 1106 | Integrated Science I |  | ISC-1105/UG/P |  |
| ISC | 1106H | Integrated Science I |  | ISC-1105/UG/P |  |
| LAR | 1254 | Environment \& Natural Systems |  |  |  |
| LAR | 3044 | Land Analysis \& Site Planning |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MASC | 1024 | Math Sci, Lib Arts |  |  |  |
| MASC | 1044 | Comp Sci, Lib Arts |  |  |  |
| MATH | 1014 | Precalc with Transcendental |  | Two units of high school algebra and one of plane geometry are required. |  |
| MATH | 1025 | Elementary Calculus |  | Assumes 2 units of high school algebra, 1 unit of geometry, $1 / 2$ unit of trigonometry and precalculus. |  |
| MATH | 1026 | Elementary Calculus |  | MATH-1025/UG/P OR MATH-1225/UG/P and assumes 2 units of high school algebra, 1 unit of geometry, $1 / 2$ unit of trigonometry and precalculus. |  |
| MATH | 1225 | Calculus of a Single Variable |  | Assumes 2 units of high school algebra, 1 unit of geometry, $1 / 2$ unit each of trigonometry and precalculus, and placement by Math Dept. |  |
| MATH | 1226 | Calculus of a Single Variable |  | MATH-1225/UG/C- |  |
| MATH | 1524 | Business Calculus |  | Assumes 2 units of high school algebra and 1 unit of geometry. |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MATH | 1525 | Calc With Matrices |  | Assumes 2 units of high school algebra and 1 unit of plane geometry. |  |
| MATH | 1526 | Calc With Matrices |  | MATH-1525/UG/P OR MATH-1025/UG/P OR MATH-1225/UG/P |  |
| MATH | 1535 | Geometry Mathematics of Design |  | Assumes 2 unites of high school algebra and 1 unit of high school geometry. |  |
| MATH | 1536 | Geometry Mathematics of Design |  | Assumes 2 units of high school algebra and 1 unit of high school geometry. |  |
| MGT | 2404 | Multicultural Prob Analytics | BIT 2404 | Sophomore standing. |  |
| PHIL | 1504 | Language and Logic |  |  |  |
| PHIL | 1604 | How Science Works |  |  |  |
| PHIL | 3505 | Modern Logic \& Dev |  |  |  |
| PHIL | 3506 | Modern Logic \& Dev |  | PHIL-3505/UG/P |  |
| PSYC | 4194 | Predicting Social Behavior | BDS 4194 | PSYC-1004/UG/P AND (PSYC-1094/UG/P OR HD-3014/UG/P OR SOC-3204/UG/P) AND (STAT-2004/UG/P OR STAT-3005/UG/P OR STAT-3604/UG/P OR STAT-3615/UG/P OR BIT-2405/UG/P) |  |
| REAL | 2034 | Real Estate Data Analysis |  | (UAP-2004/UG/P OR REAL-2004/UG/P) AND |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \hline \text { (REAL-2014/UG/P OR } \\ \text { REAL-1014/UG/P) } \\ \hline \end{gathered}$ |  |
| SOC | 2104 | Quantitative Community Researc | HD 2104 |  |  |
| SOC | 2604 | Intro Data in Social Context | HIST 2604, STS 2604 |  |  |
| SPIA | 2005 | Intro to Urban Analytics |  |  |  |
| SPIA | 2006 | Intro to Urban Analytics |  |  |  |
| SPIA | 2104 | Urban Analytics for Decisions |  |  |  |
| SPIA | 4464 | Data \& Art of Policy and Plans |  |  |  |
| STAT | 1014 | Data in Our Lives |  |  |  |
| STAT | 2004 | Introductory Statistics |  | MATH-1014/UG/P OR MATH-1025/UG/P OR MATH-1225/UG/P OR MATH-1524/UG/P OR MATH-1525/UG/P |  |
| STAT | 3005 | Statistical Methods |  | MATH-1205/UG/P OR MATH-1225/UG/P | Co: MATH 1206 or MATH 1226 |
| STAT | 3604 | Statistics for Social Science |  | MATH-1014/UG/P OR MATH-1025/UG/P OR MATH-1225/UG/P OR MATH-1524/UG/P OR MATH-1525/UG/P |  |
| STAT | 3615 | Biological Statistics |  | MATH-1205/UG/P OR MATH-1525/UG/P OR MATH-1225/UG/P OR MATH-1025/UG/P OR MATH-1524/UG/P OR ISC-1105/UG/P |  |
| STS | 2604 | Intro Data in Social Context | HIST 2604, SOC 2604 |  |  |

## Area 6: Creativity and Aesthetic Experience

1 or 3 credit hours from approved CLE courses
(Students should consult with their advisors about specific college or departmental requirements)

## Goals for students in Area 6:

1. Participate in cultural events and activities on campus, in both popular and classical arts;
2. Understand how the artists or designers who produce these events and works have shaped their ideas;
3. Examine intuitive and metaphorical thought processes and their relationship to the human imagination and other intellectual abilities;
4. Explore the interaction of art and society, including the contributions of diverse groups to cultural life, such as women and members of minority groups;
5. Study selected classic works of fine and applied arts;
6. Participate in interpretive discussions, lectures, and demonstrations led by artists, designers, architects, musicians, and/or performers;
7. Explore connections between the arts and other forms of design and creativity.

