

# Westmont College Academic Catalog 2016-2017



Westmont College  
955 La Paz Road  
Santa Barbara, CA 93108-1089  
805-565-6000  
[www.westmont.edu](http://www.westmont.edu)

# Westmont College Academic Catalog 2016-2017

## Table of Contents

ACADEMIC CALENDAR 2016-2017 .....	2
A BRIEF HISTORY .....	4
PHILOSOPHY OF EDUCATION .....	5
STATEMENT OF FAITH .....	8
ACADEMIC RESOURCES.....	10
ACCREDITATION AND MEMBERSHIPS.....	12
THE EDUCATIONAL PROGRAM .....	14
GENERAL EDUCATION .....	15
ACADEMIC PROGRAM .....	24
CURRICULUM .....	35
OFF-CAMPUS PROGRAMS .....	224
SPECIAL PROGRAMS .....	231
STUDENT LIFE .....	234
APPLYING TO WESTMONT .....	241
CHARGES.....	252
FINANCIAL AID.....	258
PERSONNEL.....	266
INDEX.....	284

This catalog accurately represents the academic programs, policies, and personal expectations of the college as of the date of publication. The College reserves the right to make changes of any nature in academic programs, calendar, and academic policy whenever these are deemed necessary or desirable. Therefore, this publication is not an irrevocable contract between the student and Westmont College.

**Westmont College**  
**955 La Paz Road**  
**Santa Barbara, CA 93108-1089**  
**805-565-6000**  
[www.westmont.edu](http://www.westmont.edu)  
[registrar@westmont.edu](mailto:registrar@westmont.edu)

# Academic Calendar 2016-2017

## FALL 2016

ORIENTATION	AUGUST 25-28
CLASSES BEGIN	AUGUST 29
FALL HOLIDAY	OCTOBER 10-11
THANKSGIVING HOLIDAY	NOVEMBER 23-25
LAST DAY OF CLASSES	DECEMBER 9
STUDY DAY	DECEMBER 12
FINAL EXAMS	DECEMBER 13-16

## SPRING 2017

CLASSES BEGIN	JANUARY 9
MARTIN LUTHER KING HOLIDAY	JANUARY 16
PRESIDENTS' HOLIDAY	FEBRUARY 20-21
SPRING RECESS	MARCH 13 – MARCH 17
EASTER HOLIDAY	APRIL 14-17
LAST DAY OF CLASSES	APRIL 27
STUDY DAY	APRIL 28
FINAL EXAMS	MAY 1-4
BACCALAUREATE	MAY 5
COMMENCEMENT	MAY 6

## MAYTERM 2017

CLASSES BEGIN	MAY 8
MEMORIAL DAY HOLIDAY	MAY 29
LAST DAY OF CLASSES	JUNE 9

# **Rigorous Academics and Love for God**

## **by President Gayle D. Beebe**

**I**n 1937 Ruth Kerr had a burning desire to start a school that combined a deep love for God with rigorous academics. For our entire history, these twin planks for our institution have guided and sustained us.

As I think about the mission and aims of Westmont, three aspects of our philosophy of education come to mind: what happens to us, what happens inside us and what happens because of us.

The five components of our mission statement (liberal arts, Christian, undergraduate, residential and global) are especially compelling when considering what happens to us when we come to Westmont. This catalog includes a good description of these distinctive emphases.

One of our great challenges is the fact that so many cultural expressions have become shrill and absolutely destructive of human civilization. That's what makes the balance between a rigorous academic understanding of the faith and a deep love for God so important. We need warm-hearted, keen-minded graduates going into the world to make a redemptive impact on our world in ways that matter and will sustain society.

The second part is what happens inside us. Being in a small liberal arts college gives us the opportunity to increase our intellectual understanding and begin to work out our own world views. This context allows us to learn how to discipline and temper our own ambitions and drives, become more integrated emotionally, more psychologically prepared and more cognitively alert so our development of critical thinking skills and independent thought take an astronomical step forward. Virtually no other education provides this experience. The single best preparation for life is studying great thoughts with bright colleagues under the guidance of able and well prepared faculty. As we learn to look anew, we undergo an intellectual awakening that changes us.

Finally, what happens because of us? At Westmont education means more than education for education alone. We have a daily choice whether or not we engage the world with meaning, purpose and drive, or simply disengage from any meaningful connection with it. We want our students to think across disciplines and master a vast array of knowledge to have at their disposal the possibilities of solving unsolvable problems in new ways. We offer an opportunity to develop a moral foundation that can sustain our graduates all their lives.

As we move deeper into the 21st century, I trust that the original vision Mrs. Kerr and others crafted for our school will continue in real and vital ways as we provide an education committed to academic rigor, moral and faith development, and the relentless pursuit of excellence. May God be with us as we pursue these efforts.

# A Brief History

**I**n 1937, Ruth Kerr helped establish a school that in 1940 became a liberal arts college committed to rigorous academics and deep love of God. Wallace Emerson, the first president, envisioned an institution that rivaled the best colleges nationwide, and he set the standard for academic rigor and excellence that still applies.

Westmont outgrew its Los Angeles campus in 1945 and moved to the former Dwight Murphy estate in Santa Barbara. Features of this property endure today, including its lovely Mediterranean house, formal gardens, wooded pathways and stone bridges. After achieving accreditation in 1958, the college added nine major facilities on campus in the 1960s. Enrollment rose to 840, and in 1976, Westmont received permission for 1,200 students. In 2007, the county approved an updated campus master plan.

Gayle D. Beebe became Westmont's eighth president in 2007. He has focused on strategic planning, completion of the campus master plan, and building a strong financial base for the 21st century. He presided over the successful recovery from the 2008 Tea Fire, the national Bright Hope for Tomorrow and Strength for Today capital campaign, and construction of Adams Center for the Visual Arts, Winter Hall for Science and Mathematics, an observatory and renovated athletic facilities. Construction of a new residence hall and Leadership Center begins in April 2016. Dr. Beebe has overseen the creation of the Martin Family Institute for Christianity and Culture and the Dallas Willard Center for Spiritual Formation as well as the expansion of Westmont's global programs and the founding of the Institute for Global Learning and Leadership and its five centers: the Mosher Center for Moral and Ethical Leadership; the Hughes Center for Neuroscience and Leadership; the Goble Center for Global Learning; the Eaton Center for Entrepreneurship and Innovation; and the Montecito Institute for Executive Education.

Throughout its history, Westmont has earned increasing national recognition for academic quality and its distinctive mission as an undergraduate, residential, Christian, liberal arts community serving God's kingdom by cultivating thoughtful scholars, grateful servants and faithful leaders for global engagement with the academy, church and world.

Westmont educates the whole person, transforming students for a lifetime of service in a variety of careers worldwide, equipping them with the knowledge, skills and heart to meet the great and pressing needs of our time.

# Philosophy of Education

*Westmont College is an undergraduate, residential, Christian, liberal arts community serving God's kingdom by cultivating thoughtful scholars, grateful servants and faithful leaders for global engagement with the academy, church and world.*

**Christ Holding Preeminence.** To understand Westmont is to understand its motto – Christ Holding Preeminence. We affirm with the Apostle Paul that "He is the image of the invisible God, the firstborn over all creation. For by Him all things were created: Things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things were created by Him and for Him. He is before all things, and in Him all things hold together." Therefore, we do not begin with our knowledge about ourselves, but the revelation of Christ, who is the foundation for all knowing, all understanding, all wisdom. As God's image bearers, we know in part. As fallen beings, we also know that we are easily deceived in our understanding. Reconciliation with God through Christ, therefore, is not only our future hope, but the ground in which our liberal learning must be rooted.

We believe that Jesus Christ – Creator, Sustainer, and Redeemer of all things – is present in all spheres of life, both to call us into relation with Himself and to challenge us to make him Lord. We are persuaded that the Christian faith, revealed to us in the Scriptures and realized in us by the Holy Spirit, provides the most promising framework within which to pursue an education. At Westmont, we believe that we can invest ourselves fully in every undertaking, with the confidence that in so doing, we will encounter the person of Christ. We will also come to understand more fully God's purposes in the world, and to honor His call upon us to participate in them.

**Liberal Arts.** As a liberal arts college, Westmont seeks to help its students become certain kinds of people, not mere repositories of information or mere possessors of professional skills. Where such information and competencies are acquired, it is to be done in an intellectual and social context that nourishes a larger spiritual vision and is integrated with it. Crucially, as a liberal arts college, Westmont seeks to help inculcate those skills that contribute to leading a successful and satisfying life. For just as one must be trained in the skills that enable one to engage in a trade, so one must be trained in those skills that enable one to engage in the distinctively human activities of reasoning, communicating, thoughtfully choosing one's moral and spiritual ends, building political, economic and spiritual communities, and entering into those "appreciative pleasures" that require knowledge, experience, and trained discrimination. Herein lies the relationship between liberal learning and life, for these are the very skills that translate into performing well one's role as citizen of the state, servant of the church, member of a family, worker or professional and participant in the cultural world.

**Christian.** Westmont College is committed to a high view of biblical authority, an orthodox doctrinal vision, and the central importance of a personal relationship with God through Jesus Christ. It is this Christian faith that the college seeks to integrate fully into its life as a liberal arts institution. For the pursuit of

a liberal arts education, with its emphasis on producing certain kinds of people and inculcating certain basic human skills essential for living a satisfactory life, cannot take place in isolation from one's most basic commitments and beliefs. For the Christian, then, this means bringing one's biblical and theological heritage to this educational enterprise. Indeed, to have basic values and commitments that one cannot explicitly and systematically bring to this task is to have an education that is severely truncated, severed, as it were, from one's most important beliefs and values. To isolate one's worldview in this way, while pursuing an education, will only result in a worldview uninformed by sustained intellectual reflection. Such an approach will yield persons who are not fully educated, indeed not educated at the core of their being. For the Christian, therefore, higher education must be Christian education, if it is to be education for the whole person. At Westmont, then, Christian faith is to inform the academic enterprise and the academic enterprise is to inform one's Christian faith and thus yield a Christian worldview that is biblically based and intellectually sound.

**Undergraduate.** Westmont is an undergraduate college and as such directs its attention, focuses its resources and devises its pedagogical strategies to facilitate the development of students who are beginning their post-secondary education. It follows that the primary emphasis at Westmont is on teaching. But teaching often involves helping students to acquire research skills and to become themselves producers of knowledge. This can be done effectively only as faculty model research skills for students, and mentor them in the acquisition of those skills. Moreover, to create a vital intellectual environment profitable for undergraduate students, Westmont must be an institution where knowledge is generated as well as transmitted. But producing such knowledge is to be largely (though not exclusively) evaluated and appreciated in terms of the benefits that accrue, directly or indirectly, to those undergraduates who have come to Westmont to receive their education. For it is those students that the educational programs at Westmont are dedicated.

**Residential.** The educational programs of Westmont College are residential in character and reflect a commitment to facilitate and exploit the ways in which education occurs within community. Indeed, ever since the monastic tradition, learning has been cultivated and transmitted within residential communities, enabling learning to be promoted by the joys of shared exploration and the sustenance of spiritual kinship. Moreover, both the Christian and liberal arts traditions remind us of the integrity of human wholeness; we cannot be neatly compartmentalized into rational, spiritual and affective components. The residential character allows and encourages expression of this wholeness as we live, learn and worship together. Further, the residential character of the college reflects the conviction that the goal of all meaningful learning, and of biblical education in particular, is to inform the way we live. The residential character of the college invites students to apply their studies to the daily task of creating a community in which individuals can grow and mature together. Students are able to cultivate these patterns of adulthood and redemptive living in the presence of role models and mentors who can help them in this process.

**Global.** Westmont is to be a college with global concerns. For the earth and all its peoples are God's good creation. As such, they must be appropriately valued and respected. We are called in scripture to be stewards of the

earth, to be faithful caretakers of the physical creation. We are also called to appreciate the rich diversity of human cultures – cultures shaped by people who bear the mark of God’s image in creation. We are, then to be a community informed and enriched by thoughtful and intentional study of and interaction with cultures other than our own. Ours is, however, a fallen world, and the earth, its peoples, and their institutions stand in need of the redemptive, reconciling word of the gospel. We are called, therefore, not only to appreciate and preserve the creation and human cultures, but also to participate in the work of the Kingdom in response to the Great Commission to make disciples of all nations – to bring all creation and human institutions under the Lordship of Christ. This task involves grappling with the full range of ways in which the fall has introduced blindness, disintegration, conflict, and injustice into the world. Finally, the emphasis on the global nature of education is a recognition that our world has increasingly become interconnected and interdependent. To prepare people to function intelligently, effectively and for the good in a world of global politics, global economics, and global communications must be one of the aims of a Westmont education.



# Statement of Faith

**Westmont College** is a liberal arts college committed to Jesus Christ and belonging to the worldwide evangelical Protestant tradition. In that tradition, the college's trustees, administrators, and faculty participate in many different churches and with them confess such historic statements of the church as the Apostles' Creed and the Nicene Creed. In faithfulness to God, who is the source of truth, and under the authority of Scripture, we joyfully and humbly affirm the following articles of faith, which guide our learning, teaching, and living.

## *We believe in God*

The Lord our God alone is God, holy and loving, revealing in creation and in Jesus Christ God's own power and glory, grace and mercy. The Lord our God alone is God, just and true, perfect in being and trustworthy in action.

The Lord our God is infinite and beyond imagination; our minds can never fully know God nor our hearts completely grasp his ways. The Lord our God is faithful and steadfast, unfailing in word and deed.

The Lord our God is Triune—one being in three persons—Father, Son, and Holy Spirit in co-equal, co-eternal communion. The Lord our God, Creator and Sustainer of all that is, redeems the world from its fallenness and consummates his saving work in a new heaven and a new earth.

## *... the Father, Son, and Holy Spirit*

God the Father is the source of all that is good. He is Father to his eternal Son, Jesus Christ, and to all who are adopted as his sons and daughters through faith in Jesus Christ. He has sovereignty over us, affection toward us, and glory for us.

God the Son became incarnate in Jesus Christ—one person in two natures, fully human and fully divine—who was conceived by the Holy Spirit and born of the virgin Mary. In his life and in his death on the cross he conquered the powers of darkness, paid the penalty for our sin, and demonstrated God's love for the world. In his bodily resurrection his life and death are vindicated, and he is revealed to be the only judge and redeemer of the world. He intercedes for us now before the Father and will return in glory.

God the Holy Spirit is Lord and Life-Giver, the one who empowered Jesus Christ and who empowers his people to continue God's work today. God the Holy Spirit convicts us of sin, brings us to faith in Jesus Christ, and conforms us to the image of Christ. The Spirit inspired the authors of Scripture and guides the church in faithful translation and interpretation. The Bible, consisting of the Old and New Testaments, is God-breathed and true, without error in all that it teaches; it is the supreme authority and only infallible guide for Christian faith and conduct—teaching, rebuking, and training us in righteousness.

*. . . the Author of our salvation*

God created humankind for unbroken relationship with God, one another, and the rest of creation. Through Adam's disobedience, we fell into sin and now suffer alienation and brokenness. The effects of sin are so pervasive that apart from God's grace we are lost and dead. Only by God's grace through faith in Jesus Christ are we saved and made alive.

In bringing us to faith in Jesus Christ, the Spirit incorporates us into the body of Christ, his church, the community of all believers in heaven and on earth. The church is called to bear witness to Christ among the nations by praising God, preaching the good news, discipling believers, healing the sick, serving the poor, setting free the oppressed, and caring for creation. The gifts and fruit of the Holy Spirit empower the church for this mission.

Jesus Christ will return one day in his glorified body to judge the living and the dead. Those who do not believe in him will be raised to suffer forever a just punishment. Those who believe in him will be transformed, their bodies raised imperishable and incorruptible, to live and reign with him forever in a new heaven and a new earth in which there will be all that is good and true and beautiful, but no sorrow, no tears, and no evil thing.

*And so we pray:* Come, Lord Jesus.

Even these declarations of faith do not define in detail what an individual Christian might believe in many important areas of doctrine and theology. Moreover, as a college seeking to serve evangelical Christians from many denominations, we feel less of an obligation to decide these various points in detail than we do to celebrate not only our unity in Jesus Christ but also our freedom to disagree, and to continue grappling in the many non-essential elements of our faith.

# Academic Resources

*The chief academic resource of any institution of higher education is its faculty and staff. But these committed people rely on programs and facilities which enhance learning.*

**O**rientation and First-Year Experience. Westmont conducts a comprehensive orientation program for all new students before classes begin. All new students (including transfers) must attend the four-day fall orientation program. At Westmont we desire to establish first-year students on a strong academic footing and to assist them in developing sound relationships with faculty and peers. First-Year Seminars provide small discussion based courses that help prepare students for integrative learning. Our First-Year Experience involves both the Academic and Student Life offices in order to best provide for the transition needs of new students. A First-Year Retreat is offered each September as a means to develop relationships and grow in one's faith. If first-year students have needs or questions, they may contact the Campus Life Office.

**A**cademic Advising. Academic advisors assist students with adjustment to college, the development of an academic program, and career/graduate school planning. In order for this relationship to be effective, students are encouraged to consult advisors on a regular basis. Incoming students are assigned a faculty advisor based upon their expressed major interest. Students may change advisors as their interests or major selections dictate. Courses selected for registration must have an advisor approval. Though advisors are available for advice and consultation, it is the student's responsibility to know and complete all requirements for a degree. Any general questions should be addressed to the Student Records Office.

*Successful Scholars Seminar.* Some students may need to strengthen academic skills and disciplines to learn increasingly difficult and complex material. Academic support is available to all students through the Successful Scholars Seminar. Students who do well at Westmont possess good academic skills and discipline, and the ability to organize time and information in efficient and meaningful ways. This seminar is a seven-week program that trains students in a variety of skills to help them succeed at Westmont College. If interested, students should contact the Student Records Office.

**D**isability Services. Westmont is committed to ensuring equal access to academic courses and campus services. In keeping with this commitment and in compliance with Section 504 of the Rehabilitation Act of 1990 and the Americans with Disabilities Amendments Act of 2008, the college will provide reasonable accommodations to students with appropriately documented disabilities. The Director of Disability Services will meet with students to discuss individual needs. It is the student's responsibility to initiate this process. The office provides referrals to local providers that can be contacted for further assistance. If students require services, or have questions about qualifying for services, they should contact the Director of Disability Services. The Office of Disability Services is located upstairs in the Voskuyl Library. See the Disability Services website for further information, [http://www.westmont.edu/\\_offices/disability/](http://www.westmont.edu/_offices/disability/).

**Writers' Corner.** All students can receive free writing support by visiting Writers' Corner in the Learning Commons of Voskuyl Library. Appointments are recommended; drop-ins are also welcome. Peer tutors assist clients at all stages of the writing process; tutors are recommended by faculty and trained by the English Department. For the most recent information about the writing center, visit the Writers' Corner website via the English department homepage.

**Library & Information Services.** Roger John Voskuyl Library, named for Westmont's third president, provides services and resources to support students, faculty, and staff. The library collection includes books, periodicals, electronic resources, music scores, DVDs, and sound recordings. Librarians work closely with academic departments to ensure that the collection grows in focused ways to meet student and faculty needs. Materials not owned by the library may be borrowed through local consortial arrangements or through the library's participation in an international interlibrary loan network. Guidance in the use of these resources is provided in subject and course-related research guides available on the library website and through library instruction. Research related instruction sessions, taught by Westmont librarians, are offered both in-class and in the library instruction lab. Librarians are also available for one-on-one research consultations at the Research Help Desk located in the Learning Commons. The Learning Commons is on the main level of the Voskuyl Library and, in addition to the Research Help Desk, is home to the IT Help Desk, the Writers' Corner, 53 dual-boot computers at individual work stations, a variety of comfortable seating choices, walk stations, and technology enabled group study rooms. This 21<sup>st</sup> century space brings together library, technology and other campus services in an environment designed to foster collaborative and creative work, and social interaction. The Westmont College Archives collection is located on the lower level of the library and is comprised of items relating to its history, 1940 to present, and that of its predecessors, Western Bible College, 1939-1940, and the Bible Missionary Institute, 1937-1939. Voskuyl Library is also home to the Disability Services office, which is located on the upper level.

# Accreditation and Memberships

Westmont College is accredited by WASC Senior College and University Commission (985 Atlantic Ave., Suite 100, Alameda, CA, 94501; phone 510-748-9797), an institutional accrediting body recognized by the U.S. Department of Education. Its teaching programs, with specialization in elementary and secondary teaching, are accredited by the California Commission on Teacher Credentialing. The music program is accredited by the National Association of Schools of Music. Approval has been granted for the training of veterans and war orphans.

Westmont is a member of the Independent Colleges of Southern California; the Association of Independent California Colleges and Universities; the Council of Christian Colleges and Universities; the Christian College Consortium; and the Annapolis Group of national liberal arts colleges. Its financial policies are in accordance with those of the Evangelical Council for Financial Accountability (ECFA).

Westmont College does not unlawfully discriminate on the basis of race, color, national origin, ancestry, sex, sexual orientation, gender, gender identity, gender expression, age, disability, genetic information, medical condition, religion, marital status, military status, or veteran status in its admissions policies or in the administration of its educational programs, including scholarship and loan programs, and athletic and other collegeadministered programs and activities. Inquiries regarding the obligations of Westmont College under Title IX of the Education Amendments of 1972 and under the Civil Rights Act of 1964 may be directed to: Chris Call, Vice President for Administration and Planning/Title IX Officer; telephone: (805) 565-6023; email: [ccall@westmont.edu](mailto:ccall@westmont.edu) or to the Director, U.S. Department of Education, Washington, D.C. 20201.

The Student Handbook and the College Catalog describe several processes that students are encouraged to use whenever appropriate for registering complaints or grievances. In addition to or in lieu of these college processes, students may file a complaint against the institution with Westmont's accrediting agency or with the State of California:

WASC Senior College and University Commission  
985 Atlantic Avenue, Suite 100  
Alameda, CA 94501  
(Tel.) 510.748.9001  
(Fax) 510.748.9797  
(Web) <http://www.wascsenior.org>

Bureau for Private Postsecondary Education  
2535 Capitol Oaks Drive, Suite 400  
Sacramento, CA 95833  
(Tel.) 916.431.6924  
(Fax) 916.263.1897  
(Web) <http://www.bppe.ca.gov>

*Institutional Graduation Rate.* Westmont College is pleased to provide the following institutional graduation rate information in compliance with the Higher Education Act of 1965, as amended. The rates reflect the graduation status of students who enrolled in college for the first time as full-time students in the Fall of 2006 through Fall of 2009. The graduation rate is based on the number of students completing their degrees within six years, which equates to 150% of the length of Westmont's 4-year, baccalaureate programs. The 4-year average graduation rate is 77.3%.