The arts contribute significantly both to the experience and the interpretation of human life. Creativity and aesthetic response crisscross the boundaries among intellectual ideas, the imagination, and actual design. Moreover, the arts are always intimately linked with the material culture of a society - its modes of production and design - as well as with its values and ideas. Thus, the arts can be studied and experienced in a variety of ways: as "high culture," as a means of tracing the history and ideas of particular societies, and as an active process of creative design and expression in many different physical forms. The metaphorical and intuitive thought processes that are essential to making and experiencing works of art are woven into many other human cultural and creative activities. Thus, the arts have an important role to play in broadening our aesthetic and intellectual sensibilities. Most artistic media include a highly public dimension - concerts, exhibitions, performances, publications, public installations, and the built environment - in which the creative works of artists, designers, and their collaborators are accepted or contested as meaningful elements of the larger social fabric. A guided exposure to the arts can provide a valuable framework for continued appreciation of, and participation in, the arts beyond college.

All of the following courses are approved for the Curriculum for Liberal Education for Area 6. Some courses are listed in both Area 2 and Area 6; remember that they CANNOT be used to count for BOTH Area 2 and Area 6 for an individual student. Majors in the College of Science and most majors in the College of Liberal Arts and Human Sciences must take one $\mathbf{3}$ credit hour course.

Some of these courses are not offered every term. Check the catalog and timetable for relevant offerings.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AFST | 2044 | Contmpry African Amer Theatre | $\begin{gathered} \hline \text { ENGL 2044, } \\ \text { TA } 2044 \end{gathered}$ |  |  |
| AHRM | 1014 | Design and Art for Consumers |  |  |  |
| AHRM | 2014 | Design for Consumers Studio |  | AHRM-1014/UG/P |  |
| ALS | 1004 | Ag , Arts and Society |  |  |  |
| APS | 2124 | Music Traditions in Appalachia | MUS 2124 |  |  |
| ARCH | 1015 | Foundation Design Laboratory |  |  |  |
| ARCH | 4514 | Thesis Inquiry |  | ARCH-4016/UG/P | Co: ARCH 4515 |
| ARCH | 4524 | Thesis Documentation |  | ARCH-4514/UG/P AND ARCH-4515/UG/P | Co: ARCH 4516 |
| ART | 1004 | Studio Art for Non-Majors |  |  | May be repeated with different topics, for a maximum of 12 credit hours. |
| ART | 1104 | Language of Visual Arts |  |  |  |
| ART | 1114 | CT+E Play to Make | $\begin{gathered} \hline \text { CAUS 1114, } \\ \text { IDS } 1114 \end{gathered}$ |  |  |
| ART | 1204 | Principles of 2D Art \& Design |  |  |  |
| ART | 1214 | Principles of 3D Art \& Design |  |  |  |
| ART | 1234 | Topics in Design Non-Majors |  |  | May be repeated for up to a maximum of 12 credit hours with varying or different topics. |
| ART | 1334 | Visual Arts and Culture |  |  | Does not count towards the art history major. |
| ART | 1404 | Principles of Drawing |  |  |  |
| ART | 1504 | Contemporary Art and Practice |  |  |  |
| ART | 1604 | Principles of 4D Art \& Design |  |  |  |
| ART | 2385 | Surv Hist West Art |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART | 2386 | Surv Hist West Art |  |  |  |
| ART | 2514 | Drawing Concepts |  | ART-1404/UG/P |  |
| ART | 2604 | Intro to Creative Tech |  | ART-1604/UG/P |  |
| ART | 3054 | Islamic Art and Architecture |  |  |  |
| ART | 3064 | Arts of China and Japan |  |  |  |
| ART | 3074 | Egyptian Art and Architecture |  |  |  |
| ART | 3084 | Greek Art and Architecture |  | ART-2385/UG/P |  |
| ART | 3094 | Early Mod Global Vis Culture |  |  |  |
| ART | 3184 | Roman Art and Architecture |  |  |  |
| ART | 3284 | Medieval Art and Architecture |  |  |  |
| ART | 3384 | Renaissance Art |  |  |  |
| ART | 3484 | Baroque Art and Arch |  |  |  |
| ART | 3584 | 19th Century Art |  |  |  |
| ART | 3674 | History of Photography |  |  |  |
| ART | 3684 | African-American Art |  |  |  |
| ART | 3884 | American Art to 1914 |  |  |  |
| ART | 4104 | Interpretation of Visual Arts |  | ART-1104/UG/P And <br> Six credits of social sciences from Pathways Minor in the Visual Arts and Society checksheet | Capstone seminar for the Pathways Minor in the Visual Arts and Society. |
| CAUS | 1114 | CT+E Play to Make | ART 1114, IDS 1114 |  |  |
| CINE | 2054 | Introduction to Cinema |  |  |  |
| DANC | 2004 | Anatomy for Performers |  |  |  |
| DANC | 2014 | Introduction to Dance History |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DANC | 2024 | Intro to Dance Techniques |  |  | May be repeated once with <br> different content for a maximum of <br> 6 credits. |
| DANC | 2104 | Moving Body, Moving Mind | HNFE 2104 |  |  |
| DANC | 3024 | Int/Adv Dance Techniques |  | DANC-2024/UG/P | May be repeated 3 times with <br> different content for a maximum of <br> 9 credits. |
| ENGE | 2094 | Create!: Ideation \& Innovation |  |  |  |
| ENGL | 1604 | Introduction to Poetry |  |  |  |
| ENGL | 1614 | Introduction to Short Fiction |  |  |  |
| ENGL | 1634 | Introduction to Shakespeare |  |  |  |
| ENGL | 2044 | Contmpry African Amer Theatre | AFST 2044, |  |  |
| TA 2044 |  |  |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ITDS | 3114 | Sustainable Design \& Biophilia |  |  |  |
| LAR | 1144 | Introduction to LA |  |  |  |
| LAR | 1264 | Understand Represent Landscape |  |  |  |
| MGT | 2064 | Foundations Entrepreneurship |  |  |  |
| MUS | 1104 | Music Appreciation |  |  |  |
| MUS | 1114 | Listening in the Digital Age |  |  |  |
| MUS | 1124 | Living a Musical Life |  |  |  |
| MUS | 2115 | Survey of Western Music |  |  |  |
| MUS | 2116 | Survey of Western Music |  |  |  |
| MUS | 2124 | Music Traditions in Appalachia | APS 2124 |  |  |
| MUS | 2134 | Disability Culture \& the Arts |  |  |  |
| MUS | 3164 | History of Electronic Music |  |  |  |
| MUS | 3314 | Instrumental Ensemble Music |  |  | May be repeated for a combined maximum of 8 hours. Consent and audition required. |
| MUS | 3414 | Choral Ensemble Music |  |  | May be repeated for a combined maximum of 8 hours. Consent and audition required. |
| MUS | 3814 | Jazz History |  |  |  |
| MUS | 3164H | History of Electronic Music |  |  |  |
| RED | 2604 | Residential Design |  |  |  |
| RED | 2654 | Residential Environments |  | AHRM-1014/UG/P AND RED-1624/UG/P |  |
| RED | 4664 | Universal Design |  |  |  |
| TA | 2014 | Introduction to Theatre |  |  |  |
| TA | 2024 | Introduction to Acting |  |  |  |
| TA | 2044 | Contmpry African Amer Theatre | AFST 2044, ENGL 2044 |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TA | 2204 | Creative Dance |  |  |  |
| TA | 2404 | Intro App Collaborative Tech |  |  |  |
| UH | 2534 | Desn/Arts \& Global Citizenship |  |  |  |

## Area 7: Critical Issues in a Global Context

3 credit hours (1 course) selected from approved CLE courses

## Goals for students in Area 7:

Goals 1-4 apply to all courses in Area 7. The remaining goals are addressed to varying degrees, depending on the content of the course.

1. Examine an issue or a group of related issues whose influence on contemporary life extends beyond the boundaries of the United States and significantly involves other societies, cultures, and geographical locations;
2. Develop an informed understanding of the context of the critical issues under study, including relevant historical, technological, cultural, and/or scientific factors;
3. Learn how to interpret and evaluate controversial issues of the day from several distinctive and differing points of view, using appropriate information from varied sources;
4. Relate contemporary events at home and abroad to the subject matter of the course;
5. Gain an informed understanding of the crucial national and international role played by technology with respect to selected critical issues;
6. Examine the root causes and influences of such dynamics as racism, ethnic prejudice, sexism, and other forms of social exclusion;
7. Develop an understanding of the culture, the state of technological and economic development, and the values of a particular society or people outside the United States;
8. Examine the role of ethical thinking and action in relation to issues in such areas as technological development, political policy, the environment, and social and economic patterns.

Global interdependence is a powerful fact of life as we enter the 21 st century. The dilemmas and possibilities humankind faces cannot be effectively addressed by any single culture or group of people acting alone. An awareness of critical issues of the day is thus an essential extension of liberal education and prepares students to respond thoughtfully to the complex world in which they live. As a state institution of higher education, Virginia Tech has a responsibility to prepare students to react creatively and constructively to the social, international, intercultural, and environmental challenges that confront the Commonwealth and the world.

The university requires that undergraduates take at least one course that deals in a substantial way with major issues of critical importance for the larger global society. Courses that satisfy this requirement can be taken in any area of the curriculum, including the major, the Curriculum for Liberal Education, or electives. Students may select from a wide range of courses that focus on major international and intercultural issues in contemporary world affairs, including such areas as politics, the management of conflict, the
roles of economic competition and cooperation, demographic issues, and the emerging world order. Many science courses in Area 7 examine global issues associated with environmental decline and restoration. Some engineering courses study the role of technology as a major force in shaping the cultural and economic conditions of human societies. Other courses include comparative or crossdisciplinary examinations of cultures, societies, and belief systems, including those of developing countries. Other courses examine the social and personal implications of cultural, racial, and gender-based differences. Whatever the topical focus of the course, all Area 7 courses utilize interdisciplinary approaches in which a number of relevant factors - historical, ethical, technological, cultural, and/or scientific - are brought to bear on the issues being studied.

In many cases, students whose curriculum already emphasizes one of these areas should take a Critical Issues course in another topical area, as a means of broadening their exposure to important issues of the day. A course taken to satisfy another area of the CLE that is listed within Area 7 will satisfy the Area 7 requirement simultaneously.

All of the following courses are approved for the Curriculum for Liberal Education for Area 7. Indications are listed with each course if it is also an approved course for another area of the CLE. Area 7 courses may also fulfill requirements in majors, minors, or college curricula.