# The Educational Program

**Academic Program.** In keeping with our overall philosophy of education, our academic program is designed to foster intellectual vitality, Christian character, and commitment to service that will last a lifetime. Crucial to this goal is providing our students with an education that is both deep and broad. In the context of a major, students learn the discipline of submitting to a particular methodology and of mastering a specialized body of content. It is in their general education that they acquire the tools for relating this specialized knowledge to other realms of understanding, to their own lives, and to the world around them. In addition to acquiring the knowledge and skills embodied in the general education program and a major, we at Westmont also hope that our students are put on a trajectory of development that will lead them to live wisely and effectively and to be agents of God's loving and gracious redemptive purposes in the world. Throughout the entire curricular and co-curricular programs, the design of the Westmont educational experience is guided by institutional learning goals and outcomes which foster learning and development.

**Institutional Learning Outcomes.** Our Institutional Learning Outcomes concern themselves with those areas of an education that go beyond mastery of the content in any particular subject area and are common to all areas of study at Westmont. Institutional Learning Outcomes are a subset of intended outcomes that support our mission and describe in concrete terms what our educational goals mean. They serve as tools in our mission-driven assessment toolkit identifying what students will be able to **demonstrate, produce or represent** as a result of what and how they have learned at Westmont.

1. **Christian Understanding, Practices, and Affections:** *Westmont graduates will demonstrate literacy in biblical and orthodox Christian faith; Westmont graduates will demonstrate faithfulness in Christian service.*
2. **Global Awareness and Diversity:** *Westmont graduates will be able to analyze global patterns from at least two different perspectives (social, cultural, economic, political, religious, technological or educational).*
3. **Critical Thinking:** *Westmont graduates will be able to accurately evaluate the strength of evidence in support of a claim and apply critical thinking creatively to problem solving.*
4. **Quantitative Literacy:** *Westmont graduates will apply relevant scientific, mathematical and logical methods to analyze and solve problems effectively.*
5. **Competence in Written Communication:** *Westmont graduates will write effectively in various contexts.*
6. **Competence in Oral Communication:** *Westmont graduates will effectively communicate orally in various contexts.*
7. **Information Literacy:** *Westmont graduates will be able to identify, evaluate and integrate sources effectively and ethically in various contexts.*

**Major Program.** Each student, by the end of the sophomore year, will choose a major program. (The various major programs are outlined later in this catalogue.) A major program educates students in a coherent field of study compatible with the goals of a liberal arts education. The program should give students a solid grounding in the content and methodologies of the field of study. Typically, B.A. programs have between 36 and 54 units and B.S. between 53 and 65 units. In every case the choice of courses and program structure should be informed by disciplinary standards. Both B.A. and B.S. programs should include courses that equip students to work at an advanced level. In majors that offer both degrees, the B.A. is intended to be a more flexible program, while the B.S. provides deeper exploration well suited to students who intend to pursue graduate studies. Every major should include a capstone experience designed to integrate the knowledge, skills, and virtues that students have developed in the major program. As the word ‘capstone’ suggests, these experiences should normally be offered to students as they approach the end of their college careers.

**General Education.** In the tradition of the liberal arts, Westmont’s academic program requires students to set their major programs of study within the larger context of General Education. The General Education framework ensures that students’ major programs will be supported by the skills, the breadth of knowledge, the strategies of inquiry, and the practices that will enable them to mature in wisdom throughout their lives and to apply their learning effectively in the world around them.

As a liberal arts college in the Christian tradition, we ground our pursuit of learning and wisdom in the context of God’s revelation—manifested in the scriptures and in the world around us, and apprehended through reason, observation, experimentation, and the affections. Through the General Education program, students develop the necessary contextual background, concepts, vocabulary, and skills to support their exploration of these various avenues to understanding the world.

In addition to developing knowledge and skills, our general education curriculum at Westmont seeks to inspire students to become constructive agents of redemption in a diverse and complex world. Thus, the General Education program provides opportunities for students to encounter a variety of viewpoints, cultures, and languages. Finally, we offer students the opportunity to practice their learning in the context of concrete experiences that facilitate the acquisition of wisdom, empathy and practical expertise.

## An Introduction to General Education

Westmont students grow in ways that reflect the rich diversity of God’s created order. But students are nourished by a common grounding that provides a shared context for growth in the Christian liberal arts tradition. As they grow in faith, students become rooted in the canon of the Old and New Testaments and in theological understanding. As they grow in skill, students cultivate their ability to write cogently, to reason mathematically, to converse in a language other than their native tongue, and to be fit stewards of their bodies. As they grow in knowledge, students increase their ability to grasp world history, to read and analyze discerningly from a Christian



## GENERAL EDUCATION

perspective, and to distinguish truths and values as they think through issues of eternal significance.

Recognizing the breadth of their heritage, Westmont students explore a variety of the branches of human knowledge and inquiry. Such exploration necessarily involves choice. In choosing courses, students will encounter some disciplines and not others. But the array of options within the general education program ensures that in reaching out to a wide variety of specific branches, each student will grasp something of the rich diversity of human learning as an organic whole. By becoming familiar with the vocabularies and types of questions asked in several disciplines, students equip themselves to be members of an increasingly global and diverse intellectual community.

Students encounter their heritage through courses labeled Common Contexts, Common Inquiries, and Common Skills. Each Common Contexts class grounds students in a body of material and explicitly invites them into an understanding of the Christian liberal arts. Each Common Inquiries class empowers students to explore the knowledge, methodologies, and modes of inquiry of a given discipline. Each Common Skills class encourages students to develop their verbal, quantitative, or physical dexterity. Once students have appropriated this heritage, they are asked to begin contributing to it through courses labeled Compassionate Action. Living out what one has learned not only embodies the liberal arts tradition, which has always sought to produce informed and capable citizens, but also the Christian tradition, in which faith is demonstrated through works.

Reflecting the rich diversity of creation, such blossoming may take many different forms. It may emerge from and be demonstrated within the student's major field of study, or within academic work outside the major. Students demonstrate the capability not just to know but to do, not just to study but to perform, not just to speak clearly but to communicate cross-culturally, not just to recognize right but to enact justice. A student completing general education and a major field of study leaves Westmont ready to live out the good news of Christ and the empowerment of education. However difficult it may be to acquire, a Christian liberal arts education exists to be given away, for free, in a lifetime of compassionate service to God and to others.

## An Overview of General Education

A Minimum grade of "D-" at Westmont is required to satisfy General Education Requirements.

### I. Common Contexts

*Common Contexts* courses must be taken at Westmont College or at an approved institution similar to those in the Christian College Consortium.

#### A. Biblical and Theological Canons

1. Introduction to the Old Testament
2. Introduction to the New Testament
3. Introduction to Christian Doctrine

#### B. Introduction to the Christian Liberal Arts

1. Philosophical Reflections on Reality, Knowledge, and Value
2. World History in Christian Perspective

## II. Common Inquiries

Courses satisfying each of the 8 categories

**A. Reading Imaginative Literature**

**B. Exploring the Physical Sciences**

**C. Exploring the Life Sciences**

**D. Reasoning Abstractly**

**E. Working Artistically**

**F. Thinking Globally**

**G. Thinking Historically**

**H. Understanding Society**

## III. Common Skills

**A. Three writing-intensive or speech-intensive courses:**

1. Writing for the Liberal Arts
2. Writing/speech within the major
3. Writing/speech outside the major

**B. Quantitative and Analytical Reasoning**

**C. Modern / Foreign Languages**

**D. Physical Education** (four 1-unit courses) Fitness for Life plus three activity courses

## IV. Compassionate Action

**Complete one of the following two options:**

1. Serving Society; Enacting Justice
2. Communicating Cross-Culturally

## The Components of General Education

### I. Common Contexts

*Common Contexts* courses must be taken at Westmont College or at an approved institution similar to those in the Christian College Consortium. In order to obtain the developmental benefits the general education program is designed to confer and to insure timely progress toward graduation, it is strongly recommended that students complete the *Common Contexts* requirements by the end of the second year.

## GENERAL EDUCATION

Transfer students attending Westmont for three or fewer years must complete one requirement at Westmont from *Biblical and Theological Canons* for each full year of attendance at Westmont. Similarly, transfer students attending Westmont for two or fewer years must complete one requirement at Westmont from *Introduction to the Christian Liberal Arts* for each full year of attendance at Westmont. Transfer students are encouraged to complete the entire requirement in order to receive the full benefit of the General Education Program. *Please note: Reapplicants who originally entered Westmont as first-year students are not considered transfer students regardless of the length of time they were away from Westmont or the number of units they “transfer” back to Westmont on their return.*

### **A. Biblical and Theological Canons**

Through completing these courses, students’ should increase their biblical and theological literacy, thereby gaining essential resources for the integration of faith and learning throughout the curriculum.

- 1. Life and Literature of the Old Testament**
- 2. Life and Literature of the New Testament**
- 3. Introduction to Christian Doctrine**

### **B. Introduction to the Christian Liberal Arts**

The requirements in this section introduce students early in their time at Westmont to the nature and purpose of a Christian Liberal Arts education. Although each of these requirements introduces students to the Christian liberal arts through a particular disciplinary or methodological lens, they all are intended to draw students explicitly into the questions and the concerns that we hope will pervade their entire education at Westmont. These themes include, among others: an exploration of what it means to be human; what it means to live a good life; and what it means to pursue justice as a citizen of both this world and the Kingdom of God. As a result of having fulfilled these requirements, students will have an appreciation for the development of the Christian Liberal Arts tradition. In addition, they will be on their way to developing categories of critical evaluation, sensitivity to historical context, and other essential capacities of a liberally educated Christian.

- 1. Philosophical Reflections on Reality, Knowledge, and Value.** Courses satisfying this requirement give significant attention to the nature of reality, our prospects for knowledge, and ethical or aesthetic values. Students in these courses should understand and appreciate the bearing of metaphysical assumptions on more specific matters; recognize how assumptions about knowledge affect such pursuits as science, mathematics, theology, and self-understanding; recognize the import of competing value claims; practice identifying and assessing arguments for philosophical claims; and emerge with a sense of how to think Christianly about various world views.
- 2. World History in Christian Perspective.** Students will explore world history from a Christian perspective and engage in critical discussion of the term “Christian perspectives” as a concept whose definition is subject to interpretation. Geographically comprehensive and chronologically wide-ranging, the course exposes students to the stories of diverse peoples, with the

goal of challenging stereotypes and developing a thoughtful, informed approach to other cultures.

## II. Common Inquiries

*Common Inquiries* courses, collectively, seek to introduce students to a range of methodological approaches that one might employ in the quest for knowledge. These courses give particular attention to various ways of acquiring knowledge and evaluating information and incorporate appropriate consideration of the resources and implications of information technology.

*Students take courses to satisfy each of the following eight categories. A student who wishes to use AP, A-level, or IB credit to satisfy more than three Common Inquires requirements may do so by passing an appropriate advanced course and filing a petition with the Registrar.*

- A. Reading Imaginative Literature.** Students will develop skills in analyzing and understanding the ways of knowing provided by imaginative literature. Such an approach invites students to see how literature reveals things we cannot know except by inference or by metaphor. Students in these courses should recognize how imaginative literature honors the complexity of human experience. Further, students will engage in ways of knowing that are inherently ethical by engaging in the practice of compassion by imagining the other.
- B. Exploring the Physical Sciences.** Students will learn the basic properties and principles of matter and, examine the structure and function in elementary physical systems traditionally studied by physicists and chemists. Students should come to appreciate both creative and systematic aspects of scientific method, and should come to understand the power of theory and prediction within the framework of empirical/experimental modes of inquiry.
- C. Exploring the Life Sciences.** Students will learn to think about complex living systems within the framework of the natural sciences. Whether experiencing the breadth of disciplines encompassed by the life sciences or focusing more narrowly on a single field of study, students will gain fundamental understandings of life processes rather than solely mastering technical applications based on those principles. As appropriate, students will be introduced to the methods used to develop the models of life processes they are studying and they should come to understand both the strengths and the limitations of those methods, especially as they impinge on a broader philosophical view of life.
- D. Reasoning Abstractly.** Students will focus on critical and analytical reasoning about non-empirical, abstract concepts, issues, theories, objects and structures. Students in these courses should learn to understand and evaluate abstract arguments and explanations, analyze abstract concepts and solve abstract problems.
- E. Working Artistically.** Students will expand their understanding of the fine arts and performing arts, including music, visual arts, or theatre. Students will develop and expand perceptual faculties, develop physical practices integral to the art form, and explore the critical principles which guide artists in the area.

**F. Thinking Globally.** Changes in economic, political and environmental conditions are contributing to an increasingly interdependent and connected world. Students will study cultural, religious, political or economic practices with an eye to appreciating interactions between people from different ethnicities and world contexts. In the process, they will better understand other perspectives and world views – extending beyond those rooted in “Western” experiences – and will appreciate the deep influence of culture on the categories one uses to understand the world. Acquiring a global perspective equips students to be informed agents of redemption and justice in a rapidly changing world.

**G. Thinking Historically.** Students will develop an awareness and appreciation for the particularities of time and place, a sense of the complex process of change and continuity over time, the ability to work critically with a range of primary and secondary historical texts, and appreciation for the art of constructing historical narrative. By studying specific historical periods, the history of Christianity, the history of academic disciplines, or by taking interdisciplinary courses, students should: become critical readers of a range of historical sources; appreciate the importance of historical context in shaping our understanding of the world in which we live; be able to engage in thoughtful interpretive and historiographic discussion; have practice in constructing a historical narrative; understand the complexity of historical change.

**H. Understanding Society.** Students will develop an understanding of society, culture, economics, and/or politics. Students should recognize the dynamic interplay among individuals, groups, institutions, cultural norms, and public policy. Courses provide exposure to a breadth of literature regarding models or theories that explain how we understand society. Students will reflect on how interpretive and objective theories interact with their values, beliefs, and worldviews. Put differently, students will explore questions of “what is?” and “why is it so?” to better inform their vision of “what ought to be.”

### III. Common Skills

*Common Skills* classes encourage students to develop their verbal, quantitative, or physical dexterity. Students are also expected to demonstrate competence in a wide range of contemporary information technology processes. To the extent that it is possible, students are encouraged to fulfill their skills requirements in the context of a course in the major or a course taken to satisfy another general education requirement. *Until the requirements have been satisfied, it is recommended that students complete at least one Writing/ Speech Intensive and one Physical Education course per year.*

**A. Three Writing-Intensive or Speech-Intensive Courses.** Students develop their communication skills at Westmont by taking at least three courses that emphasize writing fluently or speaking clearly and effectively. All students are encouraged to take a writing-intensive course during their first year at Westmont. Such writing-intensive or speech-intensive courses encourage students to develop their abilities to articulate information, ideas, and convictions both in written and oral discourse.

Students are expected to be able to communicate effectively to a wide range of audiences, within the academy, the church, and the public. The Writer's Corner enables students at all levels to discuss writing strategies individually with peer consultants.

1. **Writing for the Liberal Arts.** To fulfill this requirement students may:
  - a. take ENG 002 Composition at Westmont
  - b. complete an equivalent course to ENG 002 at another college or university
  - c. submit a score of 4 or 5 on the AP test for Language and Composition or the AP test for Literature and Composition taken before their first semester at Westmont.
  - d. submit a score of 5, 6 or 7 on the Higher Level IB examination for English A1 taken before their first semester at Westmont.
  - e. Students who submit a test score of 580 on the writing section of the SAT Critical Reasoning Test (taken prior to March 2016) or a test score of 29 on the ACT.Ew English Writing subscore are not required to take ENG 002 Composition and may fulfill the Writing for the Liberal Arts requirement by taking a writing-intensive course offered by any department. If students intend to use a test score to waive the ENG 002 Composition requirement the test must have been taken before their first semester at Westmont.
2. **Writing-Intensive or Speech-Intensive Course within the Major.** All students take at least one writing-intensive or speech-intensive course in their major.
3. **Writing-Intensive or Speech-Intensive Course outside the Major.** Students completing a single major take a writing-intensive or speech-intensive course in any field outside that major. Students completing a double major take a writing-intensive or speech-intensive course in both majors. Students majoring in English may fulfill this requirement by taking an additional writing-intensive English course.

**B. Quantitative and Analytical Reasoning.** Since many phenomena in our world can best be understood through quantitative and analytic methods, students should develop the ability to interpret, evaluate and communicate quantitative ideas. Central to this experience is: the use of mathematical models for physical or social systems or; the understanding and communication of numeric data including the computation and interpretation of summative statistics and the presentation and interpretation of graphical representations of data. Students should gain skills in quantitative and analytic methods, or, alternatively, the reflective use of quantitative methods as a tool.

**C. Modern/Foreign Languages.** Westmont encourages students to continue developing their fluency in a language other than their native tongue by requiring students to complete one semester of college language beyond the level of the two-year entrance requirement to the college. Alternatively, having met the entrance requirement in one language, they may take one semester of college-level study in another language. A course in any modern spoken language (e.g. Spanish, French, or German) or ancient language (e.g. Greek or Hebrew) is accepted as fulfilling this

## GENERAL EDUCATION

requirement. Students satisfy this requirement if they (1) submit a SAT Language Subject Test score of 580 or higher, (2) place into the fourth semester (or higher) of a language in a proctored examination setting at Westmont College or (3) present evidence of a primary language other than English to the Student Records Office.

Realizing that learning a foreign language may be especially difficult for those with certain disabilities, Westmont offers the following accommodation for those who have a **documented language based learning disability**. These students may take one semester of college level American Sign Language (ASL) at a Community College. To qualify, students must present documentation of their disability to the Director of Disability Services. The Director will verify the documented disability and notify the Student Records Office that the student is eligible for the ASL accommodation.

**D. Physical Education.** The physical education program is designed to provide instruction and exposure to fitness, skill-based and leisure activities. All students are required to take Fitness for Life and three 1-unit physical activity courses. Students establish a wellness-based foundation in Fitness for Life and build on this foundation with the additional three activity courses providing reinforcement for a lifetime of physical activity. Subsequent PEA courses in a given activity must be at a higher level. Transfer students must complete one Westmont PE Activity course for each full year they are enrolled at Westmont, including PEA-032 Fitness for Life, or complete all four (4) PE Activity course requirements. *Please note: Reapplicants who originally entered Westmont as first-year students are not considered transfer students regardless of the length of time they were away from Westmont or the number of units they “transfer” back to Westmont on their return.*

## IV. Compassionate Action

The expectation that students will put their education into action may be fulfilled in a variety of ways, many of which may be part of the student’s major.

*All students will complete one of the following two options:*

**A. Serving Society; Enacting Justice.** Students will participate in a course-related service project or an internship that is explicitly integrated into the academic content of the course and which includes significant involvement in responding to social issues. Through this experience, students will raise their awareness of issues of justice such as those grounded in social class, gender, ethnicity, human disability, the environment or the impact of technology. In completing this option, students will examine their own presuppositions and develop their skills in their exercise of charity and compassion.

**B. Communicating Cross-Culturally.** To complete this option, students will live or work in an extended cross-cultural setting that is explicitly integrated into the course or program’s goals and content. For example, a student might enroll in an off-campus program that involves significant encounters with people from other cultures, in which the encounters are designed primarily to facilitate mutual understanding, dialogue, and appreciation. Alternately, a student might enroll in an

on-campus course providing significant opportunities for encounters with—in addition to learning about—people from other cultures in a context designed to facilitate mutual understanding and appreciation.



# Academic Program

***D*egree Requirements.** In order to equip Westmont students to function with a global, Christian worldview, in the world in the 21st century, the goals of the College's degree requirements are that students will:

1. develop an understanding and appreciation of the principal areas of human knowledge, including biblical Christianity;
2. learn how to express themselves clearly and objectively in both oral and written forms;
3. develop clearer understanding and perspective toward themselves and others in the context of an increasingly global and diverse society;
4. be equipped to accept social, religious, political, economic, and scientific positions of trust and leadership.

Students receive the Bachelor of Arts, Bachelor of Science or Bachelor of Music Education degree when they complete the following:

1. A minimum of 124 semester units.
2. A minimum grade point average of 2.0 for all courses taken at Westmont and a minimum grade point average of 2.0 for all courses taken for the major and minor at Westmont.
3. Senior Residency Requirement: The final year (two full-time semesters) taken at Westmont or 32 of the last 40 units for the degree taken at Westmont.
4. The general education requirements.
5. A major program.
6. At least one-half of the upper-division major requirements on the Westmont campus or on a Westmont staffed off-campus program.
7. At least 60 units outside of the major department.

All candidates must file an application for degree no later than the second semester of their junior year.

The application of certain courses to the degree program is limited as follows:

1. A maximum of 12 units of internship credit.
2. A maximum of 12 units of applied music (MUA) credit, unless the lower-division requirements for the music major have been completed, in which case there is no limit.
3. A maximum of 8 units of physical education activity courses (PEA), 1 unit of which must be "Fitness for Life" and not more than one PEA course per semester. Subsequent PEA courses in a given activity must be at a higher level. Varsity sports are considered the highest level. Varsity athletes may use the PEA class related to their sport one time to fulfill a PEA requirement and up to three additional times for unit credit toward their degree within the 8-unit maximum noted above.

4. A maximum of 12 units may be earned through approved extension courses, and 20 units through credit by examination (excluding CLEP and Advanced Placement) not to exceed a combined total of 32 units. CLEP credit may be applied to elective credit only. No student may earn credit in these ways during the final semester before graduation. Students must apply for credit by examination through the Student Records Office. See the list of fees for cost per unit. Grading is pass/no credit, unless the faculty member and student mutually agree on letter grading.
5. Concurrent enrollment (enrollment for credit at another school while enrolled at Westmont) may occasionally be permitted for program enrichment or for solving serious class scheduling conflicts under the following conditions:
  1. the student must file a petition requesting approval for concurrent enrollment in advance of enrolling in the concurrent course
  2. the student must be a full-time student (minimum 12 academic hours) at Westmont
  3. total academic load in a term must not exceed the academic load permitted at Westmont
  4. if transfer credit is expected, the suitability of the particular course must be established in advance through the normal pre-approval process in the Student Records Office
  5. the course should be commensurate with the student's program but not offered at Westmont College or the concurrent enrollment should be undertaken to solve a class scheduling problem such that a student is unable to enroll for the course in the remainder of the student's Westmont program.
6. A maximum of 8 units of Applied Studies courses (APP).
7. A maximum of 8 units of tutorials.
8. A maximum of 12 units of publication credit.
9. A maximum of 64 units of community, junior, or two-year college credit will be accepted. All such units will only be applied to lower-division requirements. Once the 64-unit maximum has been reached, no additional units will be accepted from community, junior, or two-year colleges, i.e., units taken after the 64-unit maximum has been reached may not be substituted for any of the first 64 units already taken.