Some of these courses are not offered every term. Check the catalog and timetable for relevant offerings.

| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEC | 1264 | Peace Economics |  |  |  |
| AAEC | 3204 | Intl Agri Dvlp \& Trad |  | AAEC-1005/UG/P OR <br> ECON-2005/UG/P |  |
| AAEC | 3314 | Environmental Law |  |  |  |
| AFST | 1814 | Intro to African Studies |  |  |  |
| AFST | 2275 | African-American History | HIST 2275 |  |  |
| AFST | 2276 | African-American History | HIST 2276 |  |  |
| AFST | 3864 | Development and Hum in Africa | HIST 3864, <br> IS 3864 |  |  |
| AINS | 3174 | Native American History | HIST 3174 |  |  |
| APS | 4414 | Issues in Appalachian Studies | HUM 4414 | HUM-1704/UG/P OR <br> APS-1704/UG/P |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ARBC | 2774 | Arab Culture and Civilization |  |  | Taught in English. |
| ARBC | 3304 | Modern Arabic Lit in Trans |  |  | Taught in English. |
| ARBC | 3474 | Topics in Arab Cinema |  |  | Taught in English. Variable content. <br> May be repeated 2 times with different content for a maximum of 6 credits. |
| AS | 4215 | Natl Security Forces |  | AS-3216/UG/P |  |
| BIOL | 1064 | Plants and Civilization |  |  |  |
| BIT | 4164 | Future of Security | CS 4164, PSCI 4164 | PSCI-2164/UG/P OR BIT-2164/UG/P OR CS2164/UG/P |  |
| BSE | 4394 | Water \& Sanitation |  |  |  |
| CEE | 3104 | Intro Environ Engr |  | CHEM-1035/UG/CAND CHEM-1045/UG/C- AND (MATH-1026/UG/C- OR MATH-1206/UG/C- OR MATH-1206H/UG/COR MATH-1226/UG/COR MATH-2016/UG/COR MATH-2024/UG/C-) AND (PHYS-2305/UG/C- OR PHYS-2205/UG/C-) |  |
| CEE | 4554 | Natural Disasters |  | Senior standing. |  |
| CHEM | 3054 | Postconsumer Materials |  |  |  |
| COMM | 2094 | Comm \& Issues of Diversity |  | COMM-1016/UG/P OR ENGL-1106/UG/P |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CS | 4164 | Future of Security | $\begin{aligned} & \text { BIT 4164, } \\ & \text { PSCI } 4164 \end{aligned}$ | $\begin{gathered} \hline \text { PSCI-2164/UG/P OR } \\ \text { BIT-2164/UG/P OR CS- } \\ \text { 2164/UG/P } \end{gathered}$ |  |
| CSES | 3444 | World Crops \& Systems | HORT 3444 | Junior standing |  |
| ECON | 4124 | Growth and Development |  | $\begin{gathered} \hline \text { ECON-2006/UG/P AND } \\ \text { (ECON-2025H/UG/P OR } \\ \text { ECON-3104/UG/P) } \\ \hline \end{gathered}$ |  |
| ECON | 4135 | International Economics | AAEC 4135 | ECON-3104/UG/P OR ECON-2025H/UG/P |  |
| ECON | 4136 | International Economics |  | ECON-3204/UG/P OR ECON-4204H/UG/P |  |
| ENGE | 1644 | Global STEM Practice |  |  | Enrollment by application. |
| ENGL | 1644 | Intro to World Literature |  |  |  |
| ENGL | 3534 | Literature and the Environment |  | ```ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P``` |  |
| ENGL | 3644 | The Postcolonial Novel |  | ```ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P``` |  |
| ENGL | 3844 | Writing and Digital Media |  | ```ENGL-1106/UG/P OR ENGL-1204H/UG/P OR COMM-1016/UG/P``` |  |
| ENGR | 1814 | Energy, Resrce \& Envr |  |  |  |
| ENSC | 3604 | Fund Environ Science |  | $\begin{gathered} \hline \text { BIOL-1105// OR CHEM- } \\ \text { 1035// } \end{gathered}$ |  |
| ENT | 2004 | Insects and Human Society |  |  |  |
| FIN | 4144 | Int Fin Mgt |  | FIN-3104/UG/P OR FIN3134/UG/P |  |
| FIW | 2114 | Prin Fish and Wildl |  |  |  |
| FR | 3154 | French for Natural Sciences |  | FR-3106/UG/P |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FREC | 2124 | Forests, Society \& Climate |  |  |  |
| FREC | 2784 | Global Forest Sustainability | SBIO 2784 |  |  |
| FREC | 4174 | Climate Chng \& Intl Policy | $\begin{gathered} \text { IS 4174, } \\ \text { PSCI } 4174 \end{gathered}$ | $\begin{gathered} \hline \text { FREC-2124/UG/P OR } \\ \text { GEOG-1524/UG/P } \end{gathered}$ |  |
| GEOG | 1014 | World Regions |  |  |  |
| GEOG | 1115 | Seeking Sustainability | NR 1115 |  |  |
| GEOG | 1116 | Seeking Sustainability | NR 1116 | $\begin{gathered} \text { GEOG-1115/UG/P OR } \\ \text { NR-1115/UG/P } \end{gathered}$ |  |
| GEOG | 2034 | Geography of Global Conflict | $\begin{aligned} & \hline \text { IS 2034, } \\ & \text { PSCI } 2034 \end{aligned}$ |  |  |
| GEOG | 2054 | Introduction to World Politics | $\begin{gathered} \text { IS 2054, } \\ \text { PSCI } 2054 \end{gathered}$ |  |  |
| GEOG | 2064 | Global Econ and World Politics | $\begin{aligned} & \hline \text { IS 2064, } \\ & \text { PSCI } 2064 \end{aligned}$ |  |  |
| GEOG | 2134 | Geog of the Global Economy | $\begin{gathered} \text { IS 2134, } \\ \text { PSCI } 2134 \end{gathered}$ |  |  |