## **Second Baccalaureate Degree**

A student with a bachelor's degree from another institution who pursues a second B.A. or B.S. degree will be expected to meet all of the degree requirements applicable to a transfer student. The College does not award credit for courses taken more than 25 years ago.

A Westmont graduate seeking a second bachelor's degree must meet the major requirements of a second major or minor, satisfy all general education requirements in place at the time the second degree is initiated, and complete 30 units of work beyond the first degree, 24 of which must be taken at Westmont.

## Academic Load/Student Classification

A minimum full-time course load is 12 units per semester. During the first year of college, students may be encouraged to carry only 13 units each semester while they adjust to the rigors of academic life. A schedule of 17 units during each semester of the sophomore year and 16 in the semesters of the junior and senior years will bring students to the 124 minimum units needed for graduation when all four years of college are taken at Westmont.

A maximum full-time overload is 20 units (plus 1 unit of P.E.A.) providing the student's cumulative grade point average at Westmont is at least 3.00, or at least 3.00 for the previous two terms (minimum of 12-units) at Westmont. The College does not grant permission for more than 20 units (plus 1 unit of P.E.A.).

The maximum full-time load for a student who does not meet the grade point average requirement for an academic overload (noted above) is 18 units. Students may petition for an overload of one to three units in advance of the semester stating the reason for the overload. The signature of the student's academic advisor is required. The Registrar will notify the student of approval or disapproval.

If students wish to register for courses at another institution during any academic year, such courses must be approved in advance by petition and are counted as part of the academic load. Advance approval of concurrent enrollment is also required.

Official classification is based on the number of units completed toward graduation as follows: first-year students 0-25; sophomores 26-58; juniors 59-91; seniors 92 or more.

## Major and Minor Requirements

*Majors are designed to assist students in mastering a specified field. They are not merely accumulations of credit, but integrated programs aimed at developing scholars capable of independent study and research in an academic discipline.*

Students must observe the following requirements:

1. Each degree candidate must complete requirements in one major field as prescribed by that department. Students are not required to have a minor.
2. Students must declare an academic major no later than the end of the sophomore year.
3. An average of "C" (2.0) is required for the total of all courses in the major and minor field.
4. Students must complete at least one-half of the upper-division units required in the major field at Westmont or a Westmont approved off-campus program. This requirement also applies to completing a minor at Westmont.
5. Four units of upper-division credit earned in a major may be applied to meeting the requirements of a minor. No upper-division credits may be shared by two minors. (There is no limitation on the overlap of units between two majors.)

### **Grading.** Grades reflect the quality of students' work:

A	superior
B	good
C	adequate
D	deficient
P	pass (unless otherwise specified in the syllabus, a grade of P indicates work at the D- level or better)
F and NC	indicates unacceptable scholastic performance below passing quality or unofficial withdrawal after the seventh day of the semester
W	indicates official withdrawal from a course through the ninth week of classes
WF	indicates official withdrawal from a course with failing work after the ninth week of classes. By petition only.
WP	indicates official withdrawal from a course with passing work after the ninth week of classes. By petition only.
WX	indicates unofficial withdrawal during the first seven days of the semester

Faculty assign students a grade of I (incomplete) when they merit additional time to complete course work because of circumstances beyond their control such as a serious illness, accident, or death in the family. Students must make up this grade within six weeks of the end of the term in which they received it, or it automatically changes to F (NC in the P/NC grading option).

Students have one year from the end of the semester in which a grade was reported to challenge the grade. The procedure for requesting a grade change or challenging a grade can be found on the Academic Policies and Procedures page on the Student Records Office website.

Grade points per unit of credit are assigned on the following scale:

A	4 grade points
A-	3.7 grade points
B+	3.3 grade points
B	3.0 grade points
B-	2.7 grade points
C+	2.3 grade points
C	2.0 grade points
C-	1.7 grade points
D+	1.3 grade points
D	1.0 grade points

## ACADEMIC PROGRAM

D-	0.7 grade points
P	(At least D-) No grade points assigned. Not computed in the grade point average.
F	0 grade points
NC	(F) No grade points assigned. Not computed in the grade point average.
W	No grade points assigned. Not computed in grade point average.
WF	No grade points assigned. Not computed in grade point average.
WP	No grade points assigned. Not computed in grade point average.
WX	No grade points assigned. Not computed in grade point average.

Westmont does not compute the units and grades students earned at other colleges in its grade average. (Exception: Courses and grades taken as part of a Westmont off-campus program are posted on the Westmont transcript and will be calculated in the Westmont GPA.)

Apart from the exceptions identified below, all courses at Westmont are graded using a letter scale (A, B, C, D, F).

### Instructor Initiated Exceptions:

1. For pedagogical reasons, an instructor may elect to use P/NC grade reporting in any class not approved for GE credit. It is assumed that the same grade-reporting system will be applied to the entire class.
2. With the approval of the General Education Committee, P/NC grade reporting may be used in appropriate, GE-approved courses.
3. When P/NC grade reporting is used, the syllabus must reflect this fact. In addition, departments are encouraged to include a notice in the catalog that the course may use P/NC grading.

### Student-Initiated Exceptions:

1. No student-initiated exceptions are available for courses taken to fulfill the student's GE requirements (except PEA) or required to complete the student's major/minor. Students who have completed all requirements for a major/minor, as determined by their application for degree, may request the P/NC grading option for additional course work offered in the major/minor department.
2. With the instructor's approval, the student may elect the P/NC grading option for any other elective course.
3. The deadline for changing the grading option is the end of the ninth week of classes. The student must request the change in the Student Records Office. The faculty signature will verify that the student is currently doing work at Pass level.
4. The course grade sheet will be annotated to remind the faculty member of the option chosen by the student.

5. P/NC registration is limited to four units plus one PE Activity course in any term, with a maximum of eight units and two PE Activity courses per academic year (including Mayterm).

Unless otherwise specified in the syllabus, a grade of P indicates work at the D- level or better.

Automatic F (NC)—When a student persistently neglects class assignments or has excessive absences, the faculty member may request that the student withdraw from the class or may notify the student that he or she has been terminated with a grade of F (NC) in that particular class.

At the end of the ninth week of each semester, the Student Records Office reports unsatisfactory grades (D, F or U) to deans, advisers, and students. These grades are advisory, and the College does not record them permanently. Westmont issues final grades at the close of each semester and Mayterm. The Student Records Office records final grades on students' permanent records and grade information is made available on the Web.

**Repeating Courses.** Students may only repeat courses in which grades of D, F, or NC are earned (unless the course is identified as repeatable for credit elsewhere in this catalog). Repeating a course previously passed with a D grade earns no additional units. When a course is repeated, the lower grade is dropped from the GPA calculation. However, the course and grade remain on the student's academic record (transcript). Please note that students may not repeat a course at another institution that was taken at Westmont and for which a grade of "D-" or better was received and have it transfer back to Westmont. Further, students may not replace a "D" or "F" grade that was received at Westmont by taking a similar course at another institution. A Westmont "D" or "F" grade may only be replaced by repeating the course at Westmont.

**Audit.** Students who audit classes receive no credit for those classes. They can attend lectures, participate in musical ensembles, or take private music lessons without having any responsibility for examinations, completing homework or papers, practicing a certain number of hours, or being evaluated. Audit registrations are also available for special students who wish to attend lectures for information or review. In these cases, the College assesses an audit fee. Students may change their status from credit to audit or audit to credit through the last day to register in a course for credit.

**Academic Standing.** To remain in good standing, a student must maintain a cumulative grade point average (G.P.A) of 2.0 in courses taken at Westmont and on Westmont off-campus programs.

**Probation and Suspension.** A student is automatically placed on probation if his or her cumulative G.P.A. falls below 2.00. A student on probation is automatically suspended at the end of the semester in which his or her cumulative G.P.A. remains below 2.00.

## ACADEMIC PROGRAM

Students on probation are eligible to return for another semester. Suspended students may return only if an appeal for reinstatement is granted.

Students on academic probation will be eligible to participate in athletic competition if they have a cumulative G.P.A. of at least 1.70 at the conclusion of their first semester at Westmont, providing it is their first term of attendance at an accredited college or university. Students on academic probation after their second semester at Westmont may not participate in athletic competition.

Students on academic probation must register for at least 12 units, but not more than 16 units plus 1 unit of P.E. activity. Students will be returned to good academic standing when they achieve a cumulative G.P.A. of 2.0.

***Reinstatement.*** Following academic suspension, the Admissions and Retention Committee determines whether or not to reinstate students in response to their written appeals.

***Extracurricular Eligibility.*** Students on academic probation are ineligible to run for student body offices or to participate in intercollegiate athletics except as noted above.

***Developmental Curriculum.*** Westmont takes its mission as an institution of liberal arts and sciences very seriously. We recognize the importance of the general education requirements as a foundation for other studies and believe it is important that courses be taught at a level appropriate to the preparation of students enrolled. First-year students are limited to lower division courses (those numbered below 100) during their first semester at Westmont.

***Mayterm.*** The Westmont summer session (Mayterm) begins in early May, immediately after Commencement. Mayterm classes are five weeks in duration which means that students can complete summer courses by mid-June at the latest. This is a real advantage for those who need to work during the summer. Students may enroll in a maximum of 8 units of course credit plus 1 unit of P.E.A. (if available). The list of courses is available early in the spring each year.

***Honors and Awards.*** Beginning with merit awards to qualified first-year students through graduation honors for seniors, the College grants a series of awards and honors. Most of these include grade average requirements, although several are designed to recognize talent in the fine arts, scholarly work in a specific subject area, or reflection of the ideals of the College. Semester honors (Dean's List): 3.7 minimum for 12 graded units.

Graduation honors are determined from the G.P.A. earned at Westmont and from any Westmont sponsored off-campus program: Cum laude, 3.5; Magna cum laude, 3.75; Summa cum laude, 3.90. A student must have completed a minimum of 56 units at Westmont (or a Westmont sponsored program) to be eligible for graduation honors. Graduation honors announced at commencement will be based on the cumulative G.P.A. at the conclusion of the fall semester. Graduation honors printed on the diploma and transcript will be based on the cumulative G.P.A. when all degree requirements have been completed.

***I*nternships.** Westmont is committed to excellence in education, both inside and outside the classroom. Our Internship Program is designed to complement regular academic instruction while providing first-hand application in the workplace. In order to receive academic credit for an internship, a student must register for an internship course.

Interns generally work within a 40-mile radius of Westmont College. Ideally, students who plan to earn credit for an internship should enroll in an internship course during regular registration periods (November for spring and April for fall internships). A student may earn internship credit through his or her major department or by taking the elective internship course through the Career Development & Calling Office. Courses are designated by the department prefix and with few exceptions, a “190” suffix (APP-190, BIO-190, COM-190, etc.). The zero-credit service option (APP-191SS) requires the same procedure.

Once the internship or service site has been determined, students are required to complete registration by securing approval from the site supervisor and a faculty internship adviser. To do so, the student intern submits an Internship Learning Agreement Form (ILAF) on line within the first two weeks of the semester. The on-line ILAF may be found on the student web page at [www.westmont.edu/internships](http://www.westmont.edu/internships).

Internship seminars meet regularly during the semester. The seminars allow students to process the work experience in a community of peers, hear from alumni, examine presuppositions about work, and explore Christian Calling. Students may earn Serving Society GE credit by enrolling in a *service* internship that focuses on exercising compassion while exploring an issue of justice through exposure to differences in social class, gender, ethnicity, the environment, or human disability. The internship program strives to explore ways that a Christian Liberal Arts education influences work. When experiential learning is combined with an opportunity to develop a sense of Christian Calling, the result is a transformative educational experience.

***H*onors Study/Directed Study.** Students may receive recognition of their academic aptitude and achievement by enrolling in a variety of honors programs and directed studies. Certain courses in the catalog are available only to students who meet the qualifications for honors and directed study. Students should consult the registrar or their academic advisers if they wish clarification of their eligibility.

*094/194 Tutorial* Supervised study for non-honors students.

*098/198 Research* Study of a particular problem in the library or the laboratory.

*099/199 Major Honors* Students who have achieved a 3.5 cumulative grade point average and 3.5 average in all their major courses in their first two and one-half years of undergraduate work (at Westmont and elsewhere) are eligible to apply for Major Honors. The Academic Senate Review Committee will determine whether the student is eligible for Major Honors work and whether the proposed project is appropriate for Major Honors designation. If approved, the Academic Senate Review Committee will name an honors committee to supervise each student’s study and program for the summer between the junior and senior years and the following two semesters. Principal objectives for the Major Honors candidate are preparation through extensive reading, the development of an annotated bibliography, the production of a fully documented research paper, and the passing of an oral examination on the research before the



## ACADEMIC PROGRAM

Honors Committee and guest examiners; or the completion of a scientific project preceded by a feasibility study or other appropriate preliminary research and followed by a demonstration and written summary/evaluation of the result before a three-member Honors Committee and guest examiners.

The fall study schedule of the Major Honors candidate carries two units of credit. The spring writing schedule carries from two to four units of credit, depending on the scope of the project and the desire of the candidate at mid-year.

Only Major Honors work that receives a grade of A (or A-) will result in honors in the major being conferred.

**General Education Honors.** Some general education courses are designated as honors courses. Students who wish to work at a more accelerated and higher academic level will find these courses challenging. Honors courses are open to students with a 3.50 cumulative GPA at Westmont or to new students who are President's Scholars. Provost's Scholars may petition to enroll in honors courses by contacting the Student Records Office.

**In-Course Honors.** Students who would like to undertake honors work in a regularly offered course must meet the qualifications noted below, obtain the consent of the instructor and submit an application to the Academic Senate Review Committee for approval (via the Student Records Office) no later than the second week of the semester. The application must be accompanied by an honors plan developed by the instructor for the specific course.

Students who are eligible to enroll in honors classes (Westmont cumulative GPA of 3.50 or first-year and transfer students who are President's Scholars) are eligible for in-course honors in standard courses.

If the student completes the plan for additional work and the standard class assignments with a grade of B+ (B plus) or higher the Honors designation will be applied to the course title on their transcript.

### **National Honor Societies.**

*Lambda Pi Eta:* The purpose of Lambda Pi Eta, the national honor society in communication studies, is to foster and reward outstanding scholastic achievement in the discipline and to encourage continuing intellectual growth in communication studies. Students are invited to join when they are ranked in the top 30% of the junior or senior class, and have demonstrated high standards of personal and professional character.

*Omicron Delta Epsilon:* Omicron Delta Epsilon is the International Honor Society in Economics. Its objectives include the recognition of scholastic achievement in economics by students; the opportunity for student research in economics to be disseminated and published through professional conferences and the journal *The American Economist*; and an emphasis on the professional aspects of economics as a field of service in business, government, the academy, and international organizations. The *Alpha Pi* chapter of ODE at Westmont seeks to foster student growth in economic scholarship through student research presentations, lectures by guest speakers, and mentoring by faculty. To be received into membership, students must have achieved high academic standards in either a major or minor in economics.

*Omicron Delta Kappa:* A circle of Omicron Delta Kappa, National Leadership Honor Society for college men and women, was established at Westmont in 1972. Students are eligible for membership in the Westmont circle when they rank among the upper 35% of the junior or senior class academically. They must also provide significant leadership in at least one of five areas: scholarship; athletics; social service, and religious activities and campus government; journalism, speech, and mass media; and the creative and performing arts. When they began the Society in 1914, the founders intended to bring together outstanding students, faculty, and administrators on a basis of mutual interest. So the local circle also elects faculty and administrators to membership. The activities of Westmont's circle are varied, and may include forums on campus concerning community or national issues. Each year the circle selects and honors an outstanding first-year student leader.

*Phi Alpha Theta:* Phi Alpha Theta is the national honor society in history. The Westmont chapter, established in 2010, encourages historians—faculty and students alike—to share their research and ideas on the past. It promotes excellence in the study and teaching of history through lectures and other events. Members benefit not only from activities at Westmont but also from Phi Alpha Theta's conferences, grants, and journal (*The Historian*). To be considered for membership, a student must complete 12 semester hours in history but need not be a history major.

*Phi Kappa Phi:* The National Honor Society of Phi Kappa Phi seeks to recognize and encourage superior scholarship in all academic disciplines. The Westmont College chapter, established in 1976, is one of over 200 chapters nationwide. Students are eligible for membership when they have senior status and are in the upper 10% of their class, or when they have reached the final period of their junior year and are in the upper five percent of their class scholastically. The Westmont chapter awards a scholarship to the male and female sophomore students with the highest cumulative grade point averages. The chapter also sponsors a lectureship each semester by a member of the Westmont faculty.

*Phi Sigma Tau:* Phi Sigma Tau is the national honor society in philosophy. Its central purpose is to serve as a means of awarding distinction to students having high scholarship and personal interest in philosophy, to provide opportunities for the publication of student research papers of merit, and to popularize interest in philosophy among the general collegiate public. To be received into membership, a student shall have attained standards of high scholarship in philosophy, but need not be a major.

*Pi Sigma Alpha:* Phi Sigma Alpha, the national political science honor society, stimulates scholarship and intellectual interest in political science. Westmont's chapter honors academic excellence among political science majors and provides a forum for student discussion and guest lectures.

*Psi Chi:* The purpose of Psi Chi, the international honor society in psychology, is to encourage and stimulate excellence in students' scholarship and professional growth, as well as further the science of pPsychology. Students who are majors or minors in

## ACADEMIC PROGRAM

psychology, demonstrate superior scholarship in Psychology and their overall academic program, and have high standards of personal behavior are eligible to join Psi Chi. The Westmont College chapter was established in 1995.

*Sigma Delta Pi:* The central purpose of Sigma Delta Pi, the National Collegiate Hispanic Honor Society, is to honor those who seek and attain excellence in the study of the Spanish language and Hispanic literature and culture. To become a member, students must demonstrate superior scholarship in Spanish and overall, show a genuine interest in things Hispanic, and be of good moral character.

*Sigma Tau Delta:* Sigma Tau Delta is the International English Honor Society. The purposes of the Society are (a) to confer distinction for high achievement in the study of English language and literature; (b) to promote interest in literature and the English language; and (c) to foster the discipline of English in all its aspects, including creative and critical writing.

**Awards.** *The Faculty Scholarship Award* is presented each year to the graduating senior(s) attaining the highest cumulative record of scholarship at the conclusion of the fall semester before spring graduation. To be eligible for consideration, a minimum of 56 units must have been completed at Westmont (or a Westmont sponsored program) at the conclusion of the fall semester prior to graduation.

*The Dean's Award* is given to the outstanding male and female graduates who have demonstrated excellence in the classroom, made superior contributions to an intercollegiate athletic team, and evidenced a deep faith in Christ.

*The Dave Dolan Award* is given to the outstanding graduate whose campus leadership has made significant contributions in our awareness and response to the social and spiritual needs of the community, the nation and the world.

*The Kenneth Monroe Award* is given to the outstanding male and female graduates who have demonstrated superior academic achievement in the classroom, excelled as leaders on campus, and impacted other students' lives through their integrity, character, and faithfulness.

# Curriculum

*To* implement an academic philosophy designed to meet the needs of individual students, Westmont offers a curriculum that includes a broad spectrum of disciplines. Students study under a faculty deeply committed to research and scholarly activity as well as to personalized teaching.

The following pages feature descriptions of Westmont's majors, programs, and courses. They reflect the College's conviction that its curriculum must be comprehensive in nature yet specific enough to promote a breadth of perception and a depth of understanding.

Within the framework of a strong liberal arts emphasis, Westmont provides opportunities for students to build a foundation for specialized education and to expand vocational horizons.

**Important Note:** Prerequisites may be met by an equivalent transfer course, as determined by the Student Records Office and/or the academic department chair. Students who do not meet prerequisite requirements may be allowed to register for a class if they obtain consent of the instructor, i.e., instructor permission on WebAdvisor or an instructor's signature on an add/drop form.

## Majors and Programs

Interdisciplinary Studies (B.A., B.S.)	History (B.A.)
Art (B.A.)	Kinesiology (B.S.)
Art History (B.A.)	Liberal Studies (B.A.)
Biology (B.S., B.A.)	Mathematics (B.S., B.A.)
Chemistry (B.S., B.A.)	Music (B.A.)
Communication Studies (B.A.)	Music Education (B.M.E.)
Computer Science (B.S., B.A.)	Philosophy (B.A.)
Economics and Business (B.A.)	Physics (B.S., B.A.)
Education Program	Political Science (B.A.)
Elementary Credential Program	Psychology (B.S., B.A.)
Secondary Credential Program	Religious Studies (B.A.)
Engineering Physics (B.S., B.A.)	Social Science (B.A.)
English (B.A.)	Sociology (B.A.)
English—Modern Languages (B.A.)	Spanish (B.A.)
European Studies (B.A.)	Theatre Arts (B.A.)
French (B.A.)	

# Interdisciplinary Major

Westmont College offers twenty-eight departmental and interdepartmental majors. In addition to these officially approved majors, a student who has a particular interest or goal may wish to construct an interdisciplinary major and submit it for approval. The following guidelines should be followed:

1. The proposal specifying the title and degree (BA or BS General) must be submitted at least three full semesters prior to graduation.
2. The student must secure a faculty sponsor who can endorse what is proposed as a major and who will attach a letter of support to the proposal described below and will serve as the student's academic advisor.
3. The written proposal should be submitted through the faculty member to the Registrar for the Academic Senate Review Committees consideration.
4. When the title of the proposed major implies competency in a discipline, the student must consult with the corresponding department and secure signed approval from the chair.
5. The proposal should explain the coherence, breadth, and depth of the major being presented. Students are expected to demonstrate how the courses fit together logically; how they cover the essential components of the field of study; and how they would provide mastery of a body of material comparable in scope to other majors Westmont offers. (It may be helpful—though not required—to show that the courses proposed would constitute a major at other institutions.)
6. The courses in the proposed Major should be available at Westmont.
7. Tutorial units should be limited in number according to the Academic Policies and Procedures
8. Major Honors courses may be included in the major proposal, but the Major Honors project must be approved separately by the appropriate committees.
9. Total units for the major, the distribution of units between lower and upper division, and limits on transfer units in the major should be within the normal range for existing majors.
10. In cases where there is standing student and faculty interest but uncertain availability of courses, the full Academic Senate may approve an interdisciplinary major template submitted by a member of the faculty. Proposals conforming to the template need not include an analysis of the coherence, breadth and depth of the proposed major. Applications will be approved by the Registrar subject to verification of course availability.
11. Aside from approved templates, no appeal may be made to precedent; each application is unique and individual.

# Applied Studies

A maximum of 8 units of applied studies courses (APP) will be credited towards graduation degree requirements.

## Lower-Division Course Descriptions

**APP 002 Successful Scholars Seminar** (0) A non-credit workshop focusing on learning college resources and developing appropriate study skills and time management for the college environment. Appropriate for students at any grade level.

**APP 062 Leadership Skills/Fieldwork** (1) Based on the premise that leadership is a learned skill, students examine personal and interpersonal skills needed to be effective leaders (e.g., personal leadership style, commitment, collaboration, common purpose, problem-solving, conflict resolution, negotiation, team building, effective presentation skills). Each student is required to participate in a mentoring relationship. (To be taken while serving in some leadership capacity.)

**APP 070 Career Sports Broadcasting Practicum** (1) This course provides an experimental learning opportunity and is focused upon the on-air broadcasting of Westmont Athletic events. Students will serve as both play-by-play commentators and broadcast analysts for the productions. The course offers growth opportunities for participants in research skills, conducting interviews, public speaking, public relations and working in a team environment with other broadcasters and student producers. Broadcast industry professionals will supplement the student's learning through a mentoring relationship which will include instruction, review of broadcasts and feedback. The course may be taken a maximum of four semesters. The course is offered on a Pass/No Credit (P/NC) basis.

**APP 080 Career and Life Planning** (1) Prerequisite: Sophomore standing. Designed to help students understand: (1) the occupational "landscape" in terms of changes in the way work is done and the shifting contexts in which it takes place, (2) the correlation between their key characteristics (personality, interests, skills, work-related values) and choices of career options, and (3) the ways in which those key characteristics are communicated to potential employers (through job search, interviewing, resume).

**APP 085 Foundation of Residential Life** (2) This semester-long required course for Resident Assistants explores the dynamic role Resident Assistants play as facilitators of community at Westmont College. The course will challenge students to examine their unique role as a facilitator of a redemptive community of learners. Particular focus will be given to an understanding of individual and community development in the context of the college community. Students will have the opportunity to gain a better understanding of the purpose and goals of residential living at Westmont College, and develop a greater understanding of community leadership.

**APP 090 The Inoculum: Wilderness/Orientation** (1) A 10-day to two-week mountain wilderness trek in the Yosemite High Sierras offered prior to fall semester. Faculty and wilderness leaders join to create a rigorous program of wilderness activities while examining the nature of a Christian liberal arts and

sciences education at Westmont. Students engage in backpacking, rock climbing, peak climbing, and navigation with map and compass. Readings, discussions, and papers aid students in more fully understanding their purpose in attending Westmont. Participants also receive 1 unit of PEA credit.

## Upper-Division Course Descriptions

**APP 168 Student Publications: Horizon** (1-4) Semester-long course of experiential learning in news writing, and perhaps in editing, page layout and production of a student newspaper. The editor-in-chief may receive 4 units per semester, section editors may receive 2 units per semester, and other staff may receive 1 unit per semester. P/NC grading only.

**APP 170 Student Publications: Citadel** (1-4) Semester-long course of experiential learning in the design and production of Westmont's yearbook. Course includes writing, editing, photography and page layout using InDesign, Illustrator, and Photoshop. The Editor-in-Chief may receive 2 units of credit and Editors may receive 1 unit of credit. This course is offered in the Fall and Spring semesters.

**APP 190 Internship** (1-4) Open to all majors for upper division, elective credit. Designed for students exploring a field outside of their major or for those whose major department does not offer an internship seminar. Supervised work experience through local public, private, or government agencies, businesses, medical facilities, schools, non-profits, churches, or parachurch organizations. Concurrent, mandatory seminar meets one hour per week over the course of the semester. Internship is supervised by a professional in the field. Course is facilitated by a faculty adviser.

**APP 190SS Service Internship** (1-4) APP-190SS Open to all majors. Supervised work experience involving a service project, response to a social problem and/or the exploration of an issue of justice. Possible work settings include public, private, or government agencies, businesses, medical facilities, schools, non-profits, churches or Para church organizations. Concurrent, mandatory seminar meets bi-weekly over the course of the semester. Supervised by a professional in the field and the seminar instructor.

**APP 191SS Serving Society** (0) A minimum of 12 hours of community service at an approved site over the course of the semester. Mandatory orientation, assigned reading, paper, and mid-term conference. The student's hours are documented and his or her service is evaluated by a supervisor in the community. P/NC grading only.

**APP 192 Service Experience Seminar** (1) Prerequisite: Consent of the Instructor. Preparation for and reflection on a service-oriented field experience. P/NC grading. Not available through the Internship Office.

# Art

*R. Anthony Askew Chair of Art History, Director of the Westmont Museum of Art, Professor J. Larson*

*Professors S. Anderson, L. De Boer (Chair)*

*Assistant Professors N.Huff, M. Stirling*

**Description of the Major.** The art department at Westmont helps students discover and develop their creativity and become attentive to the power of the visual arts in our world. The creation of artwork engages a conversation. Each contributor brings what he or she can to the conversation, and ultimately the experience provides a channel for self-expression. A vision of the importance of the arts for a Christian liberal education forms the center of Westmont's traditionally based academic program. The program pushes for self-understanding and the realization that art forms add strength to one's worldview. Emphasizing basics and breadth, attention is given to the development of ideas and to the realm of problem solving as students learn to utilize media as tools for expression. Attention is also given to the importance of asking philosophical questions so that meaning can be achieved and experiences can be interpreted. Students begin with foundation courses in the principles of art and its history, which provides the context for continued exploration of 2-D (design, drawing, graphic design, painting, printmaking, illustration and photography) and 3-D (ceramics, sculpture, and crafts) media. In studio courses students receive individualized instruction and are challenged to develop both competency in a given medium, and creativity in working with and responding to that medium. Attention to careful work habits, diligence, and patience is valued. In art history courses, students are challenged to understand the visual arts as a dynamic, powerful domain of human culture. Both studio and art history courses stimulate critical thinking and intellectual curiosity about the visual realm.

**Distinctive Features.** Students who engage the artistic process and the objects that result, and who consider the past and present roles of those objects in our world, will learn the skills, attitudes, and affections essential to becoming discerning participants in contemporary culture. The faculty and staff, an on-site museum and gallery space, regular lectures and exhibits by visiting artists, a dedicated community-based arts council, off-campus study opportunities, and the vibrant art scene in Santa Barbara, all make this a rich community for students interested in learning through the visual arts.

**Off-Campus Programs.** The art department recognizes the importance of off-campus educational experiences. Art majors are strongly encouraged to experience the diversity and cultural impact of studying in another country or in another setting. The Art Department endorses five off-campus programs: Westmont in San Francisco; IAU Aix-en-Provence, Studio Art Centers International in Florence, Italy; University of Georgia's Cortona, Italy Program; Gordon College's program in Orvieto, Italy. Students who want to pursue an off-campus semester during their sophomore or junior year must begin the application process one year in advance of the



intended study opportunity. Senior Art majors are required to be on campus their entire senior year for the year-long course progression of Senior Seminar and Senior Project. Each student is encouraged to meet with his or her advisor and the Office of Off-Campus Programs for planning assistance.

**Career Choices.** One of the goals of Westmont's art program is to guide students in becoming artists of integrity. Westmont's art program has been instrumental in directing students to specific careers as artists, art historians, and art teachers. With additional training, our majors are able to pursue careers in graphic design, illustration, interior design, museum work, the academy and many other specialties. Potential employers appreciate the creative problem-solving skills that art majors develop and nurture during their course of study at Westmont. The flexibility, intellectual engagement, reasoning, and risk-taking attributes inherent in art training provide a solid basis for employment in numerous professional fields.

Students wishing to teach at the high school level or junior high level are encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, as well as with their departmental advisor. Students wishing to complete the secondary education credential program are also urged to make use of the advising materials available on the departmental webpage.

## Requirements for a Studio Major: 57 units

### General Studio Track

#### Required Basic Core: 41 units

- ART 010 2-D Design (4)
- ART 015 Drawing I (4)
- ART 065 Digital Tools (4)
- ART 070 3-D Sculptural Explorations (4)
- ART 093 Sophomore Project (1)
- ART 110 4-D Intermedia (4)
- ART 115 Drawing II (4)
- One of the following: (4)*
  - ART 021 Art History: Prehistoric to Gothic (4)
  - ART 022 Art History: Renaissance to Modern (4)
- ART 128 Modern and Contemporary Art (4)
- ART 131 Theory and Criticism in the Arts (4)
- ART 193 Senior Project (2)
- ART 195 Senior Seminar (2)

#### Studio Electives from the following: 16 units

- ART 001 Principles of Art (4)
- ART 029 Studio Art Topics (4)
- ART 040 Ceramics I (4)
- ART 041 Interpretive Crafts I (4)
- ART 045 Photography I (4)
- ART 050 Painting I (4)

*At least one of which must be upper division*

ART 140 Ceramics II (4)

ART 141 Interpretive Crafts II (4)

ART 145 Photography II (4)

ART 150 Painting II (4)

ART 151 Illustration (4)

ART 161 Printmaking: Relief and Intaglio (4)

ART 162 Printmaking: Lithography and Serigraphy (4)

ART 165 Digital Painting (4)

ART 167 Publication Design (4)

ART 170 Stone Sculpture (4)

## Preparation for Teaching Art

Students wishing to teach art at the elementary or secondary level should follow the requirements for the Studio Art major above. In addition, in order to complete a fifth-year Credential Program at Westmont, students should also complete four or more of the following prior to applying to the program.

1. KNS 156 Health Education for the Classroom Teacher (2)
2. ENG 106 Language Acquisition (4)
3. ED 101 Explorations in Teaching: Secondary (4)
4. ED 105 Perspectives on Cultural Diversity and Education (4)
5. ED 130 Special Education for the Classroom Teacher (2)
6. ED 161 Computers for the Classroom Teacher: Secondary (2)

In many cases, it is possible to complete requirements for the major and the Westmont Credential Program in four years. Such a “fast-track” program requires early planning.

All students wishing to explore secondary teaching are strongly encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, in addition to their major advisor.

## Requirements for Studio Art Minor: 25 units

Basic Required Core (13 units)

ART 010 2-D Design (4)

ART 015 Drawing I (4)

ART 093 Sophomore Project (1)

*One of the following:* (4)

ART 021 Art History: Prehistoric to Gothic (4)

ART 022 Art History: Renaissance to Modern (4)

ART 023 Introduction to World Art (4)

ART 124 Italian Renaissance Art (4)

ART 128 Modern and Contemporary Art (4)

IS 123, 126, or 128 Europe Semester - (4)

*Elective Courses:* (at least 12 units)

ART 001 Principles of Art (4)

## ART

ART 040 Ceramics I (4)  
ART 041 Interpretive Crafts I (4)  
ART 045 Photography I (4)  
ART 050 Painting I (4)  
ART 065 Digital Tools (4)  
ART 070 3-D Sculptural Explorations (4)  
ART 110 4-D Intermedia (4)  
ART 115 Drawing II (4)  
ART 140 Ceramics II (4)  
ART 141 Interpretive Crafts II (4)  
ART 145 Photography II (4)  
ART 150 Painting II (4)  
ART 151 Illustration (4)  
ART 161 Printmaking: Relief and Intaglio (4)  
ART 162 Printmaking: Lithography and Serigraphy (4)  
ART 165 Digital Painting (4)  
ART 167 Publication Design (4)  
ART 170 Stone Sculpture (4)  
ART 180 Art For Children (4)

## Requirements for Art History Major: 49 units

### Required Basic Core: 17 units

ART 010 2-D Design (4)  
ART 015 Drawing I (4)  
ART 093 Sophomore Project (1)  
ART 131 Theory and Criticism in the Arts (4)  
HIS 198 Historical Method/Research (4)

### Lower Division Electives: 8 units

*Two of the following:*

ART 021 Art History: Prehistoric to Gothic (4)  
ART 022 Art History: Renaissance to Modern (4)  
ART 023 Introduction to World Art (4)  
IS 123, 126, or 128 Europe Semester (4)

### Upper Division Electives: 24 units

*At least five of the following:*

ART 124 Italian Renaissance Art (4)  
ART 125 Northern Renaissance Art (4)  
ART 126 Seventeenth Century Art (4)  
ART 127 Nineteenth Century Art (4)  
ART 128 Modern and Contemporary Art (4)  
ART 129 Special Topics in the History of Art (4)  
ART 132 Museum Studies (4)  
ART 133 Art, Theology and Worship (4)

*One of the following:*

ENG 101 Film Studies (4)

PHI 189 Aesthetics (4)  
 AN 145 Culture Theory (4)

## Requirements for Art History Minor: 24 units

*Two of the following:* (8)

ART 021 Art History: Prehistoric to Gothic (4)  
 ART 022 Art History: Renaissance to Modern (4)  
 ART 023 Introduction to World Art (4)  
 IS 123, 126, or 128 Europe Semester (4)

*Four of the following:* (16)

ART 124 Italian Renaissance Art (4)  
 ART 125 Northern Renaissance Art (4)  
 ART 126 Art of Early Modern Europe (4)  
 ART 127 Nineteenth Century Art (4)  
 ART 128 Modern and Contemporary Art (4)  
 ART 129 Special Topics in the History of Art (4)  
 ART 131 Theory and Criticism in the Arts (4)  
 ART 132 Museum Studies (4)  
 ART 133 Art, Theology and Worship (4)

## Lower-Division Course Descriptions

Prerequisites MAY be waived in some lower-division ART courses for those students who desire a studio experience but have not had foundational art courses at Westmont. Students who do not meet prerequisite requirements MAY be allowed to register for a class if they obtain consent of the instructor and the instructor's signature on a registration form or add/drop form.

**ART 001 Principles of Art (4)** A foundational course in the study of the basic elements of art (line, shape, color, value, texture, space) and art styles through formal analysis and their relationship to intellectual, aesthetic, and historical engagement. Includes a comprehensive hands-on studio component. Recommended for non-majors.

**ART 010 2-D Design (4)** A study of the application of the formal principles and elements of 2-D design through the process of problem solving. Intense investigation in looking, seeing and making.

**ART 015 Drawing I (4)** A study in the process of drawing using a variety of media in specific assignments. Emphasis is placed on learning to see, and the development of technical and interpretive skills.

**ART 021 Art History: Prehistoric to Gothic (4)** An investigation of development of architecture, sculpture, and two-dimensional imagery in the Mediterranean Basin and Europe from pre-historic through the Middle Ages, with particular attention to the ethical issues raised by the interpretive methods--archaeological, anthropological and art-historical--used to understand their use and significance.

**ART 022 Art History: Renaissance to Modern (4)** An investigation of European and New World painting, sculpture and architecture with particular attention to the development of Western notions of “artist,” “art,” and “the aesthetic,” the corresponding emergence of the discipline of art history, and the ways in which that history enables and limits artistic practice.

**ART 023 Introduction to World Art (4)** A comparative study of the forms and cultural contexts of architecture, sculpture, painting, metalwork, ceramics, and performances from Asia, Africa, Oceania and the Americas, with particular attention to how conventional, Western art historical frameworks and methods serve, or fail to serve, an ethical understanding of non-Western objects.

**ART 029 Studio Art Topics (4)** Various courses in specific media/technique explorations; offered intermittently. See professors for upcoming offerings.

## Upper-Division Course Descriptions

**ART 110 4-D Intermedia (4)** Prerequisite: ART 010. Intermediate and advanced 4-D design problems, including time-based media, performance, video/sound and other interdisciplinary mediums.

**ART 115 Drawing II (4)** Prerequisite: ART 015. Advanced drawing problems for the serious visual art student. Emphasis on composition, development of technical abilities, and conceptual growth. Special emphasis is placed on drawing the human figure. Course may be repeated for elective credit.

**ART 124 Italian Renaissance Art (4)** Prerequisite: ART 021, 022, or 023. A study of the painting, sculpture and architecture of Italy from the 14th to the 16th centuries. This course is designed to help students understand why the arts of the Italian Renaissance have become the basis of the artistic tradition of the West.

**ART 125 Northern Renaissance Art (4)** Prerequisite: ART 021, 022, or 023. A study of the visual arts in the Low Countries (modern Belgium and the Netherlands) and Germany in the centuries of Renaissance and Reformation. A major theme will be the new uses of art afforded by new media: oil paint and print.

**ART 126 Seventeenth Century Art (4)** Prerequisite: ART 021, 022, or 023. A study of the arts of 17th century Europe, with particular emphasis on Italy, Spain, and the Low Countries. A major theme concerns the role played by the visual arts in developing ideas of absolute monarchy, and in facilitating European expansion.

**ART 127 Nineteenth Century Art: Origins of Modernism (4)** Prerequisite: ART 021, 022, or 023. An art historical investigation of shifting styles and understandings of art from the late 18th to the 19th century, with an emphasis on painting in Paris and the emergence of “modernism” in that milieu.

**ART 128 Modern and Contemporary Art (4)** Prerequisite: ART 021, 022, or 023. A study of art from the early 20th century to the early 21st century, with an emphasis on the social and intellectual institutions that have defined the parameters, uses and values we ascribe to the arts in contemporary culture.

**ART 129 Special Topics in the History of Art** (4) Prerequisite: ART 021, 022, or 023. An historical investigation of a specific art issue, artist, or monument, chosen by the professor. This course may be repeated for credit.

**ART 131 Theory and Criticism in the Arts** (4) An exploration into theories in the arts (including theatre, music, and the visual art) with an emphasis on the historical trajectory of these theories in the West, and a critical examination of their relevance for contemporary arts criticism.

**ART 132 Museum Studies** (4) An introduction to museums, galleries, historic sites, and other cultural institutions that interpret and exhibit material culture. Readings and field trips will expose students to the history of museums with in-depth discussions about the changing role of museums in contemporary culture. Students will receive practical experience in the day to day operations of museums from planning an exhibition schedule to the proper identification and handling of objects.

**ART 133/RS 133 Art, Theology and Worship** (4) A study of the arts in Christian worship with a particular emphasis on the visual arts. Within a broadly historical framework, this course invites students to consider the roles that the arts have played in worship, to understand the range of theological and doctrinal understandings that have been used to interpret and support their use, and to become sensitive to the social and economic circumstances that are also involved.

**ART 180 Art for Children** (4) Prerequisite: Priority given to liberal studies majors. This course provides ideas and tools for instruction in art for prospective elementary school teachers. Students develop a continuum of lessons to enhance a child's understanding of line, color, space, form, and texture, as well as the implementation of The California State Visual Arts Standards.

**ART 190 Art Internship** (1) A specifically school-site-related experience for Art 180 students.

**ART 193 Senior Project** (2) Prerequisite: Senior standing. Advanced study in applied art culminating in a public exhibition.

**ART 195 Senior Seminar** (2) Prerequisite: Senior standing, ART 193. A capstone course for the major involving advanced study, reading and research in a selected topic related to the student's emphasis. Additional supportive topics for discussion, implementation, and preparation for the culminating public exhibition are included.

## Applied Art—Lower-Division Course Descriptions

**ART 040 Ceramics I** (4) An introduction to clay, glazes, firing, and studio procedures through the production of varied hand-built and wheel-thrown projects. Emphasis is on basic and classic forms.

**ART 041 Interpretive Crafts I** (4) Introductory studies in several universal craft forms, their histories and functions. Emphasis is on the processes inherent in resist-dyed textiles, masks, paper-making, book-making and their contemporary applications, as well as 3-dimensional applications in additional combined media. Limited to 10 students.

**ART 045 Photography I** (4) Prerequisite: ART 001 or ART 010 or ART 015. This course is intended to provide a basic introduction to the art of photography. Emphasis will be placed on operating the digital camera, and mastering compositional design. There are no darkroom projects in the class. A digital single-lens reflex camera is required.

**ART 050 Painting I** (4) Prerequisite: ART 010 or ART 015. An introduction to the materials and processes of oil painting. Representational and investigations are emphasized.

**ART 065 Digital Tools** (4) An introduction to computer graphics and foundational digital skills for the contemporary artist, using the Macintosh OS X system. Programs covered include Adobe Illustrator, Photoshop, InDesign and Keynote. Lecture and lab time comprise the course. ART 10 or basic design background is helpful but not required.

**ART 070 3-D Sculptural Explorations** (4) An introduction to basic 3-D sculptural approaches and mold-making. Investigations include additive and subtractive processes in clay, plaster, wood, and stone.

**ART 093 Sophomore Project** (1) Prerequisite: Sophomore standing. An independent project designed to prepare students for the senior project. Successful completion of this project, before the senior year, constitutes commitment and stability in the major.

## Applied Art—Upper-Division Course Descriptions

**ART 140 Ceramics II** (4) Prerequisite: ART 040. Intermediate and advanced work in clay, glazes, firing, and studio procedures through the production of varied hand-built and wheel-thrown projects.

**ART 141 Interpretive Crafts II** (4) Prerequisite: ART 041. Intermediate studies in three or four universal craft forms. An extension of Crafts I with focused, personalized study in textiles, mask-making, paper-making, book-making and their contemporary applications. Limited to 10 students.

**ART 145 Photography II** (4) Prerequisite: ART 045. A continued study of the art of photography. Emphasis will be in B/W film and B/W wet printing. The class will introduce darkroom techniques, while fine-tuning technical camera skills and composition. Single-lens reflex film camera required.

**ART 150 Painting II** (4) Prerequisite: ART 050. Intermediate-level painting study. Emphasis on personal growth, development of technical ability, and conceptual awareness. Experimental representational perspectives are offered.