| GEOG | 2214 | Geography of North America |  |  |  |
| GEOG | 3104 | Environ Prob Pop Dev |  |  |  |
| GEOG | 3254 | Geography of East Asia |  |  |  |
| GEOG | 3274 | Polar Environments |  | Sophomore standing. |  |
| GEOG | 4074 | Medical Geography |  | Junior standing. |  |
| GEOG | 4204 | Geography of Resources |  | Junior standing. |  |
| GEOG | 4214 | Gender Envi Intl Development | UAP 4214, WGS 4214 | Junior standing. |  |
| GEOG | 4764 | Internatl Development | SOC 4764, $\text { UAP } 4764$ | Junior standing. |  |
| GEOS | 1024 | Earth Resources, Soc, \& Env |  |  |  |
| GEOS | 1054 | Age of Dinosaurs |  |  |  |
| GEOS | 1064 | Climate History |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GEOS | 1124 | Earth Res, Society \& Env Lab |  |  |  |
| HD | 2314 | Human Sexuality |  |  |  |
| HIST | 1025 | Intro to European History |  |  |  |
| HIST | 1026 | Intro to European History |  |  |  |
| HIST | 1214 | History of the Modern World |  |  |  |
| HIST | 1215 | Intro to World History |  |  |  |
| HIST | 1216 | Intro to World History |  |  |  |
| HIST | 1354 | Conflict Security in East Asia |  |  |  |
| HIST | 1515 | History of Africa |  |  |  |
| HIST | 1516 | History of Africa |  |  |  |
| HIST | 2054 | Engineering Cultures | STS 2054 |  |  |
| HIST | 2114 | Topics Crit Issues Euro Hist |  |  |  |
| HIST | 2124 | Topics Crit Issues World Hist |  |  | May be repeated two times with different content for a maximum of 9 credit hours. |
| HIST | 2275 | African-American History | AFST 2275 |  |  |
| HIST | 2276 | African-American History | AFST 2276 |  |  |
| HIST | 2384 | Gandhi and Modern India | RLCL 2384 |  |  |
| HIST | 2484 | Modern Germany |  |  |  |
| HIST | 3174 | Native American History | AINS 3174 |  |  |
| HIST | 3394 | Europe Since World War II |  |  |  |
| HIST | 3544 | World War II |  |  |  |
| HIST | 3554 | Age of Globalization |  |  |  |
| HIST | 3564 | The Cold War |  |  |  |
| HIST | 3654 | Arab-Israeli Conflict |  |  |  |
| HIST | 3864 | Development and Hum in Africa | $\begin{gathered} \text { AFST 3864, } \\ \text { IS } 3864 \end{gathered}$ |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HNFE | 2314 | Active Transp for Health | SPIA 2314 |  |  |
| HORT | 2184 | Plants Places Culture Globally |  |  |  |
| HORT | 3444 | World Crops and Systems | CSES 3444 | Junior standing. |  |
| HORT | 4794 | Medicinal Plants and Herbs |  | BIOL-1005/UG/P OR BIOL-1105/UG/P |  |
| HTM | 2454 | Travel \& Tourism Management |  |  |  |
| HUM | 3204 | Multicultural Communication | RLCL 3204 |  |  |
| HUM | 4414 | Issues in Appalachian Studies | APS 4414 | HUM-1704/UG/P OR APS-1704/UG/P |  |
| IS | 1004 | Nations and Nationalities | PSCI 1004 |  |  |
| IS | 1024 | Comp Gov \& Politics | PSCI 1024 |  |  |
| IS | 2034 | Geography of Global Conflict | $\begin{gathered} \hline \text { GEOG 2034, } \\ \text { PSCI } 2034 \\ \hline \end{gathered}$ |  |  |
| IS | 2054 | Introduction to World Politics | $\begin{gathered} \text { GEOG 2054, } \\ \text { PSCI } 2054 \end{gathered}$ |  |  |
| IS | 2064 | Global Econ and World Politics | $\begin{gathered} \text { GEOG 2064, } \\ \text { PSCI } 2064 \end{gathered}$ |  |  |
| IS | 2134 | Geog of the Global Economy | $\begin{gathered} \hline \text { GEOG } 2134, \\ \text { PSCI } 2134 \end{gathered}$ |  |  |
| IS | 2484 | Religion and Politics | PSCI 2484, RLCL 2484 |  |  |
| IS | 3864 | Development and Hum in Africa | AFST 3864, HIST 3864 |  |  |
| IS | 4174 | Climate Chng \& Intl Policy | $\begin{aligned} & \hline \text { FREC } 4174, \\ & \text { PSCI } 4174 \\ & \hline \end{aligned}$ | FREC-2124/UG/P OR GEOG-1524/UG/P |  |
| ISE | 4304 | Global Issues Ind Mgt |  |  |  |
| LDRS | 1414 | Citizen Leadership |  |  |  |
| LDRS | 1424 | Citizen Leadership Praxis |  | LDRS-1414/UG/P |  |
| MGT | 3444 | Multi Diversity in Orgs |  | Junior standing. |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MGT | 4314 | International Management |  | Junior standing. |  |
| MGT | 4334 | Ethical Leadership |  | $\begin{gathered} \hline \text { MGT-2354/UG/P OR } \\ \text { MGT-3304/UG/P OR } \\ \text { MGT-3404/UG/P } \\ \hline \end{gathered}$ |  |
| MINE | 2114 | Energy and Raw Materials |  |  |  |
| MKTG | 4704 | International Marketing |  | MKTG-3104/UG/P OR MKTG-3104H/UG/P and junior standing. |  |
| MN | 2104 | Seapower and Maritime Affairs |  |  |  |
| MN | 4005 | Leadership \& Mgt/Ethics |  | Sophomore standing. |  |
| MN | 4006 | Leadership \& Mgt/Ethics |  | Sophomore standing. |  |
| MUS | 1124 | Living a Musical Life |  |  |  |