**ART 151 Illustration** (4) Prerequisites: ART-010 or ART 015 or permission of instructor. Advanced studio course dedicated to the applied art of illustration. Projects will encompass a range of approaches and media to connect conceptual thinking to visual metaphorical solutions. Emphasis on development of advanced drawing and compositional skills as well as student's personal artistic voice.

**ART 161 Printmaking: Relief and Intaglio** (4) Prerequisite: ART 010 or ART 015. An introduction to matrix based art making. Students will explore relief and intaglio processes focusing on the practices and skills unique to the discipline.

**ART 162 Printmaking: Lithography and Serigraphy** (4) Prerequisite: ART 010 or ART 015. Students will explore the planographic processes of stone lithography and plate lithography, as well as non-toxic screenprinting. Students will produce a cohesive body of work for discussion and display.

**ART 165 Digital Painting** (4) Prerequisite: ART 065. Intermediate and advanced projects in digital painting and imaging.

**ART 167 Publication Design** (4) Prerequisite: ART 065. An introduction to the fundamentals of graphic design using the page-layout program Adobe InDesign, in addition to Photoshop and Illustrator. Emphasis will be on software mastery, typography, page design, and pre-press. Students will complete several projects including brochures, posters and book design. Understanding the process of taking a project from concept to finished printed piece will be a key goal.

**ART 170 Stone Sculpture** (4) Prerequisite: ART 070. Advanced techniques in three-dimensional stone carving. A continuation and expansion of 3-D Sculptural Explorations.



# Biology

*T.B. Walker Chair in the Natural & Behavioral Sciences, Distinguished*

*Professor J. Schloss*

*Professor E. McQuade*

*Associate Professors B. Horvath, S. Julio (chair),*

*Assistant Professor A. Sparkman*

**Description of the Major.** The Biology major at Westmont equips students for the rewarding and challenging professions related to laboratory, environmental, and medical studies. It also cultivates the knowledgeable care and appreciation of the living world as a means of developing a fuller appreciation of God.

There are several components of the Biology program: a schedule of required and elective coursework emphasizing biological concepts at the molecular, cellular, organismal, and ecosystem levels; a laboratory program involving student investigations with opportunities for individual laboratory or field research; and a senior seminar series in which each student develops work on a topic in the biological literature and on an issue of bioethics.

The Biology program emphasizes conceptual understanding, laboratory techniques, field methods, written and oral communication skills, competency in information processing and computer analysis, and informed sensitivity to issues involving biology, ethics, culture, and faith.

Several options are available within the major. The B.A. is designed for those choosing a biology major who wish to maintain a high level of involvement in other disciplines. The B.A. in Biology is common for those entering the health sciences, and for those double-majoring.

The B.S. includes three tracks, each of which is well-suited for those who wish to pursue graduate studies. The General Track affords a comprehensive study of biology that spans the molecular to the environment, exposing students to a wide breadth of disciplinary routes. The Cellular and Molecular Biology Track is designed for those planning to study fields including biotechnology, pharmacology, laboratory research, education, and burgeoning areas such as genomics and bioinformatics. The Ecology, Evolution and Natural History Track is designed for those who might want to pursue ecological and/or evolutionary research, environmental education, environmental consulting, museum collections, or resource conservation and management.

Additional information about the major or the premedical program is available on the Biology web site, <<http://www.westmont.edu/departments/biology>>.

**Distinctive Features.** The traditional disciplinary content is enhanced by discussion of ethical and social implications of biology (e.g. genetic engineering and biomedical ethics, world hunger and environmental stewardship, human nature and origins). Students are provided the personal support and intellectual tools necessary to develop mature and reasoned approaches to relating scientific and scriptural perspectives on these emerging issues.

Students have the opportunity to engage in laboratory and field research, and internships under the supervision of faculty or associated personnel. These opportunities include research laboratories at the College, field study in the region,

internships in local medical clinics or internships at the Santa Barbara Zoo, Museum of Natural History or Botanic Garden.

Students in the Biology program have direct access to contemporary instrumentation for studies in physiological ecology, environmental biophysics, molecular biology, cell biology, immunology, physiology, biochemistry and computational biology. These instruments are used throughout one's upper-division coursework, and may be used for individual and directed study.

Nearby resources for field biology include the Los Padres National Forest and local marine, river, and lake habitats. Desert, alpine, and coniferous forest ecosystems are within driving distance. Students may also take ecological coursework in the Pacific Northwest or, Michigan northwoods. At our AuSable Institute for Environmental Studies, in our tropical cloudforest Mayterm and semester programs in Costa Rica, or in the Creation Care Studies Program in Belize or New Zealand. Additional opportunities for an off-campus semester are available through the College, and can be planned into the schedule of any track within the Biology major.

**Career Choices.** Some of the fields recent biology students have entered include medicine, dentistry, veterinary medicine, law, biotechnology, graduate study, teaching at secondary and collegiate levels, physician assistant, public health, nursing, third-world development, agriculture, environmental monitoring, laboratory research, environmental education, pharmacology, fisheries industry, occupational therapy, and full-time missionary work.

## Requirements for a B.A. Major: 48 units

The bachelor of arts major in biology consists of lower- and upper-division course work in biology and supporting physical sciences and mathematics. The program is designed for students who wish to obtain a strong preparation in biology, while also obtaining a broader exposure to courses outside the major than is generally possible with a bachelor of science degree.

### Required Lower-Division Courses: 20 units

BIO 005, 006 General Biology I, II (4,4)

*Additional courses to be chosen from the following:*

CHM 005, 006 General Chemistry I, II (4,4)

MA 005 Introduction to Statistics (4)

MA 009, 010 Elementary Calculus I, II (4,4)

MA 015 Discrete Mathematics (4)

PHY 011, 013 Physics for Life Sciences I, II (4,4)

PHY 021, 023 General Physics I, II (4,4)

### Required Upper-Division Courses: 20 units

BIO 114 Genetics (4)

*At least three additional upper-division biology lab or field courses (12)*

*One of the following: (4)*

Upper-division BIO Elective (4)

CHM 101, 102 Organic Chemistry I, II (4,4)

PSY 125 Behavioral Neuroscience (4)

### Additional Courses, either Lower- or Upper-Division: 8 units

## BIOLOGY

Courses in the natural sciences chosen from the BIO listings or from the courses listed above.

### *Integrative Course*

One course, included among the above requirements, which integrates biology with theological and ethical issues. Courses offered by the department which satisfy this requirement are:

- BIO 196 Bioethics Seminar (1)
- BIO 197 Biology and Faith (4)
- BIO 124 Biology, Values, and the Developing World (4)

## **Requirements for a B.S. Major: 64 units**

The biology department offers three options leading to a bachelor of science degree in biology—a general track providing a comprehensive introduction to all areas of biology, a more specialized track emphasizing cellular and molecular biology and a track emphasizing ecology, evolution, and natural history. Each track is comprised of lower-division courses in biology, mathematics, and physical sciences, plus a variety of required and elective upper-division courses.

### **General Biology Track: 64 units**

#### **Supporting Science Courses: 20 units**

CHM 005, 006 General Chemistry I, II (4,4)

*One Math course, from the following:* (4)

MA 005 Introduction to Statistics (4)

MA 009 Elementary Calculus (4)

MA 015 Discrete Mathematics (4)

CS 010 Introduction to Computer Science (4)

*Additional courses in chemistry, mathematics, or physics* (8)

#### **Required Biology Courses: 26-29 units**

BIO 005, 006 General Biology I, II (4,4)

BIO 114 Genetics (4)

*One course from each of the following three areas:* (12)

Cellular and Molecular Biology

BIO 113 Biochemistry (4)

BIO 130 Cell Biology (4)

BIO 132 Molecular Biology (4)

Organismal Biology

BIO 102 Physiology (4)

BIO 108 Animal Diversity (4)

BIO 110 Microbiology (4)

BIO 142 Marine Mammal Ecophysiology (4)

Population Biology

BIO 104 Marine Biology (4)

BIO 120 Behavioral Ecology (4)

BIO 125 General Ecology (4)

BIO 126 Animal Ecology (4) (AuSable)

BIO 128 Physiological Ecology (4)

- BIO 129 Tropical Ecology (4)
- Regional ecosystem courses (various off-campus programs)
- BIO 195 Seminar in Biological Research Literature (1)
- One integrative course from the following: (1-4)*
  - BIO 196 Bioethics Seminar (1)
  - BIO 197 Biology and Faith (4)
  - BIO 124 Biology, Values, and the Developing World (4)

**Major electives from the following for a total of 64 units: 15-18 units**

- Upper-division BIO
- Upper-division CHM
- MA 009, 010 Elementary Calculus I, II
- MA 015 Discrete Mathematics (4)
- PHS 114 Earth Science
- PSY 125 Behavioral Neuroscience (4)

No more than 12 units to be selected from physical sciences or math.

No more than 2 units of Practicum, BIO 190, 191, or 192.

No more than 4 units Research, BIO 198.

## **Cellular and Molecular Biology Track: 64 units**

**Supporting Science Courses: 28 units**

- CHM 005, 006 General Chemistry I, II (4,4)
- CHM 101, 102 Organic Chemistry I, II (4,4)
- One Math course, from the following: (4)*
  - MA 005 Introduction to Statistics (4)
  - MA 009 Elementary Calculus (4)
  - MA 015 Discrete Mathematics (4)
  - CS 010 Introduction to Computer Science (4)
- Additional courses in Chemistry, Mathematics, or Physics (8)

**Required Biology Courses: 30-33 units**

- BIO 005, 006 General Biology I, II (4,4)
- Upper-division Biology Laboratory Courses (20)
  - BIO 113 Biochemistry (4)
  - BIO 114 Genetics (4)
  - BIO 130 Cell Biology (4)
  - BIO 132 Molecular Biology (4)
- One course from the following: (4)*
  - BIO 102 Physiology (4)
  - BIO 110 Microbiology (4)
  - BIO 155 Infectious Disease and Immune Response (4)
- BIO 195 Seminar in Biological Research Literature (1)
- One integrative course, from the following: (1-4)*
  - BIO 124 Biology, Values, and the Developing World (4)
  - BIO 196 Bioethics Seminar (1)
  - BIO 197 Biology and Faith (4)

## BIOLOGY

### **Additional courses from the following for a total of 64 units: 3-6 units**

Upper-division BIO  
Upper-division CHM  
MA 009, 010 Elementary Calculus I, II  
MA 015 Discrete Mathematics (4)  
PSY 125 Behavioral Neuroscience (4)

No more than 4 units to be selected from physical sciences or math.

No more than 2 units of Practicum, BIO 190, 191, or 192

No more than 4 units Research, BIO 198

## **Ecology, Evolution and Natural History Track: 64 units**

### **Supporting Science Courses: 20 units**

CHM 005, 006 General Chemistry I, II (4,4)  
MA 005 Statistics (4)

*Additional courses in physical or other cognate sciences (8) to be selected from the following:*

CHM 101, 102 Organic Chemistry I, II (4,4)  
MA 009, 010 Calculus I, II (4,4)  
MA 015 Discrete Mathematics (4)  
PHY 011, 013 Physics for Life Sciences I, II (4,4)  
PHY 021, 023 General Physics I, II (4,4)

Other environmental courses offered at Westmont field programs (*e.g.*,  
Environmental Chemistry, Field Geology, Land Resources, Sustainable  
Development, Environmental Sociology, Land Stewardship Ecology)

### **Required Biology Courses: 38-41 units**

BIO 005, 006 General Biology I, II (4,4)  
BIO 114 Genetics (4)  
*One of the following courses: (4)*  
BIO 102 Physiology (4)  
BIO 110 Microbiology (4)  
BIO 128 Physiological Ecology (4)  
BIO 132 Molecular Biology (4)  
BIO 142 Marine Mammal Ecophysiology (4)  
Molecular Tools for the Field Biologist (Au Sable)

*Five Field Courses: (20)*

At least one course must be taken from each of the following four areas. Courses listed include Westmont courses that would meet the requirement as well as representative courses of those offered at field stations with which our program has affiliation.

General Ecology or Evolution

BIO 125 or equivalent course (4)  
BIO 131 Evolution (4)

Plant Systematics or Field Studies

BIO 151 Plant Classification (4)  
Woody Plants, Field Botany or Forest Ecology (AuSable)

Animal Systematics or Field Studies

BIO 108 Animal Diversity (4)

BIO 141 Ornithology/Herpetology (4)

BIO 142 Marine Mammal Ecophysiology (4) Animal Ecology, Field Ecology of Birds, Marine Mammals, or Insect Ecology (AuSable)

Upper Division Field Course

BIO 104 Marine Biology (4)

BIO 120 Behavioral Ecology

BIO 129 Tropical Ecology (4)

Aquatic Biology, Alpine Ecology, Conservation Biology, Restoration Ecology, Limnology, Northwest Natural History, Ecology Agriculture (AuSable) or other upper-division field course, excluding those that satisfy the Plant or Animal Systematics courses listed above

*Courses at a Biological Field Station*

At least two courses for the major must be taken in residence at a biological field station.

*One course from the following: (1)*

BIO 191 Environmental Practicum (1)

BIO 195 Seminar in Biological Literature (1)

BIO 198 Research (1)

*One integrative course from the following: (1-4)*

BIO 124 Biology, Values and the Developing World (4)

BIO 196 Seminar in Bioethics (1)

BIO 197 Biology & Faith (4)

**Additional courses chosen from the following for a total of 64 units: (3-6 units)**

Upper-division BIO

Upper-division CHM

MA 009, 010 Elementary Calculus I, II (4,4)

MA 015 Discrete Mathematics (4)

PSY 125 Behavioral Neuroscience (4)

No more than 2 units of Practicum, BIO 190, 191, or 192

No more than 4 units Research, BIO 198

## Requirements for a Minor: 20 units

BIO 005, 006 General Biology I, II (4,4)

Upper-division BIO Electives (12)

## Lower-Division Course Descriptions

**BIO 005 General Biology I (4)** Prerequisite: CHM 005. Corequisite CHM 006. Cell structure and metabolism; introductory genetics; anatomy and physiology of vascular plants.

**BIO 006 General Biology II (4)** Prerequisite: BIO 005, CHM 005, CHM 006. Survey of animal phyla; anatomy, physiology, and behavior of vertebrates; population; community and global ecology; population genetics; evolutionary theory and its theological implications.

## BIOLOGY

**BIO/KNS 011 Human Anatomy** (4) Not for credit toward the B.S. in Biology. A systems approach to the study of tissues and organ systems that make up the human body. An emphasis is given to skeletal muscle. Course is designed with careers such as Nursing, Physical Therapy, and Sports Medicine in mind. Lab required.

**BIO/KNS 012 Human Physiology** (4) Not for credit toward the B.S. in biology. Functional characteristics and interrelationships of the organ systems of the human body.

**BIO/KNS 040 Human Nutrition** (4) Not for credit toward the B.S. in biology. Role of nutrients in human growth, development, and maintenance, including the chemistry and metabolism of carbohydrate, fat, and protein and the role of vitamins and minerals. The principles of energy balance, essentials of an adequate diet throughout the life cycle, and nutritive values of foods. Nutrition concepts applied to current nutrition issues and controversies. (taught without laboratory)

## Upper-Division Course Descriptions

**BIO 102 Physiology** (4) Prerequisite: BIO 114. An examination of the mechanisms that determine the function of the animal body, from various degrees of organization, including the molecular, cellular, tissue, organ, and organ systems levels. Fundamental physiological processes that underlie all the body's activities are reinforced in a laboratory component that allows students to examine cardiovascular, lung, endocrine, and kidney function, culminating in a student-designed and -implemented independent project.

**BIO 104 Marine Biology** (4) Prerequisites: BIO 005, 006. Recommended: BIO 125. The class presents an overview of the marine science disciplines, including oceanographic (both physical and biological), zoology, ecology, biogeography, island biology and diversity, as they are represented and featured here in the Southern and Central California marine environments. There is a strong emphasis on field experiences, introducing students to the natural history of this area, as well as the current areas of research and study being conducted here. Class does involve some travel up and down the Central California coast, will involve students in cooperative efforts with marine organizations in the area and will ask students to develop the ability to recognize organisms specifically in the field so that small field projects can be developed.

**BIO 108 Animal Diversity** (4) Prerequisite: BIO 006. Recommended: BIO 114. The class will expose students to the diversity of animal life on the planet, emphasizing the adaptive nature of diversity through structure, function and life history, will involve students in actual case studies of animal populations currently experiencing loss of diversity, and will expose students to the issues of field research involving animal subjects. There is a major emphasis on Animal Behavior, Conservation Biology, and Wildlife Management. Many of these issues will be addressed not only in the classroom, but in the field, talking with and hearing from those who are actively engaged in aspects of this work. Thus, travel to field sites, and to institutions involved with the issues of animal conservation, is an integral component of the class.

- BIO 110 Microbiology** (4) Prerequisites: BIO 005, 006, 114 and CHM 005, 006. Recommended: CHM 101, 102 and BIO 113. Introduction to the biology of prokaryotic microorganisms and their viruses. The course surveys prokaryotic cell biology, population growth and its control by physical and biological factors, and the prokaryotic groups associated with important microbial habitats, including the normal microflora of the human body. Laboratory work emphasizes techniques for isolating, identifying, and characterizing the activities of bacteria in natural environments.
- BIO 113 Biochemistry** (4) Prerequisites: BIO 005 and CHM 101, 102. Introduction to metabolism through a consideration of protein structure-function relationships, enzyme action and regulation, and catabolic and anabolic pathways, emphasizing the metabolism of carbohydrates. Laboratory work emphasizes enzyme isolation and characterization.
- BIO 114 Genetics** (4) Prerequisites: BIO 005, 006. Introduction to genetic analysis, emphasizing the physical basis for patterns of heredity in eukaryotes and prokaryotes, gene structure and function, cytogenetics, quantitative inheritance, and population genetics. Laboratory research and scientific writing is emphasized.
- BIO 120 Behavioral Ecology** (4) Prerequisites: BIO 005, 006. Explores how animal behavior evolves to maximize fitness in particular ecological contexts. Covers topics related to foraging, signals, coevolution, sexual selection, mating systems, parental care and group living, introducing basic principles of optimality theory, game theory and the comparative method. Involves field-based labs, independent research projects, and interdisciplinary discussion of historical, philosophical, and theological issues that arise in the study of both human and animal behavior.
- BIO 123 Aquatic Biology** (4) Ecology, identification, systematics, culture, and care of aquatic plants and animals, and adaptations to freshwater environments. Human impacts on aquatic species and ecosystems, stewardship of aquatic habitats, and aquatic restoration ecology. Fieldwork in lakes, ponds, bogs, marshes, and streams. (Offered summers at the Au Sable Institute.)
- BIO 124 Biology, Values, and the Developing World** (4) Prerequisites: BIO 005, 006. An introduction to how biological processes both influence and are influenced by cultural values and lifestyle with emphasis on Third World issues. Discussion of world hunger and the neo-Malthusian controversy, biological theories of ethnic variation, Third World agricultural and health problems, equatorial natural history, tropical deforestation and desertification.
- BIO 125 General Ecology** (4) Prerequisite: BIO 005, 006 and one semester of college mathematics. An overview of organism/environment interactions at the physiological, population and community levels. Entails biostatistics, a field research project, and consideration of issues in human ecology and environmental stewardship.
- BIO 126 Animal Ecology** (4) Interrelationships between animals and their biotic and physical environments, emphasizing behavioral aspects. A field course that centers on the ecology of northern Michigan fauna from a stewardship perspective. Included are individual student research projects. (Offered summers at the Au Sable Institute.)



## BIOLOGY

- BIO 128 Physiological Ecology** (4) Prerequisite: BIO 005, 006 and one upper-division biology course. An overview of the relationships between physiological adaptation and the environment. Includes examinations of water, temperature, & energy balance, chemical defenses, biological rhythms, physiological tolerances, allometry, and life history strategies.
- BIO 129 Tropical Ecology** (4) Prerequisites: BIO 005, 006 and permission of instructor. Examination of general ecological principles as they underlie the unique structural and functional characteristics of tropical ecosystems. Emphasis on environmental biophysics and climatology, energy balance and ecophysiological adaptation, plant/animal interactions, chemical and behavioral ecology, and specific threats to ecological integrity of local communities. Intensive exposure to field methodology, including student research projects. (Offered in Mayterm in Costa Rica.)
- BIO 130 Cell Biology** (4) Prerequisite: BIO 114. Cell biology is the study of the structures and functions which define cells. The course examines the components and properties of the cell membrane, subcellular organelles, and cytoskeleton and explores basic principles of intra- and inter-cellular communication. Students also learn about development and stem cell biology and discuss ethical implications. In lab, the 2<sup>nd</sup> half of the semester culminates in independent research projects and presentations.
- BIO 131 Evolution** (4) Prerequisites: BIO 005, 006, 114. Explores the full range of fundamental topics in evolutionary biology, from mechanisms of selection and drift, to pattern and process in macroevolution. Covers key evolutionary themes, such as the evolution of sex, optimization of life-history strategy, evolutionary developmental biology, and evolutionary medicine. Gives substantial attention to critical thinking in both theoretical and empirical contexts, and fosters the development of basic skills in molecular phylogenetics. Also explores key historical, philosophical, and religious aspects of evolutionary theory.
- BIO 132 Molecular Biology** (4) Prerequisites: BIO 114. A detailed examination of the central dogma of molecular biology (DNA to RNA to protein), including DNA replication, transcription, translation, transcriptional and post-transcriptional control mechanisms, as well as how this dogma has expanded in recent years to include epigenetic regulatory mechanisms (DNA accessibility), DNA rearrangements, and non-coding RNA. The course also features a survey of the genomics revolution and its application to human health. Students complete a semester-long project in laboratory utilizing techniques commonly used in the field, including PCR, cloning, gene expression analysis, and Western blotting.
- BIO 135 Conservation Biology** (4) Principles of conservation biology with applications to sustainable human society and biospheric integrity. Integrative relationships between population biology, ecological principles, biogeochemical cycles, ecosystem functions, and human society in the context of biospheric degradation. Principles for conserving plant and animal species, biotic communities, ecosystems, and human societies. (Offered summers at the Au Sable Institute.)
- BIO 138 Forest Ecology** (4) Ecology of the Great Lakes Forest, including forest community analysis and community structure, soils and soil development, hydrology, and post-glacial history. Prerequisite: one year in biology and one course in ecology, or permission of professor. (Offered summers at the Au Sable Institute.)

- BIO 139 Marine Mammals** (4) Biology, behavior, ecology, identification, and conservation of the marine mammals of the Pacific Rim. The study area covers some major habitats in Puget Sound and the Salish Sea, with attention to the diving physiology, social behavior, and communications of whales and seals. The course aims to develop a stewardship perspective rooted in biological principles and directed at the global conservation of marine mammals and their ecosystems. Special attention is given to their use by cultures of the region in order to understand current issues. Prerequisite: one year of general biology or one semester of zoology. A course in anatomy and/or physiology is recommended. (Offered summers at the Au Sable Institute.)
- BIO 140 Marine Invertebrates** (4) A study of invertebrate taxonomy, ecology, life histories, and economic importance. Field methods are stressed. Prerequisite: one year of general biology or one semester of general zoology. (Offered summers at the Au Sable Institute.)
- BIO 141 Ornithology/Herpetology** (4) Prerequisites: BIO 005, BIO 006. An introduction to the traditional fields of ornithology (the study of birds) and herpetology (the study of amphibians and reptiles). Emphasizes diversity, natural history and behavior, viewed through ecological and evolutionary lenses. Topics will include tetrapod evolution and systematics, physiology, locomotion, intelligence, communication, social behavior, reproduction, life histories, movements, and conservation. Laboratories will emphasize identification of native California species, surveying and monitoring techniques, and encounters with animals in the field.
- BIO 142 Marine Mammal Ecophysiology** (4) Biology, behavior, ecophysiological adaptations, evolutionary origins and conservation strategies, in light of current global climatic and oceanic change, of marine mammals (with a special emphasis on marine mammals of California waters). The study area covers major habitats, and species, found year-round or seasonally in Ventura, Santa Barbara and San Luis Obispo Counties, with attention focused on diving physiology, temperature regulation, feeding strategies, reproductive efficiency and means of communication in both whales and the Caniformia (the pinnipeds--seals and sea lions). The course aims to not only develop students' understanding of the challenges of being an air-breathing animal in an aquatic environment, but also aims to develop a stewardship perspective rooted in biological principles, directed at the global conservation of marine mammals, and their ecosystems.
- BIO 150 Topics in Biology** (1-4) Prerequisites: BIO 005, 006 and consent of instructor. Special courses offered on selected topics in biology. Content as announced.
- BIO 151 Plant Classification** (4) Prerequisite: BIO 005, 006. An introduction to the major families of vascular plants and to the principles of botanical nomenclature and systematics. Field work emphasizes the flora of Southern California with a survey of the plant communities of the region.
- BIO 155 Infectious Disease & Immune Response** (4) Prerequisites: BIO 114. An in-depth survey of the vertebrate immune system and classic and emerging infectious diseases, including those caused by bacterial, viral, and protozoan pathogens. Students will participate in an extensive group project that will focus on a topic related to immunology and disease.

## BIOLOGY

**BIO 190 Practicum** (1) Prerequisite: Junior standing. Internship experience in any biological or biomedical field, including the health sciences. Practicum to be done within the normal academic semesters.

**BIO 190SS Practicum** (1) Prerequisite: Junior standing. Internship experience in any biological or biomedical field, including the health sciences, that involve site locations approved by department in consultation with the GE Committee. Practicum is done within the normal academic year (not during Mayterm or Summer).

**BIO 191 Environmental Practicum** (1) Prerequisite: Junior standing. Supervised internship experience with national park service, local museums, environmental education facilities, conservation agencies, or other environmental settings. Practicum to be done within the normal academic semesters.

**BIO 191SS Environmental Practicum** (1) Prerequisite: Junior standing. Supervised internship experience with national park service, non-governmental agencies, environmental education facilities, conservations agencies, or other environmental settings, as approved by department in consultation with the GE Committee. Practicum is done within the normal academic year (not during Mayterm or Summer).

**BIO 192 Lab/Instructional Practicum** (1) Prerequisite: Junior standing. Supervised internship in the design, preparation, and instructional implementation of laboratory exercises and other curricular components. Entails both laboratory and instructional activities.

**BIO 195 Seminar in Biological Literature** (1) Prerequisite: Senior standing. Each student will conduct a survey of the primary literature on a selected research topic, write a comprehensive and critical review paper, and make an oral presentation in a departmental forum.

**BIO 196 Seminar in Bioethics** (1) Prerequisite: Senior standing. Consideration of ethical issues raised by study in the biological sciences. Potential topics include biomedical ethics, environmental ethics, and food and agricultural ethics. Guided by assigned reading, students lead and participate in group discussion, drawing on ethical arguments and a reading of scripture to develop and articulate their own positions.

**BIO 197 Biology & Faith** (4) Prerequisite: Biology major, Senior standing. An overview of relationships between the Christian worldview and major themes in the biological sciences. Considers models for relating science and religion; biological and theological perspectives on human nature, freedom, and mind; sociobiological and biblical views of morality, sexuality, and altruism; neuro-evolutionary interpretations of religion; and ecological and theological assessments of human place in and responsibility toward the natural world (taught without laboratory).

**BIO 198 Research** (1-4) Laboratory and/or field research with a faculty member. Students will conduct experiments, analyze the data, and present written and/or oral presentations based on their work.

# Chemistry

*Professors M. Everest (chair), N. Tro*

*Associate Professor S. Contakes*

*Assistant Professors K. Lazar Cantrell, A. Silberstein*

**Description of the Major.** Chemistry investigates the composition, properties, and changes of properties in substances and various elementary forms of matter. The study of chemistry gives students an opportunity to develop necessary modern knowledge and techniques with instrumentation.

The chemistry program at Westmont provides a broad knowledge of the field and includes six tracks.

The professional track, or Program A, leads to graduate study in chemistry and prepares students for challenging careers in teaching and research, industrial chemistry research and development, energy development, medicinal and pharmaceutical chemistry and related areas.

Program B, or the general track, is more flexible and allows students to go directly into laboratory work or to take additional courses in other disciplines for careers in environmental control, industrial chemistry, medical technology, food chemistry and agricultural chemistry.

The biochemistry track, or Program C, provides the basis for pre-medical, pre-pharmacy and pre-dental training or for graduate study in biochemistry, molecular biology, biomedical research or genetic engineering.

The chemical physics track, Program D, allows students to combine chemistry with a strong emphasis in physics and engineering. This track prepares students for graduate work in chemical physics or chemical engineering, or teaching chemistry and physics at the secondary level. All four tracks lead to the B.S. degree.

For students desiring a broader curriculum or a double major, the B.A. degree track allows the most flexibility. A four-year Fast-Track plan for obtaining a secondary teaching credential in chemistry is available using this track.

Students interested in chemical engineering have the option of the 3-2 program in which they receive a degree from the engineering school and a B.A. from Westmont. The benefits of receiving a liberal arts and sciences background and the more specialized training from a formal engineering school can be beneficial for both the student and the employer. Since the 3-2 program has strict requirements, interested students must meet with a faculty of the department to plan the class schedules consistent with their goals. The program often takes six years to complete.

**Distinctive Features.** Chemistry students at Westmont have many opportunities to use state-of-the-art instrumentation such as atomic absorption spectrometers, 400 MHz Fourier transform nuclear magnetic resonance spectrometers, FT infrared and ultraviolet-visible spectrometers, fluorimeter, mass spectrometer, pulsed dye laser, automated gel electrophoresis and gas and high performance liquid chromatographs. They learn analytical chemical techniques, and advanced organic synthesis techniques.

## CHEMISTRY

Most of our students participate in undergraduate research. Each student in the B.S. program is *required* to do independent research with a faculty member.

Participating in an off-campus program is encouraged of all chemistry majors. The student may choose to do so during the fall of either the junior or senior year. The student should consult his or her academic advisor so that the required courses can be scheduled ahead of that off-campus semester.

**Career Choices.** A degree in chemistry can lead to many interesting and challenging careers, including: biochemist, chemical engineer, industrial or clinical chemist, college instructor, dentist, dietician, high school teacher, marine scientist, pharmacologist, physician, radiologic technician, nuclear medicine technician, forensic serologist, toxicologist, technical writer, patent lawyer, industrial hygienist, and industrial management.

## B.S. Degree Major Requirements: 54-69 units

### A. Professional Track (Program A)

#### Required Lower-Division Courses: 30 units

CHM 005, 006 General Chemistry I, II (4,4)  
MA 009, 010 Elementary Calculus I, II (4,4)  
MA 019 Multivariable Calculus (4)  
PHY 021, 023 General Physics I, II (4,4)  
PHY 022, 024 Introductory Physics Laboratory I, II (1,1)

#### Recommended Lower-Division Courses:

BIO 005 General Biology I (4)  
CS 010 Introduction to Computer Science I (4)  
PHY 040 Differential Equations (4)  
GR 001, 002 Elementary German I, II (4,4)

#### Required Upper-Division Courses: 35 units

CHM 101, 102 Organic Chemistry I, II (4,4)  
CHM 104 Advanced Inorganic Chemistry (4)  
CHM 121 Introductory Analytical Chemistry (3)  
CHM 122 Advanced Analytical Chemistry (2)  
CHM 130, 131 Physical Chemistry I, II (3,3)  
CHM 132, 133 Physical Chemistry Laboratory I, II (1,1)  
CHM 195 Seminar (2)  
CHM 198 Chemical Research (4)  
*One of the following* (4-5)  
PHY 142/143 Circuits and Electronics/Electronics Laboratory (4,1)  
CHM 150 Special Topics (4)  
CHM 160 Advanced Organic Chemistry (4)

All graduating majors in the professional track are required to take the Graduate Record Exam in their senior year.

## B. General Track (Program B)

### Required Lower-Division Courses: 25-26 units

CHM 005, 006 General Chemistry I, II (4,4)

MA 009, 010 Elementary Calculus I, II (4,4)

*One of the following combinations: (9-10)*

PHY 011, 013 Physics for Life Sciences I, II (4,4)

PHY 014 Physics for Life Sciences Laboratory (1)

OR

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

### Required Upper-Division Courses: 29 units

CHM 101, 102 Organic Chemistry I, II (4,4)

CHM 121 Introductory Analytical Chemistry (3)

CHM 122 Advanced Analytical Chemistry (2)

CHM 195 Seminar (2)

CHM 198 Research (2)

*One of the following combinations: (4)*

CHM 130 Physical Chemistry I (3)

CHM 132 Physical Chemistry Laboratory I (1)

OR

CHM 135 Introductory Physical Chemistry (3)

CHM 132 or 133 Physical Chemistry Laboratory I or II (1)

*Upper-Division CHM Electives (8)*

## C. Biochemistry Track (Program C)

### Required Lower-Division Courses: 33-34 units

CHM 005, 006 General Chemistry I, II (4,4)

BIO 005, 006 General Biology I, II (4,4)

MA 009, 010 Elementary Calculus I, II (4,4)

*One of the following combinations: (9-10)*

PHY 011, 013 Physics for Life Sciences I, II (4,4)

PHY 014 Physics for Life Sciences Laboratory (1)

OR

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

### Required Upper-Division Courses: 32 units

CHM 101, 102 Organic Chemistry I, II (4,4)

CHM 113 Biochemistry (4)

CHM 121 Introductory Analytical Chemistry (3)

CHM 122 Advanced Analytical Chemistry (2)

CHM 195 Seminar (2)

CHM 198 Research (1)

## CHEMISTRY

*One of the following combinations:* (4)

CHM 130 Physical Chemistry I (3)

CHM 132 Physical Chemistry Laboratory I (1)

OR

CHM 135 Introductory Physical Chemistry (3)

CHM 132 or 133 Physical Chemistry Laboratory I or II (1)

*Two of the following three:* (8)

CHM 131 Physical Chemistry II (3) **and** CHM 133 Physical Chemistry Laboratory II (1)

BIO 102 Physiology (4)

BIO 114 Genetics (4)

Those interested in graduate school in biochemistry should choose CHM 130 and 131 and take additional courses in advanced biochemistry, molecular biology, inorganic and organic chemistry.

### D. Chemical Physics Track (Program D)

#### **Required Lower-Division Courses: 39 units**

CHM 005, 006 General Chemistry I, II (4,4)

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

PHY 025 Modern Physics (4)

PHY 026 Modern Physics Laboratory (1)

PHY 040 Differential Equations (4)

MA 009, 010 Elementary Calculus I, II (4,4)

MA 019 Multivariable Calculus (4)

#### **Required Upper-Division Courses: 28-29 units**

CHM 101 Organic Chemistry I (4)

CHM 130, 131 Physical Chemistry I, II (3,3)

CHM 132, 133 Physical Chemistry Laboratory I, II (1,1)

CHM 195 Seminar (2)

CHM 198 Chemistry Research (2)

\*CHM Electives (4)

\*PHY Electives (8 or 9)

PHY 142/143 Circuits & Electronics with lab (4,1) recommended

\*Department Chair approval required.

#### **Recommended Course**

MA 140 Complex Analysis (4)

## B.A. Degree Major Requirements: 46-47 units

### A. General Track

#### Required Lower-Division Courses: 25-26 units

CHM 005, 006 General Chemistry I, II (4,4)

MA 009, 010 Elementary Calculus I, II (4,4)

*One of the following combinations* (9-10)

PHY 011, 013 Physics for Life Sciences I, II (4,4)

PHY 014 Physics for Life Sciences Laboratory (1)

OR

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

#### Required Upper-Division Courses: 21 units

CHM 101, 102 Organic Chemistry I, II (4,4)

CHM 121 Introductory Analytical Chemistry (3)

CHM 195 Seminar (2)

*One of the following combinations:* (4)

CHM 130 Physical Chemistry I (3)

CHM 132 Physical Chemistry Laboratory I (1)

OR

CHM 135 Introductory Physical Chemistry (3)

CHM 132 or 133 Physical Chemistry Laboratory I or II (1)

Upper-Division CHM Elective (4)

A four-year Fast-Track plan is available using this track that allows a student to receive a B.A. degree and a secondary teaching credential in chemistry. See the department chair or the education department for details.

### B. Chemical Engineering 3-2/3-3 Program Track

#### Required Lower-Division Courses: 34 units

CHM 005, 006 General Chemistry I, II (4,4)

MA 009, 010 Elementary Calculus I, II (4,4)

MA 019 Multivariable Calculus (4)

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

PHY 040 Differential Equations (4)

#### Required Upper-Division Courses: 21 units

CHM 101, 102 Organic Chemistry I, II (4,4)

CHM 121 Introductory Analytical Chemistry (3)

CHM 122 Advanced Analytical Chemistry (2)

CHM 125 Analog and Digital Instrumental Analysis (4)

CHM 130 Physical Chemistry I (3)

CHM 132 Physical Chemistry Laboratory I (1)



## CHEMISTRY

### Highly Recommended Courses:

MA 020 Linear Algebra (4)

CS 010 Introduction to Computer Science I (4)

## Requirements for a Minor: 20 units

### Required Lower-Division Courses: 8 units

CHM 005, 006 General Chemistry I, II (4,4)

### Required Upper-Division Courses: 12 units

CHM 101, 102 Organic Chemistry I, II (4,4)

*Upper-Division CHM Elective* (4)

## Preparation for Teaching Chemistry at the Secondary Level

Students wishing to teach at the high school or junior high level should complete the requirements for a B.A. major, following the general track. In order to complete a fifth-year Credential Program at Westmont, students should also complete four or more of the following (minimum of 12 units) prior to applying to the program.

KNS 156 Health Education for the Classroom Teacher (2)

ENG 106 Language Acquisition (4)

ED 101 Explorations in Teaching: Secondary (4)

ED 105 Perspectives on Cultural Diversity and Education (4)

ED 130 Special Education for the Classroom Teacher (2)

ED 161 Computers for the Classroom Teacher: Secondary (2)

In many cases, it is possible to complete requirements for the major and the Westmont Credential Program in four years. Such a “fast-track” schedule requires early planning, ideally beginning in the first year. Students wishing to complete such a program should refer to more specific advising materials available on the department web-page.

All students wishing to explore secondary teaching are also strongly encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, in addition to their major advisor.

## Lower-Division Course Descriptions

**CHM 001 Introductory General Chemistry** (4) Three lectures and one four-hour laboratory per week. The periodic table, atomic structure, and other fundamentals of chemistry, including laboratory.

**CHM 004 Chemistry, Culture and Society** (4) Survey course that teaches the basic concepts of chemistry. Key episodes in the history of chemistry are used to develop an understanding of how science functions and describe modern ideas about matter, including atomic-molecular theory, energy, chemical periodicity, chemical bonding, and molecular structure. This understanding is then used to describe the chemistry of petroleum derivatives, living systems, food, drug action, chemically-intensive agriculture, and contemporary energy technologies. The course also considers the impact of chemical technology on society by exploring issues such as consumerism, technological optimism, technology's role in social change, and ethical issues associated with the development, manufacture, and use of chemicals. As part of this exploration students are urged to consider the relationships between science, technology, and Christian thought and practice.

**CHM 005 General Chemistry I** (4) Prerequisites: Admissions math requirement (see p. 241). Corequisite: CHM 005L. Three lectures and one four-hour laboratory per week. Covers basic concepts of physical, inorganic, organic, analytical and nuclear chemistry.

**CHM 006 General Chemistry II** (4) Prerequisites: CHM 005. Corequisite: CHM 006L. Three lectures and one four-hour laboratory per week. Covers basic concepts of physical, inorganic, organic, analytical and nuclear chemistry.

**CHM 005H, 006H General Chemistry I, II: Honors** (4,4) Prerequisites: By invitation only and Admissions math requirement (see p. 241). Three lectures and one four-hour laboratory per week. A survey of concepts in physical, inorganic, organic, analytical and nuclear chemistry. Examines each topic with more rigor than CHM 005, 006.

**CHM 014 Scientific Glassblowing** (1) Practical construction and repair of glass apparatus. One three-hour laboratory per week.

## Upper-Division Course Descriptions

**CHM 101, 102 Organic Chemistry I, II** (4,4) Prerequisite: CHM 006. Three lectures and one four-hour laboratory per week. Preparation and properties of aliphatic and aromatic compounds, reaction mechanisms, organic synthesis, and qualitative organic analysis in theory and laboratory.

**CHM 104 Advanced Inorganic Chemistry** (4) Prerequisite: CHM 101. Recommended: CHM 102 and CHM 130/131 or CHM 135. The structure, spectroscopy, and reactivity of main group and transition metal compounds will be presented and systematized in terms of current bonding models, particularly molecular orbital and group theory. The results of these studies will then be applied to problems in bioinorganic, materials, environmental, and organometallic chemistry. Three lectures per week.

**CHM 113 Elementary Biochemistry** (4) (See BIO 113)

**CHM 121 Introductory Analytical Chemistry** (3) Prerequisites: CHM 006. Two lectures and one four-hour laboratory per week. Theoretical background of quantitative analytical procedures, including statistics, gravimetry, titrimetry, potentiometry, and coulometry.

## CHEMISTRY

- CHM 122 Advanced Analytical Chemistry** (2) Prerequisites: CHM 101 and CHM 121 or consent of instructor. One lecture and one four-hour laboratory per week. Emphasis on instrumental methods of analysis including spectrophotometry, voltammetry, and gas and liquid chromatography.
- CHM 125 Analog and Digital Instrumental Analysis** (4) A laboratory course in analog and digital electronics: assembly language and microprocessors, computer interfacing, data acquisition by analog to digital conversion, and stepping motors. Two lectures and two three-hour laboratories per week.
- CHM 130 Physical Chemistry I** (3) Prerequisites: MA 010. Corequisite: CHM 132. Postulates in quantum mechanics and application of the Schrodinger's equation to translation, rotation and vibration. Angular momentum, approximation methods, group theory, atomic and molecular structure, spectroscopy, and electric and magnetic properties, chemical kinetics.
- CHM 131 Physical Chemistry II/PHY 160** (3) Prerequisites: MA 010 and CHM 130 or PHY 025. Corequisite: CHM 133. Classical equilibrium thermodynamics: applications of the first, second, and third laws to condensed and gas phases. Principles and applications of statistical thermodynamics.
- CHM 132, 133 Physical Chemistry Laboratory I, II** (1,1) Corequisites: CHM 130 or 131 or 135. One three-hour laboratory per week. Emphasizes thermodynamics, kinetics, electrochemistry, spectroscopy, quantum chemistry, and computer applications. Oral and written presentations of laboratory results are required.
- CHM 135 Introductory Physical Chemistry** (3) Prerequisite: MA 010. Corequisite: CHM 132 or 133. Applications of physical chemistry to the life sciences. Thermodynamics, energy and the first law, entropy and the second law, free energy and bioenergetics, solar energy. Chemical and biochemical kinetics, biochemical spectroscopy, transport properties, macromolecules.
- CHM 150 Special Topics** (1/2-4) Prerequisites: CHM 102 (and others possible, depending on topic). Topics include advanced biochemistry, biophysical chemistry, materials chemistry, bioinorganic chemistry, advanced spectroscopy, organometallic chemistry of the transition elements, and electroanalytical chemistry.
- CHM 160 Advanced Organic Chemistry** (4) Prerequisites: CHM 102 and CHM 131 or CHM 135. Advanced topics in kinetics and mechanisms of organic reactions, stereochemistry, molecular orbital theory, photochemistry, organometallic chemistry, polymers, and natural products. Three lectures and one four-hour laboratory per week.
- CHM 190 Chemistry Internship**(1) Supervised experiences in the chemistry department or in community and industrial facilities such as clinical or research laboratories. Generally one unit of credit per semester.
- CHM 195 Seminar** (2) Prerequisite: Chemistry major and junior standing. Weekly reading and writing assignments, with discussion, on topics involving the nature of scientific knowledge, science and religion, the environment and stewardship, and ethics in science. A major research paper and oral presentation are given at the end of the course.

**CHM 198 Chemical Research** (2-4) Prerequisites: CHM 102, 125 or 131. Students work closely with a faculty person on original research projects. The results may be reported in research conferences and journal form for publication.

# Communication Studies

*Professors D. Dunn, G. Spencer, L. Stern (Chair)*

*Assistant Professor E. Gardner*

**Description of the Major.** Many have said that symbolic communication is the defining human characteristic. Even with this recognition, its mysteries often elude us. How do messages lead to meaning—or misunderstanding or manipulation? How has public discourse influenced culture? What are the effects of image-based communication? These and other questions are explored in the Communication Studies major. Our symbol-making nature is considered in all its manifestations, with attention given to the verbal and nonverbal aspects of oral, print, and electronic messages.