| NR | 1115 | Seeking Sustainability | GEOG 1115 |  |  |
| NR | 1116 | Seeking Sustainability | GEOG 1116 | NR-1115/UG/P OR GEOG-1115/UG/P |  |
| PHIL | 2304 | Global Ethics |  |  |  |
| PHIL | 3324 | Biomedical Ethics |  |  |  |
| PHYS | 2074 | Contemporary Physics |  |  |  |
| PPWS | 2004 | Mysterious Mushrooms \& Molds |  |  |  |
| PPWS | 2104 | Plants, Genes, and People |  | $\begin{gathered} \text { BIOL-1005// OR BIOL- } \\ \text { 1105// } \end{gathered}$ |  |
| PSCI | 1004 | Nations and Nationalities | IS 1004 |  |  |
| PSCI | 1014 | US Gov \& Politics |  |  |  |
| PSCI | 1024 | Comp Gov \& Politics | IS 1024 |  |  |
| PSCI | 2034 | Geography of Global Conflict | $\begin{gathered} \text { GEOG } 2034, \\ \text { IS } 2034 \end{gathered}$ |  |  |
| PSCI | 2054 | Introduction to World Politics | $\begin{gathered} \text { GEOG } 2054, \\ \text { IS } 2054 \end{gathered}$ |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PSCI | 2064 | Global Econ and World Politics | $\begin{gathered} \hline \text { GEOG 2064, } \\ \text { IS } 2064 \end{gathered}$ |  |  |
| PSCI | 2134 | Geog of the Global Economy | $\begin{gathered} \hline \text { GEOG } 2134, \\ \text { IS } 2134 \end{gathered}$ |  |  |
| PSCI | 2484 | Religion and Politics | $\begin{gathered} \text { IS 2484, } \\ \text { RLCL } 2484 \end{gathered}$ |  |  |
| PSCI | 3344 | Global Environmental Issues | UAP 3344 |  |  |
| PSCI | 4164 | Future of Security | $\begin{gathered} \text { BIT 4164, CS } \\ 4164 \end{gathered}$ | $\begin{gathered} \text { PSCI-2164/UG/P OR } \\ \text { BIT-2164/UG/P OR CS- } \\ \text { 2164/UG/P } \\ \hline \end{gathered}$ |  |
| PSCI | 4174 | Climate Chng \& Intl Policy | $\begin{gathered} \text { FREC } 4174, \\ \text { IS } 4174 \end{gathered}$ | $\begin{gathered} \hline \text { FREC-2124/UG/P OR } \\ \text { GEOG-1524/UG/P } \\ \hline \end{gathered}$ |  |
| PSCI | 1024H | Honors Comp Gov \& Politics |  |  |  |
| PSVP | 2044 | Peace and Violence |  |  |  |
| PSYC | 3024 | Human Behaviors Nat Environ |  | PSYC-1004/UG/P |  |
| RED | 4604 | Environ \& Sustain Housing |  |  |  |
| RED | 4604H | Environ \& Sustain Housing |  |  |  |
| RLCL | 1004 | Intro to Religion \& Culture |  |  |  |
| RLCL | 1024 | Judaism, Christianity, Islam |  |  |  |
| RLCL | 2384 | Gandhi and Modern India | HIST 2384 |  |  |
| RLCL | 2464 | Religion and Science | STS 2464 |  |  |
| RLCL | 2484 | Religion and Politics | $\begin{gathered} \text { IS 2484, } \\ \text { PSCI } 2484 \end{gathered}$ |  |  |
| RLCL | 3204 | Multicultural Communication | HUM 3204 |  |  |
| RLCL | 1004H | Intro to Religion \& Culture |  |  |  |
| RLCL | 1024H | Judaism, Christianity, Islam |  |  |  |
| SBIO | 2114 | Packaging Law and Regulation |  | SBIO-2104/UG/P |  |
| SBIO | 2784 | Global Forest Sustainability | FREC 2784 |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SOC | 3404 | Environmental Justice |  |  |  |
| SOC | 3504 | Population Trends and Issues |  | SOC-1004/UG/P |  |
| SOC | 4764 | Internatl Development | $\begin{gathered} \text { GEOG 4764, } \\ \text { UAP } 4764 \end{gathered}$ | Junior standing. |  |
| SPAN | 2764 | Intro Latino American Studies |  |  | Taught in English. |
| SPAN | 2774 | Minority Lang \& Span Context |  |  | Taught in English. Does not count toward the Spanish major or minor. |
| SPAN | 3154 | Spanish for Natural Sciences |  | SPAN-3106/UG/P | Taught in Spanish. |
| SPAN | 3514 | Span Medical Professions |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPAN | 3534 | Spanish Business Professions |  | SPAN-3304/UG/P | Taught in Spanish. |
| SPIA | 2024 | Community Systems Thinking |  |  |  |
| SPIA | 2314 | Active Transp for Health | HNFE 2314 |  |  |
| STS | 2034 | Intro to Technology and Race |  |  |  |
| STS | 2054 | Engineering Cultures | HIST 2054 |  |  |
| STS | 2444 | Global Sci \& Tech Policy |  |  |  |
| STS | 2454 | Science Tech \& Environment |  |  |  |
| STS | 2464 | Religion and Science | RLCL 2464 |  |  |
| STS | 3284 | Technology and Disability |  |  |  |
| STS | 3334 | Energy and Society |  |  |  |
| UAP | 3344 | Global Environ Issues | PSCI 3344 | 3 credits of Critical Issues in a Global Context. |  |
| UAP | 4214 | Gender Envi Intl Development | $\begin{gathered} \text { GEOG } 4214, \\ \text { WGS } 4214 \end{gathered}$ | Junior Standing. |  |
| UAP | 4764 | Internatl Development | $\begin{gathered} \text { GEOG } 4764, \\ \text { SOC } 4764 \\ \hline \end{gathered}$ | Junior standing. |  |
| UH | 2504 | Discourse \& Global Citizenship |  |  |  |
| UH | 2524 | Nat Sci \& Global Citizenship |  |  |  |