The mission of Westmont's Communication Studies department is to help students improve in both "wisdom and eloquence," a centuries-old but still contemporary ideal. Students develop facility in communication, gain an understanding of rhetoric as part of the human experience, and bring Christian values to bear on communication as a moral act. Topics include the difficulty of interpersonal faithfulness in a transient culture, the increasing power of the media, and the role of persuasion and propaganda in social movements.

**Distinctive Features.** Besides completing four foundational courses, students select four more courses from three categories representing various communication contexts and applications, plus three elective courses. In addition, students meet a "Global Communication Requirement," which is one way the department highlights its commitment to enlarging students' thinking and experience. Along these lines, Communication Studies majors are encouraged to spend time abroad. Options include both Westmont-run programs and approved courses in Paris, the Netherlands, and Buenos Aires. The Westmont in San Francisco program also works well with the major, as do journalism and political programs in Washington, D.C., and the film studies semester in Los Angeles. Every other year or so, the department sponsors a conflict and reconciliation program abroad.

As students choose from the major's categories, they can construct an interest-area such as media, rhetorical, or interpersonal studies. Although the curriculum is designed more to aid the student in being transformed intellectually according to the study of communication than to teach technique, many courses emphasize learning to think, speak, and write better.

Students are also encouraged to complete communication-related internships, participate in the Tournament of Expressions speech and debate contest, engage in original research with their professors, and participate in academic conferences in the discipline of communication. The Westmont College chapter of Lambda Pi Eta, the national communication honor society, is an active campus organization and provides opportunities for leadership. Each year the department presents an Outstanding Senior Award to a graduating senior.

**Career Choices.** The bachelor's degree in communication prepares students well for a wide variety of careers and opportunities. Graduating majors have entered the fields of marketing, journalism, management, teaching, mediation, editing, public relations, international relief and development work, ministry, advertising, sales, event coordination, diplomacy, film production, real estate and youth work. The major also provides the essential foundation for graduate work. Many graduates have gone on to law school, counseling, graduate school in communication, business school, and seminary, to name just a few.

## **Requirements for a Major: 44 units**

### **Required Foundation: 16 units**

COM 006 Messages, Meaning and Culture (4)  
 COM 015 Public Speaking (4)  
 COM 098 Introduction to Communication Research (4)  
 COM 101 Theories of Rhetoric and Communication I (4)

### **Required Options by Category: 28 units**

#### **Relationships and Conflict (one of the following): 4 units**

COM 110 Interpersonal Communication (4)  
 COM 127 Group Communication and Leadership (4)  
 COM 133 Conflict and Reconciliation (4)  
 COM 134 Conflict and Reconciliation: Case Study (4)

#### **Discourse and Society (one of the following): 4 units**

COM 125 Media and Society (4)  
 COM 135 Studies in Public Discourse (4)  
 COM 138 International Rhetoric (4)  
 COM 145 Organizational Communication (4)

#### **Reasoning and Writing (two of the following, one of which must be from Communication Studies): 8 units**

COM 103 Communication Criticism (4)  
 COM 130 Argumentation and Advocacy (4)  
 COM 140 Studies in Communication Ethics (4)  
 ENG 087 Journalism (4)  
 ENG 104 Modern Grammar and Advanced Composition (4)

#### **Electives (three of the following not taken above): 12 units**

COM 102 Theories of Rhetoric and Communication II (4)  
 COM 103 Communication Criticism (4)  
 COM 110 Interpersonal Communication (4)  
 COM 115 Advanced Public Speaking (4)  
 COM 125 Mass Communication (4)  
 COM 127 Group Communication and Leadership (4)  
 COM 129 Persuasion and Propaganda (4)

## COMMUNICATION STUDIES

COM 130 Argumentation and Advocacy (4)  
COM 133 Conflict and Reconciliation (4)  
COM 134 Conflict and Reconciliation: Case Study (4)  
COM 135 Studies in Public Discourse (4)  
COM 138 International Rhetoric (4)  
COM 140 Studies in Communication Ethics (4)  
COM 145 Organizational Communication (4)  
COM 148 Postmodern Narratives (4)  
COM 190 Internship (2-4)  
COM 195 Special Topics (4)  
COM 196 Senior Seminar (2-4)  
COM 198 Independent Research (1-4)

Non-departmental elective options (you may choose one course, up to 4 units):

AN 150 Cross-Cultural Communication (4)  
CS 050 Morality, Information, Logic, knowledge (4)  
ENG 101 Film Studies (4)  
MA 005 Statistics (4)  
PHI 135 Philosophy of Language (4)  
Intermediate Level II *or* Advanced Course in Modern, Foreign Language (such as Spanish, French, German, etc.) (4)

### **Global Communication (complete at least one)\***

Advanced or Intermediate (Level II) Foreign Language (Spanish, German, etc.)  
Academic Study Abroad experience of at least one month (Mexico, Europe, etc.)  
Westmont in San Francisco  
COM 138 International Rhetoric

\*This category is a requirement students must complete, but it does not add to the unit total. Students may meet the requirement with a course already taken to fulfill the major (language or International Rhetoric). It may also be met through participation in an off-campus program.

## **Requirements for a Minor: 24 units**

### **Required Foundation: 8 units**

COM 006 Messages, Meaning and Culture (4)  
COM 101 Theories of Rhetoric and Communication I (4)

### **Electives: 16 units**

Only one course for the minor may be taken in a department outside of Communication Studies. COM 190 (Internship) may not be taken to fulfill the minor.

## **Lower-Division Course Descriptions**

**COM 006 Messages, Meaning and Culture (4)** A theory course that seeks to demonstrate the centrality of communication in our perceptions of reality and interactions with others. The course offers perspectives by which to interpret and critique our message-dense society, and reviews issues of language and meaning. Meets GE “Understanding Society” requirement.

**COM 015 Public Speaking** (4) A performance class that presents principles of oral communication with classroom evaluation of speeches. Primary emphasis will be on student performance and understanding of basic speech theory. Meets GE “Writing/Speech Intensive” requirement.

**COM 098 Introduction to Communication Research** (4) Prerequisite: Any communication course. Introduction to social scientific and humanistic approaches to the study of communication, including both qualitative and quantitative methods.

## Upper-Division Course Descriptions

**COM 101 Theories of Rhetoric and Communication I** (4) Prerequisite: COM 006. Examines the philosophy and importance of rhetoric as the art of discourse. Draws from classical and biblical sources. Covers the first two canons of classical rhetoric. Meets GE “Writing/Speech Intensive” requirement.

**COM 102 Theories of Rhetoric and Communication II** (4) Prerequisite: COM 101. Completes the study of rhetoric with the last three canons and reviews non-verbal studies as an extension of “delivery”.

**COM 103 Communication Criticism** (4) Prerequisites: COM 006 and COM 098 or approved research methods course. A writing class that examines the theoretical knowledge of, and hones practical skill at discovering, interpreting and articulating the meaning, effectiveness, ethics and aesthetics of a broad variety of rhetorical artifacts, including speeches, literature, film and architecture. Meets GE “Writing/Speech Inside the Major” and “Integrating the Major Discipline” requirements.

**COM 110 Interpersonal Communication** (4) Examines theory and practice of one-on-one communication within casual, professional, familial, and intimate relationships. Attention given to social role, relational development, communicator responsibility, verbal and nonverbal messages, and interpersonal conflict management.

**COM 115 Advanced Public Speaking** (4) Prerequisite: COM 015. An intensive study of the theory, preparation, delivery, and criticism of public speaking. The course includes public speaking opportunities both inside and outside the classroom.

**COM 125 Media and Society** (4) Prerequisite: COM 098 or approved research methods course. Examination of the social and cultural impact of mass media (print, radio, television, film, new technologies), especially upon politics, public discourse, education, and religion. Meets GE “Research” requirement.

**COM 127 Group Communication and Leadership** (4) Theory and practice of communication in a variety of small-group contexts. Attention given to roles, conformity, decision-making, leadership, and group climate. Special emphasis given to group and leadership dynamics in the church, as well as diverse community and support groups.



## COMMUNICATION STUDIES

**COM 129 Persuasion and Propaganda** (4) Prerequisite: COM 098 or approved research methods course. The study of motivation and influence by various perspectives (rhetorical, philosophical, psychological) and by contexts (interpersonal, group, campaigns, and macrosocietal). Includes examination of historical and contemporary propaganda. Meets GE “Productions and Presentations” requirement.

**COM 130 Argumentation and Advocacy** (4) Examines the philosophy, structure, theory and practice of argumentation as a counterpoint to the easy credulity of the modern age. Includes experience in advocacy and debate.

**COM 133 Conflict and Reconciliation** (4) How might human communication enable peacemaking both internationally and interpersonally? Emphasis on dialogic perspectives, role of power, face needs, cultural differences, communication of forgiveness, and symbolic constructions of enemies.

**COM 134 Conflict and Reconciliation** (4) This course is offered as part of the off-campus Mayterm program in conflict & reconciliation. In-depth case studies of particular conflict contexts and exploration of how communication arts and sciences help us understand and transform conflict. Previous cases/locations include Northern Ireland, South Africa, the Middle East, and Germany.

**COM 135 Studies in Public Discourse** (4) Prerequisites: COM 098 or approved research methods course such as POL 040. History through a communication lens examines the controversies, social movements, and persuasive strategies that have contributed to the American experience. The rhetoric of rebellion, abolition, revival, and civil rights will be studied.

**COM 138 International Rhetoric** (4) Examines the philosophy, ethics, and meaning of “wisdom” as articulated in the rhetorical traditions of Africa, Asia, and South America. The class will offer comparative explorations of these intellectual traditions with modern and postmodern understandings of knowledge, the self, and the meaning of life. Meets GE “Thinking Globally” requirement.

**COM 140 Studies in Communication Ethics** (4) The ethical issues and legal constraints related to communication situations will be studied. Typically, the course will emphasize case studies from the news, advertising, and entertainment industries. Other times the course will focus more broadly on communication dilemmas, including issues related to freedom of speech.

**COM 145 Organizational Communication** (4) Prerequisites: COM 098 or approved research methods course. The study of profit and non-profit organizations, including the study of power, leadership, teamwork, gender, and the nature of work in a fast-paced, technological, global work environment. Many theoretical and historical perspectives are explored, including scientific management, systems and networks, interpretive and cultural approaches, and critical and postmodern questions of corporate colonization.

**COM 148 Postmodern Narratives** (4): Seminar exploration in communication theory and postmodern thought, paying special attention to cultural narratives. Film and other texts are used to further explore and illustrate the theories and perspectives. Students are invited and expected to shape the discussions as well as participate in them.

**COM 190 Internship** (2-4) Prerequisite: COM 006 and COM 098 or approved research methods course. Practical field experience, in the form of an internship with an organization in the local community. Coursework emphasizes relating learning in the discipline of communication with learning in the organization, as well as historical and contemporary approaches to vocation and calling.

**COM 195 Special Topics** (4) A variety of special topics will be offered periodically, such as Health Communication, Gender and Communication.

**COM 196R Senior Seminar** (4) Prerequisite: COM 006 and COM 098 or approved research methods course. Senior standing. This capstone course asks students to look back at their studies in communication at Westmont and to look toward living out ideals and skills after graduation. Students will consider issues related to “telling the truth,” book-driven conversation, biblical principles for communication, and the rhetoric of vocation. . Students will complete a “capstone” research project. Meets GE “Research” requirement.

**COM 198 Independent Research** (2-4) Prerequisites: Junior standing; instructor consent. Guided research on appropriate issues in communication studies culminating in a major paper.

# Computer Science

*Professors D. Hunter, W. Iba, C. R. Rosentrater (chair)*  
*Associate Professor D. Patterson*

**Description of the Major.** Computers permeate every aspect of our society, and the science of computing is an exciting and rapidly changing field. Designed to give students the best preparation for careers in computer science, the program at Westmont equips students to learn core ideas and methods, develop communication skills, formulate and solve novel problems, and incorporate skills and knowledge into their vocations as followers of Christ. The major introduces students to computer science and develops the requisite technical skills for work in the field, further study, or research. By focusing on foundational concepts and ideas, students are prepared to grow and adapt as the field continues to change rapidly. Students who complete the major earn a B.A. or B.S. degree.

The Westmont program goes beyond the acquisition of technical skills by adding the perspective gained through group work, problem-solving, and critical thinking. The rationale for these emphases is simple: the modern computing environment involves professionals from many fields working together as a team to solve problems. Success in such an environment requires the ability to analyze problems from many sources and communicate clearly with people from other backgrounds.

Set in the context of a liberal arts college, the computer science program at Westmont offers broad opportunities for exposure to problems and ideas from other disciplines. In recognition of the increasingly interdisciplinary contexts faced by computer professionals, students may complete a B.A. or B.S. degree in computer science with an interdisciplinary emphasis in another discipline such as art, biology, psychology, business, or engineering.

The program offers students the opportunity to examine the ethical issues of modern computing from a Christian perspective. Our society needs the leadership and insight of individuals who are able to combine technical knowledge with ethical and moral principles.

**Distinctive features.** Students enjoy the benefits of working closely with faculty in a variety of settings. Students can gain deeper understanding and develop their ability to solve novel problems by participating in research with faculty, either during the summer or the academic year. Research also brings the opportunity for students to develop valuable communication skills by co-authoring papers with faculty and presenting their results at conferences.

The computer science program maintains a strong sense of community through weekly dinners shared between students and faculty, annual department retreats, and various events in faculty homes such as dinners, Bible studies, and movie nights. Santa Barbara has earned the nickname “Silicon Beach” by being home to a number of high-tech companies; thus opening the way for student work and/or paid internships off-campus. Students can also engage in paid work for the department as teaching assistants or for the campus information technology department performing troubleshooting and maintenance of campus networks and computers.

**Career Choices.** Opportunities for careers in computer science are both numerous and diverse, and a critical shortage of well-prepared professionals is predicted to exist for many years to come. Students who choose to further their studies in graduate school will be well prepared to do so. Students who wish to join the workforce immediately also have many opportunities. Computers have become ubiquitous and permeate every facet of our society. More and more careers are integrally related to computer science such as bioinformatics, cognitive science, digital media arts, neuroscience, artificial intelligence, computer graphics, management information systems, human-computer interaction, and intellectual property law. Essentially all fields and organizations welcome the talents of those properly trained in computer science. Computing on the mission field is also a growing area in which students will be able to make significant contributions.

## Requirements for the Computer Science Major

### Required Core: (32 units)

- CS 010 Design and Implementation of Solutions to Computational Problems (4)
- CS 015 Discrete Mathematics (4)
- CS 030 Abstract Models for Concrete Problems Using Java (4)
- CS 045 Computer Organization and Hardware Architecture (4)
- CS 105 Programming Languages (4)
- CS 120 Space, Time, and Perfect Algorithms (4)
- CS 130 Creative Software Architectures for Collaborative Projects (4)
- CS 195 Senior Seminar (4)

In addition to the core courses, students must complete elective units to satisfy one of the following two tracks. Elective units may include a total of no more than 4 units from among CS190 Internship, CS192 Project, or CS198 Research, of which 190 and 192 may contribute no more than 2 units each. Students complete one of the following two tracks:

### B.A. in Computer Science (44 units including core)

Additional CS courses numbered CS 100 or above to bring the total to 44 units

### B.S. in Computer Science (56 units including core)

Additional CS courses numbered CS 100 or above to bring the total to 56 units

## Requirements for a Computer Science Minor: 24 units

- CS 010 Design and Implementation of Solutions to Computational Problems (4)
- CS/MA 015 Discrete Mathematics (4)
- CS 030 Abstract Models for Concrete Problems Using Java (4)
- CS 120 Space, Time, and Perfect Algorithms (4)
- CS 130 Creative Software Architectures for Collaborative Projects (4)

**Courses from the following: for a minimum of 4 units**

- CS 045 Computer Organization and Hardware Architecture (4)
- CS 105 Programming Languages (4)
- CS 116 Artificial Intelligence (4)
- CS 125 Database Design (4)
- CS/MA 135 Formal Languages and Automata (4)
- CS 140 Networks (4)
- CS 145 Operating Systems (4)
- CS 150 Topics in Computer Science (4)

## **Lower-Division Course Descriptions**

- CS 005 Fundamentals of Computing** (4) No prior computer or programming experience required. Introduction to basic principles of computing, problem solving, algorithmic thinking, and abstraction. Overview of hardware and software. Applications including spreadsheets, databases, artificial intelligence, networks, and web development. Social and ethical issues including viruses, privacy, security, intellectual property, anti-trust, and the digital divide.
- CS 010 Design and Implementation of Solutions to Computational Problems** (4) No prior computer or programming experience required. What are the general principles for designing solutions to problems? In particular, how can we employ such principles to implement computer programs that solve practical problems? This course covers the basics of programming including language features, disciplined programming style, and documentation, algorithm design, and the software development process. Discussion of ethical issues arising from the creation and use of computer programs.
- CS/MA 015 Discrete Mathematics** (4) Prerequisite: Admissions Math Requirement. If calculus is analog, then discrete mathematics is digital; it is the study of things that you count, rather than things that you measure. Topics include logic (organizing thought), set theory (organizing objects), graph theory (representing relationships), combinatorics (clever ways of counting), and algorithms (analyzing processes). Students will learn how mathematicians prove theorems and how computer scientists solve problems.
- CS 030 Abstract Models for Concrete Problems Using Java** (4) Prerequisite: CS 010. This class introduces abstract data types (ADTs) and their implementations in Java. ADTs considered include: lists, stacks, queues, maps, trees and graphs. Sorting and searching algorithms. Big-O notation. Software testing and program verification. Discussion of ethical issues arising from the creation and use of computer programs.
- CS 045 Computer Organization and Hardware Architecture** (4) Prerequisite: CS 010. Introduction to the hardware-software interface. Digital logic, data representation, computer arithmetic, software vs. hardware tradeoffs, instruction set architecture, addressing techniques, cache, virtual memory, and pipelining.

**CS 050 Morality, Information, Logic, Knowledge (MILK)** (4) Introduction to the Christian liberal arts and philosophy through a computational perspective. Topics include: ethics, information and communication theory, epistemology, logic, and metaphysics. Application of theories and principles to policy decisions regarding issues that varying by semester; examples include ownership of information, privacy, professional ethics, gender and ethnicity in computing fields. Prerequisites: No background in computer science or philosophy is required.

## Upper-Division Course Descriptions

**CS 105 Programming Languages** (4) Prerequisite: CS 030. Language processors; data; binding time; operations; sequence control; referencing environments; scope of a variable; storage management; operating environment, syntax; translation.

**CS 116 Artificial Intelligence** (4) Prerequisite: CS 030. Computational and philosophical principles of intelligence; methods for knowledge representation; automated reasoning, and learning.

**CS 120 Space, Time, and Perfect Algorithms** (4) Prerequisite: CS 030 and MA/CS015. How fast is a fast algorithm? How do we determine if one algorithm is faster than another? How does the amount of memory used by an algorithm trade off against the time that algorithm takes? What is a perfect algorithm and how can we find one? These and other questions about the formal properties of algorithms and the classic data structures used by algorithms are the focus of this course.

**CS 125 Database Design** (4) Prerequisite: CS 030. Database system architecture; relational and object-oriented databases, the Structure Query Language (SQL), normal forms and database design; query processing and optimization; handling transactions, concurrency control, crash recovery; data warehousing and data mining.

**CS 130 Creative Software Architectures for Collaborative Projects** (4) Prerequisites: CS 030 and junior standing. When the scope a software project exceeds a single programmer's capacity within a given time-frame, what sorts of skills and tools become necessary to support collaboration and coordination within teams? This course introduces students to the challenges of developing large-scale software artifacts. The approach taken involves the implementation of one or more large multi-person projects. Other topics include: software life-cycle, fundamental concepts of software design, modern language features, verification and validation techniques.

**CS/MA 135 Formal Languages and Automata** (4) Prerequisite: CS/MA015 Discrete Mathematics. In his early thirties, Alan Turing cracked the Enigma code, thereby shortening WWII by two to four years. As a consequence of this work, he established the theoretical foundation for what is computable, and what is not. At the age of 41, he tragically died from eating a poisoned apple. This course explores what it means to compute, what features are necessary for a machine to compute, and the respective limits on what different machines can compute.

## COMPUTER SCIENCE

- CS 140 Networks** (4) Prerequisite: CS 045 or consent of instructor. Network technologies including packet switching, framing, local and wide area technologies, network addressing, repeaters, bridges, hubs, switches, topologies, next-hop forwarding, shortest path computation, delay and throughput, and protocol layers. Internetworking including IP, TCP, UDP, datagrams, routers, and protocol ports. Network applications including client-server paradigm, and domain name system. Web technologies and protocols including HTTP, CGI, and Java.
- CS 145 Operating Systems** (4) Prerequisite: CS 045. Sequential processes; concurrent processes; scheduling algorithms; segmentation; paging; virtual systems; store management; networking; parallel processing; security.
- CS 150 Topics in Computer Science** (4) Prerequisite: CS 030 or consent of instructor. Special courses offered on selected advanced topics in computer science. Content as announced. May be repeated for credit in a different topic.
- CS 190 Internship** (1-4) Prerequisite: CS 030. Field experience arranged in conjunction with the department and supervised by professional computer scientists. (By arrangement.)
- CS 190SS, 191SS Computer Science Seminar for Service Learning Internship** (1,0) Prerequisite: Consent of instructor. Students will spend one (CS-191SS) or three hours (CS-190SS) per week running after-school enrichment programs in mathematics or computer science in local elementary, junior high, or high schools. Students will also attend four hours of course meetings, read assigned material, and write a reflective paper on the experience. (By arrangement.)
- CS 192 Project** (1-4) Prerequisite: CS 130. Participation in a multi-person computer science project. (By arrangement.)
- CS 195 Senior Seminar** (4) Prerequisite: CS 130 and senior standing as a computer science major or minor. In this capstone class, students reflect on computer science as a discipline, the connections with other disciplines, the impacts of technology upon society, and ethical considerations introduced by computers. In the process of completing a major project, students consider marketing, design, implementation, testing, and maintenance. In this class, seniors complete and present their online portfolio. As the culmination of their program, students explore the transition to graduate school or the commercial sector.
- CS 198 Research** (1-4) Prerequisite: CS 030. Students will work closely with faculty on original research. (By arrangement.)