| SUBJECT | COURSE | COURSE TITLE | CROSSLIST | PREREQUISITES | OTHER INFO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| UH | 2534 | Desn/Arts \& Global Citizenship |  |  |  |
| UH | 2544 | Soc Sci \& Global Citizenship |  |  |  |
| UH | 2554 | Humanities\&Global Citizenship |  |  |  |
| WGS | 3214 | Global Feminisms |  | WGS-2264/UG/P |  |
| WGS | 4214 | Gender Envi Intl Development | GEOG 4214, <br> UAP 4214 | Junior Standing. |  |

## Depth Studies Combinations

If your college requires "depth studies" in a particular area, you may choose one of the course combinations listed below, or courses in a sequence (course numbers ending with 5 and 6; for example, AAEC 1005 and AAEC 1006). Colleges may also recommend particular combinations of courses. It is recommended that you consult with your advisor to determine appropriate course combination for your college.

## Area 2: Ideas, Cultural Traditions, and Values

AFST 1714 and SOC 2024
ART 2385 and 1 of ART 3084, 3184, or 3284
ART 2386 and 1 of ART 3384, 3484, 3584, 3784, or 3884
CLA/ENGL/HUM 2444 and 2454
2 of FR/ENGL 3404, GER/ENGL 3414, RUS/ENGL 3424, or SPAN/ENGL 3434
2 of FR/HUM 2714, GER/HUM 2724, RUS/HUM 2734, SPAN/HUM 2744, or SPAN/HUM 2754
HORT 3524 and LAR 4034
JUD 2134 and JUD/RLCL 2414
RLCL 3214 \& 3224
RLCL 1024 \& One of the following: RLCL 1034, 1044, 2124, or 2464
HUM 1134 \& Either HUM 1214 or HUM 1324
RLCL 1024 \& Either RLCL 2134 or 2414
RLCL 1034 \& RLCL 3024
HUM/SOC 2514 \& RLCL 2124
MUS 1104 and 1 of MUS 3115 or 3116
PHIL 1204 and 1304
PHIL 1204 and 1 of PHIL 3454, 4204, 4214, or 4224
PHIL 1304 and 1 of PHIL 3314, 4304, or 4334

TA 2014 and 2024
WGS 1824 and WGS 2224

## Area 3: Society and Human Behavior

GEOG 1004 and GEOG 1014
PSYC 1004 and SOC 1004
PSYC 1004 and 1 of PSYC 2034, 2044, 2054, 2064, 2084, or 3014
SOC 1004 and 1 of SOC 2004, 2014, 2024, 2304, 3004, or 3304
SOC 1014 and SOC 2504
SOC 2304 and SOC 4304
SOC 3504 and SOC 3604
UAP 1024 and UAP 3014
UAP 2014 and UAP 2024

## Area 4: Scientific Reasoning and Discovery

GEOS 1004 \& Lab GEOS 1104 and 1 of GEOS 1014 or GEOS 1024 \& Lab 1124

## Area 5: Quantitative and Symbolic Reasoning

MASC 1024 and 1 of MASC 1034 or 1044
MASC 1044 and 1 of CS 1024 or 1044
MATH 1016 and MATH 2015
MATH 1014 and MATH 1025
MATH 1015 and MATH 1025
MATH 1016 and MATH 1026
MATH 1025 and MATH 2015
MATH 1014 and MATH 1016
1 of MATH 1016 or 1205 or 1025 or 1225 , and 1 of CS 1024, CS 1044, STAT 2004, STAT 3005, STAT 3604 , STAT 3615
MATH 1526 and 1 of MATH 2524, CS 1024, CS 1044, STAT 2004, STAT 3005, STAT 3604, STAT 3615

PHIL 1504 and CS 1044

## Summary of College Requirements in the Curriculum for Liberal Education

There are some differences among colleges and departments as to how CLE courses are to be used. In this section we identify particular CLE requirements that are unique to a college and/or vary within a college. Use the information to plan your program of CLE courses. It is very important to consult with your advisor because your major department may also require certain CLE courses.

## College of Agriculture and Life Sciences

In addition to the CLE requirements, the College of Agriculture and Life Sciences requires 12 additional semester credits in Area 4, Scientific Reasoning and Discovery. The CLE requirement in Area 3 should be fulfilled by Agricultural Economics or Economics courses, except for Biochemistry majors who may choose from the Area 3 listings.

## College of Architecture and Urban Studies

Students in the College of Architecture and Urban Studies should check with their advisors about CLE requirements in their division of the college.

## Pamplin College of Business

Specified CLE courses for all Pamplin College of Business majors:
Area 3: Society and Human Behavior ECON 2005-2006: Principles of Economics PSYC 1004 or SOC 1004. Students are advised to choose one of these in common with Area 7 courses in the Social Sciences.

Area 5: Quantitative and Symbolic Reasoning MATH 1524: Business Calculus.
There are no college or department designations in the other areas.

## College of Engineering

In order to meet specific accreditation requirements for calculus and natural sciences, the college has specified required sequences in Areas 4 and 5 . Some departments may specify additional CLE courses on their checksheets.

Area 2: Ideas, Cultural Traditions, and Values; and Area 3: Society and Human Behavior Students who enrolled at Virginia Tech prior to First Summer session 1998 are subject to depth and breadth requirements when selecting courses within Area 2 and Area 3. These students are instructed to see their academic advisor to ensure completion of these graduation requirements.

Area 4: Scientific Reasoning and Discovery All engineering students (except Mining) must complete PHYS 2305-2306. Mining Engineering students are encouraged to speak with their academic advisor regarding satisfaction of Area 4 requirements.

Area 5: Quantitative and Symbolic Reasoning All engineering students must complete MATH 1205, 1206 or Math 1225, 1226. The college also specifies other courses in this area of study.

## Liberal Arts and Human Sciences

Most Liberal Arts and Human Sciences students must complete an approved sequence of courses for "depth studies" in Area 4: Scientific Reasoning and Discovery (8 hours) and Area 5: Quantitative and Symbolic Reasoning (6 hours).

In order to meet the foreign language requirement through work taken in high school, students in the majors of Classical Studies, Communication, English, French, German, History, Interdisciplinary Studies, International Studies, Music, Philosophy, Political Science, Sociology, Spanish and Theatre Arts \& Cinema must have passed the third year (Level 3) of one foreign language. Students in the majors of Apparel, Housing, and Resource Management, Education, and Human Development must have completed two years of the same language in high school.

Most Liberal Arts and Human Sciences students are required to take one 3-credit hour class in Area 6 . Keep in mind that a course may not be counted in both Area 2 and Area 6 for an individual student.

For detailed information about the College of Liberal Arts and Human Sciences CLE requirements consult your advisor, your department's undergraduate office or the Associate Dean's office in 238 Wallace Hall.

## College of Natural Resources and Environment

Students in the College of Natural Resources and Environment should refer to the degree-specific check sheets for CLE requirements. CLE requirements vary by option and specific CLE courses often are required for each of the 7 CLE Areas of Study.

## College of Science

Most Science students must complete an approved sequence of courses in Area 4: Scientific Reasoning and Discovery (8 hours) and Area 5: Quantitative and Symbolic Reasoning (6 hours).

In order to meet the foreign language requirement through work taken in high school, Science students must have passed the third year (Level 3) of one foreign language (the University requirement is Level 2).

Science students are required to take one 3-credit hours class in Area 6. Keep in mind that a course may not be counted in both Area 2 and Area 6 for an individual student.

For detailed information about the College of Science CLE requirements, consult the Guide Sheet, available through your advisor or at the Science Administration Building.

## Curriculum for Liberal Education (CLE) Worksheet

1. The following page is a worksheet which is intended to help you with tentative long-range planning.
2. Before completing the worksheet, check your Undergraduate Course Catalog and the checksheet for your major to find out if your major or college predesignates specific courses in any Area(s) of study. (see also "Summary of College Requirements" in this handbook.)
3. Remember, the level of consideration you put into this exercise will have a direct bearing on your academic experience at Virginia Tech. Work with your advisor to identify your goals and preferences as they relate to the Curriculum for Liberal Education. You need to define how your CLE courses will complement the courses in your major.
4. Fill in the blanks with the department abbreviation and course number. Put a check beside each blank when you have successfully completed the course. Also note in Areas 2-5 whether there are additional college requirements

## CLE Course Preferences Worksheet

## Area 1: Writing and Discourse

6 credit hours of Freshman Writing
(3)
(3)

Additional College Requirements:

Area 2: Ideas, Cultural Traditions, and Values
6 credit hours selected from approved CLE courses
Additional College Requirements:
(3) $\qquad$
$\qquad$
(3) $\qquad$

## Area 3: Society and Human Behavior

6 credit hours selected from approved CLE courses
Additional College Requirements:
(3) $\qquad$
$\qquad$
(3) $\qquad$

## Area 4: Scientific Reasoning and Discovery

6 or 8 credit hours selected from approved CLE courses
Additional College Requirements:
(3) $\qquad$
$\qquad$
(1) $\qquad$
$\qquad$
(3) $\qquad$
$\qquad$
(1) $\qquad$
$\qquad$

## Area 5: Quantitative and Symbolic Reasoning

6 credit hours selected from approved CLE courses
Additional College Requirements:
(3) $\qquad$
(3) $\qquad$
$\qquad$

## Area 6: Creativity and Aesthetic Experience

1 or 3 credit hours selected from approved CLE courses
Additional College Requirements:
(Majors in the College of Science and most majors in the College of Liberal Arts and Human Sciences must take one 3-credit course)
(1 or 3) $\qquad$
Area 7: Critical Issues in a Global Context
3 semester credit hours selected from approved CLE courses
Additional College Requirements: (3)

## Foreign Languages:

Check the Undergraduate Course Catalog for university-wide requirements and for requirements specific to the College of Liberal Arts and Human Sciences and the College of Science (see page 23) and consult with your advisor.

For further information:

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