# Economics and Business

*Professors M. Asher, E. Noell*

*Associate Professors R. Ifland (chair), E. Manlapig*

*Assistant Professor*

**Description of the Major.** The economics and business department equips students to serve and lead in dynamic settings with a major that is both distinctively broad by integrating the essential components of economics and business, and deeply engaging, by challenging students to address contemporary issues with critical thinking, personal conviction, and a Christian perspective.

**Distinctive Features.** The department of economics and business offers a rigorous undergraduate curriculum that explicitly integrates a decidedly Christian perspective to a broad range of concepts and terminology from both the economics and business fields of study. The college and faculty are committed to the classic liberal arts by educating the whole person for a lifetime of learning and growth (personally, spiritually, and professionally). Many institutions offer separate degrees in economics or business. Westmont intentionally blends these academic fields to demonstrate the timeless synergies between the core tenets of economic theory, and the functional disciplines of business, such that models, graphs, terminology, constructs, and simulations are explored from the integrative perspectives of both the economist and the business leader or manager.

**Career Choices.** Study of the indivisible interaction of economics and business within a liberal arts framework is designed specifically for full-time, residential, undergraduate students, grounding them in the noblest competencies related to all types of economic activity and enterprise development, in both public and private sectors, including but not limited to: critical thinking, problem-solving, quantitative analysis, writing, speaking, original inquiry, and decision-making. The department is not a business school within a university, and does not offer *majors* such as: accounting, economics, finance, and marketing. The *Wall Street Journal* and other publications often reports that a broad, interdisciplinary liberal arts education is preferred for future CEOs by blending knowledge of history, culture, philosophy, and economic policy, with international experience and problem-solving skills.

## Requirements for a Major: 49 units

**During the first two years, students complete 20 units of lower-division introductory courses:**

EB 003 Principles of Accounting (4)

EB 011 Principles of Macroeconomics (4)

EB 012 Principles of Microeconomics (4)

EB 020 Research and Forecasting (4) *or* EB 030 Principles of Corporate Finance (4)

MA 005 Introduction to Statistics (4)



**During the final two years, students take 9 units of required upper-division courses:**

- EB 102 Intermediate Microeconomics (4) *or* EB 137 Intermediate Macroeconomics (4)
- EB 180 Principles of Management (4) *or* EB 138 Applied Management Science (4)
- EB 195 Senior Seminar (1)

**Students choose 20 units of elective courses (five 4-unit courses) including but not limited to the following courses:**

- EB 103 History of Economic Thought (4)
- EB 104 World Poverty and Economic Development (4)
- EB 105 Business Law (4)
- EB 106 Environmental and Natural Resource Economics (4)
- EB 107 Business at the Bottom of the Pyramid (4)
- EB 116 Antitrust and Regulatory Environment of Business (4)
- EB 120 American Economic History (4)
- EB 125 Topics in Accounting (4)
- EB 130 Financial Statement Analysis and Earnings Management (4)
- EB 131 Corporate Finance (4)
- EB 132 Investments and Portfolio Management (4)
- EB 135 Money, Banking and Financial Markets (4)
- EB 138 Applied Management Science (4)
- EB 140 Seminar in Executive Leadership (4)
- EB 150 Topics in Business (4)
- EB 160 Principles of Marketing (4)
- EB 184 Globalization (4)
- EB 190 Internship (2-4)
- EB 191 Entrepreneurship and New Venture Development (4)
- EB 192 Change and Innovation (4)
- EB 193 Applied Research in Economics and Business (4)

Electives may be taken in any combination, based upon individual interests, allowing students to develop an *emphasis* such as: economics, entrepreneurship and innovation, accounting and finance, marketing and management, pre-law or international business. Students may earn 12 units of upper-division electives in the Europe-based International Business Institute, which includes visits to eight countries, and presentations by management and senior executives at venues such as: Nestle, Goldman Sachs, Finland Bank, Daimler-Benz, and the British Parliament. Students may earn up to 9 units of upper-division electives studying for one semester, for example, at either King's College London or The American University of Paris. In London, EB students enroll in the Management Department for three upper-division courses (250-399 level) consisting of one upper-division required course in either intermediate economics or management, or applied management science, plus two upper-division electives, and one course in a foreign language. Study in London is open to Westmont students with junior standing for Fall or Spring; those with senior standing can attend Fall term only. In Paris, EB students enroll in the Economics Department and/or the

International Business Administration Department for three upper-division courses (300-400 level) consisting of one upper-division required course in intermediate economics, plus two upper-division economics electives, OR one upper-division required course in Quantitative Decision-Making, plus two upper-division business electives. In addition, students in Paris take one course in French. Other off-campus programs for economics and business majors include the Westmont in San Francisco semester or the Washington, D.C. semester, with internship placements in an economics- or business-related organization or firm.

Many students complete a second major or minor in: mathematics, foreign language, philosophy, communication studies, or computer science.

## **Requirements for a Minor: 24 units**

### **Required Lower-Division Courses: 12 units**

EB 003 Principles of Accounting (4)

EB 011 Principles of Macroeconomics (4)

EB 012 Principles of Microeconomics (4)

### **Required Three Upper-Division Courses: 12 units**

## **Lower-Division Course Descriptions**

**EB 003 Principles of Accounting** (4) An introduction to accounting and construction of financial statements developed by basic concepts and techniques used in accounting.

**EB 006 Survey of Principles of Economics** (2) Survey of micro- and macro-economic principles, applications, economic systems, and international trade and development. (Not open to EB majors and minors.)

**EB 009 Society, Morality, and Enterprise** (4) An introduction to the philosophical perspectives, assumptions, competing interests and moral issues at the intersection of enterprise and society. The course progresses with an emphasis on reflective and critical evaluation of practical enterprise cases.

**EB 011 Principles of Macroeconomics** (4) An introduction to economic analysis with an emphasis on the dynamics of national income and monetary and fiscal policy.

**EB 011H Principles of Macroeconomics: Honors** (4) Prerequisite: By invitation only. An advanced section of Principles of Macroeconomics incorporating greater emphasis on oral reports, writing assignments, and more advanced readings with close supervision by the instructor. Special attention will be given to current economic policy issues.

**EB 012 Principles of Microeconomics** (4) An introduction to economic analysis with emphasis on the theory of firm and consumer behavior and the role of government in the microeconomy.

**EB 012H Principles of Microeconomics: Honors** (4) Prerequisite: By invitation only. An advanced section of Principles of Microeconomics incorporating greater emphasis on oral reports, writing assignments, and more advanced readings with close supervision by the instructor. Special attention will be given to current economic policy issues.

**EB 020 Research and Forecasting** (4) Develop a working knowledge of quantitative research and forecasting, including data types, methods, models, and analysis-interpretation; develop working knowledge of how to build curvilinear models and forecasts for companies, including pricing functions, demand curves, revenue, cost functions, and profitability. Emphasis is placed on using multivariate regression analysis and applied business calculus to examine a wide range of marginal analyses, and to develop proficiency building/using spreadsheets/macros and graphing functions.

**EB 030 Principles of Corporate Finance** (4) An introduction to corporate finance theory, working capital, debt and equity, capital budgeting, capital structure, financial analysis, mergers and acquisitions, leasing, and financial forecasting.

## Upper-Division Course Descriptions

(All lower-division required courses must be completed before upper-division courses are undertaken. This requirement applies to both the major and minor.)

**EB 102 Intermediate Microeconomics** (4) Analysis of the price system as applied to consumer behavior, theory of the firm, product market structures, and resource markets. Includes the consideration of the competitive market process, rent-seeking, market failure, the economics of information, and principal-agent relationships.

**EB 103 History of Economic Thought** (4) (Alternate years) A study of the origins and development of economic thought, emphasizing its inter-relationship to other disciplines, especially the other social sciences and Christian theology. Examines the economic thought of the ancients and medieval scholastics, as well as the development of modern political economy associated with figures such as Adam Smith, Karl Marx, J.M. Keynes, and Joseph Schumpeter.

**EB 104 World Poverty and Economic Development** (4) Examination of the issues of world poverty and economic development including income distribution, capital formation, informality, law and corruption, international trade, foreign aid, globalization and multinationals, financial crises, population growth, gender issues, agriculture, and education. An emphasis is placed on the neoclassical economic principles and economic evidence that point to causes of poverty and the path to economic development.

**EB 105 Business Law** (4) Develops critical thinking skills with respect to the law and the business world from an interdisciplinary perspective as diversity of thought is valued. Fosters an active intellectual engagement with business legal questions in our contemporary society through an enhanced understanding of legal terminology, the judicial system and how it applies to business in particular, and when it is time to seek legal advice and take preventative law steps. Topics covered include: legal

rights and their enforcement in the civil and criminal setting; contract law; real property and personal property; sales and negotiable instruments; commercial paper; creditors rights; bankruptcy; agency and principal law; corporations, partnerships and limited liability companies; cyber law; intellectual property law, and international laws.

- EB 106 Environmental and Natural Resource Economics** (4) Economic principles for understanding complex environmental and natural resource issues and providing a foundation for innovative policy solutions. Special attention is paid to the debate between the neoclassical and ecological economics perspectives.
- EB 107 Business at the Bottom of the Pyramid** (4) The fundamentals of business formation and strategy applied to some of the deepest needs in the world. This class travels to Haiti during the Spring semester to launch companies.
- EB 116 Antitrust and Regulatory Environment of Business** (4) The influence of government on business with special emphasis on market structure, industrial organization, and antitrust policy.
- EB 120 American Economic History** (4) Examines the development of the American economy, from the colonial period to the twenty-first century, in order to understand sources of economic growth. Special attention is given to understanding the significance of economic institutions in particular economic issues, including the Constitution, technological change, slavery, the changing roles of women and African-Americans in the economy, immigration, industrialization, warfare, increasing scope of government, the labor union movement, changes in antitrust and labor law, macroeconomic fluctuations, and the role of the U.S. in the global economy.
- EB 125 Topics on Accounting** (4) Prerequisite: EB 003 only. Advanced accounting topics will be selected from year to year, including income tax theory and practice, and intermediate accounting.
- EB 130 Financial Statement Analysis and Earnings Management** (4) Prerequisite: EB 003. Advanced financial statement analysis and earnings management of private and public corporations, including how Chief Financial Officers can use financial statements to alter stock prices, financing alternatives and liquidity.
- EB 131 Corporate Financial Management** (4) Corporate finance theory, working capital, debt and equity, capital budgeting, capital structure, financial analysis, mergers and acquisitions, leasing, and financial forecasting.
- EB 132 Investments and Portfolio Management** (4) Prerequisite: EB 131. Risk and return, stocks, bonds, options, commodity and index futures, real estate, mutual funds, technical and fundamental analysis, money markets, modern portfolio theory, arbitrage, and asset allocation.
- EB 135 Money, Banking and Financial Markets** (4) Analysis of the functioning and significance of money and capital markets, financial institutions, and financial instruments. Examines the role of financial innovation and government regulation in relationship to the U.S. banking industry, nondepository financial institutions, the Federal Reserve System, and the international financial system. Explores the significance of hedging instruments and regulatory intervention with respect to financial crises.

- EB 137 Intermediate Macroeconomics** (4) The study of aggregate economic activity. Analyzes inflation, employment, and growth policies of Classical, Keynesian, Monetarist, and New Classical schools through the use of macromodels.
- EB 138 Applied Management Science** (4) Managerial use of microeconomic models and quantitative techniques including probability, optimization, forecasting, econometrics, linear programming, utility tests, production models, exponential and logarithmic functions, derivatives, and decisions under uncertainty.
- EB 140 Seminar in Executive Leadership** (4) A seminar format to study both leadership and management, including the roles of the Chief Executive Officer, the Board of Directors and the Top Management Teams and how they use various strategies to lead during times of uncertainty.
- EB 150 Topics** (2-4) Prerequisites: EB 011 and EB 012 only. Special topics in economics or business.
- EB 160 Principles of Marketing** (4) An exploration of the principles, concepts, strategy and tactics of marketing. This course provides an overview of marketing, understood as the empathetic art of building relationships between products and services and unique consumers, businesses and markets. Abstract theory and concepts are brought to life by case studies, examples and a major student-run auction event at the end of the semester. In these ways, this class will serve as a proving ground for thinking critically about marketing, creating and executing ideas, and grappling with the current trends, ethics and controversies of modern marketing.
- EB 161 International Marketing** (4) Theory and practice of international marketing management. (International Business Institute)
- EB 170 Auditing** (4) Concepts of auditing businesses, including analysis of financial statements and ethical considerations, with emphasis on the principles needed for the CPA examination.
- EB 180 Principles of Management** (4) An exploration of the responsibilities, opportunities and challenges of contemporary management. This course provides an overview of the central concepts of management, as segmented into the core functions, skills and processes of management theory, and brought to life by case studies that provide students the opportunity to grapple with practical management dilemmas. This class will serve as a training ground for thinking managerially, and for considering what it takes to be an excellent manager.
- EB 182 Modern Chinese and East Asian Economics** (4) Examines the economic features of the modern Chinese economy in its East Asian context. Attention is paid to the particular features of the Chinese 'socialist market' economy in light of recent and ongoing economic reforms. Among the economic institutions and policies explored are banking, household savings, financial markets, intellectual property rights and manufacturing, labor markets and intra-China migration policy, working conditions and pension benefits, one-child policy, women's role in the Chinese economy, income inequality, poverty, agriculture, environmental pollution and natural resource usage. A comparative analysis of the historical rise of East Asian economics such as Japan and South Korea is offered as well as a discussion of China's role in the global economy through its trade and currency policies. Through travel in China students will visit small business firms, financial

institutions and markets, nonprofit organizations tasked with aiding migrant workers and low-income Chinese citizens, and the business operations of leading multinational firms engaged in manufacturing and provision of services.

**EB 183 Social Entrepreneurship and Collective Action** (4) This course explores different theories and practices of social change, entrepreneurship, and innovation. As such, the course considers a range of methods to resolve pressing social problems while situating social ventures into theoretical, historical, structural, and scriptural context. Throughout the course, students will examine locally specific, solutions-oriented social change efforts and then place those efforts in to global context.

**EB 184 Globalization: Economic History, Controversy, and Prospects** (4) Explores the process of globalization, by means of examining various eras of globalization and possible lessons for modern controversies. Considers the growth of major European economies as economic powers and the interaction between protectionism and global economic integration. Special emphasis is placed on changes in international monetary standards and exchange-rate policy in Europe, Asia, and Latin America, the controversial roles of the World Bank, IMF, WTO, and multinational corporations in relation to trade, the environment and global poverty, and the development of the European Monetary Union. Prospects for the world economy and particular global economic challenges facing Christians are examined.

**EB 185 International Trade and Finance** (3) An introduction to analysis of international trade, international finance, and economic integration. (International Business Institute)

**EB 186 Seminar on International Business Policy** (3) The multinational firm in the world economy, international business strategy, organizational behavior, and international investment. On-site presentations by leaders of multinational and international firms. (International Business Institute)

**EB 187 Comparative Economic Systems** (3) Analytical and historical comparison of various major economic systems. (International Business Institute)

**EB 189 Economics of the European Union** (4) An examination of the development and current status of the European Union, including its history, central economic and political institutions, and inter-relationships among member economies. Analyzes current issues in industrial policy, social policy, trade policy, economics of a single currency, financial markets, and European political economy, and considers possible future directions for the European Union.

**EB 190 Internship** (1-4) Prerequisite: one upper-division economics course. The department internship program is designed to help students answer two basic questions: 1) What type of career, and work environment, best fits me? and 2) What does it take to excel in such a role? These questions are answered most effectively by immersion in a local organization approximating the student's ideal. This course offers a unique opportunity to ground one's education, and personal ambitions, in a practical work environment. Some internship placements may also satisfy the GE requirement for *Serving Society; Enacting Justice*. See also IS 190 Urban Internship under off-campus programs.

**EB 191 Entrepreneurship and New Venture Development** (4) The role and processes of new venture development applied to some of the world's deepest needs. Each team develops an in-depth business plan to meet some of the deepest needs in the world, working closely with people on the ground. Each team then sends their completed plan to the entity for implementation. Topics include: writing business plans, strategic management, venture capital, public offerings, and the unique legal and tax issues of small to medium enterprises. The course culminates with the Annual Westmont Collegiate Entrepreneurs Business Plan Competition (Thursday evening of last week of Fall classes in December), where each student venture team makes formal presentations to an outside panel of reviewers who are successful entrepreneurs, investment bankers, hedge fund managers, angel investors, and venture capitalists.

**EB 192 Change and Innovation** (4) Seminar style course focused on reading five or six contemporary authors as a follow-up to EB 191 (Entrepreneurship and New Venture Development). The emphasis is on industry analysis within various technology sectors of the economy. Defines the primary economic tenets and freedoms of the American private enterprise system, and the impacts (negative and positive) that emerging change and innovation have on the stability and viability of firms within specific industries. Topics include: types and forms of change, the role of process innovation, emergence of intellectual capital, the impact of IT, principles of strategic management in response to change, and ethics and issues of successful change and transition management. Includes outside field trips to high technology firms, conferences, and/or product expos. Also involves outside speakers who are running successful high-tech firms between San Diego, Los Angeles, the central coast and Silicon Valley.

**EB 193 Applied Research in Economics and Business** (4) Offered only within the Market Applications Program (MAP) senior year experience at E<sup>3</sup> (Westmont's Center for Entrepreneurship, Ethics, and Enterprise), the course engages students in primary joint research projects with EB faculty and other EB seniors, covering a wide range of topics in economics and business. Students apply various aspects of their previous EB coursework to the design, implementation, analysis, and publication of original research using both primary and secondary data with specific emphases on statistics, econometrics, multiple regression, calculus, and Excel-based forecast modeling. Results are published and distributed for public access through E<sup>3</sup>. Students also write and publish research summaries, policy editorials, and make presentations to various constituents with interest in the research findings.

**EB 195 Senior Seminar** (1) Prerequisites: Senior standing. Topics related to the transition to the world of economics and business.

**EB 198 Directed Research** (2-4) Students have the opportunity to complete a semester-long independent research project under the direction of one or more Economics and Business faculty, and may be awarded two, three, or four units of upper-division elective credit toward the major. The student proposes the research thesis and project completion agenda to the selected faculty member(s), and meets regularly during the semester as the project advances through the research stages. Upon completion, the student makes a formal presentation to the department faculty, which is announced as an open forum for students and faculty from across campus to attend.

# Education Program

*Professor A. Mullen*

*Associate Professor M. Hughes (chair), J. Wilson*

**P**rogram Description: Well-educated persons want to share their education with others. It's no surprise, then, that graduates of liberal arts colleges such as Westmont have historically been attracted in large numbers to elementary and secondary classrooms. A career in K-12 education allows one to share one's knowledge and wisdom with others, but perhaps even more important—to share oneself.

Teaching at any level is a demanding profession, and requires rigorous preparation accordingly. This includes academic and professional preparation, but also something much bigger: becoming the sort of self-worth sharing. A liberal arts college such as Westmont, where students are encouraged to develop themselves as whole, well-rounded persons, is an ideal environment to undertake such preparation. The task of preparing teachers becomes in one sense, then, the responsibility of the entire college. All courses and experiences on and off campus are potential contributions to the education of a prospective teacher, and should be approached by students in that spirit.

In the Education Department we bear a special responsibility for mentoring prospective teachers and guiding them in the transition from student to teacher. We work closely with other academic departments on campus responsible for the subject matter preparation of teachers. We seek to integrate that subject matter into our lives and to develop skills in sharing subject matter with adolescents and children. The department takes great pride in the reputation we have developed in the community and the region for sending out well-prepared, highly professional teachers.

**P**rogram Offerings: Westmont's Department of Education offers programs leading to both elementary (Multiple Subject) and secondary (Single Subject) credentials. Prospective elementary teachers at Westmont typically major in Liberal Studies, which in California refers to a multi-disciplinary program specifically designed for elementary teaching candidates. After completing the Liberal Studies major and passing state-required examinations, candidates apply to the one-year professional program to earn a Multiple Subject Credential (typically used K-6). At Westmont, students who plan carefully can complete both the Liberal Studies major and the credential program in four years. For details of the Liberal Studies program, please see p. 141.

Prospective secondary teachers generally major in the subject area they wish to teach. In their junior or senior year, they take a general academic competency test (the CBEST) and a specific subject-matter examination in their chosen field (the CSET) in order to enroll in a professional program leading to certification. If schedule permits, secondary teaching candidates may qualify for teaching an additional subject beyond their major field.

Westmont is approved by the California Commission on Teacher Credentialing to offer Single Subject credentials in English, History-Social Science, Mathematics, the Sciences (general and specialized), Art, Physical Education, and Spanish, refer to Bachelors of Music Education on p. 158.



## EDUCATION PROGRAM

All teacher candidates, elementary and secondary, should note that requirements for entrance to state-approved credential programs, as well as credential requirements themselves, are subject to change by California's Commission on Teacher Credentialing (CTC) on short notice. It is imperative to stay in close touch with your academic advisor to stay up on current regulations.

Early planning is essential for secondary candidates. Students considering such a profession should alert their academic advisor as soon as possible after arriving at Westmont, and also notify the Education Department chair.

***P*rogram Distinctives:** With careful planning and (in many cases) extra classes over the summer, it is possible to complete both the subject-area requirements and the Credential program in four years.

Personal, one-on-one advising guides candidates through the sometimes bewildering maze of state requirements leading to a teaching credential. Program personnel are consistently available and responsive to individual student questions.

A scholarship equal to a 55% reduction in tuition is given during the semester of student teaching to students who have completed the B.A. degree and who live off campus. Note that this is given in lieu of other Westmont scholarships the student may have received previously.

## Multiple Subject Credential Requirements (Elementary)

Candidates for the Multiple Subject Credential typically complete a Liberal Studies major. Whatever major is selected, candidates must achieve passing scores on the CBEST and CSET. Please note that beginning in 2007, the state of California made available multiple options for meeting the basic skills requirement for Multiple Subject candidates (see options at [www.ctc.ca.gov/credentials/leaflets/c1667.pdf](http://www.ctc.ca.gov/credentials/leaflets/c1667.pdf)). Passage of the California Basic Educational Skills Test (CBEST) remains one of the options. CSET: Writing Skills is another option for credential candidates to meet the state basic skills requirement. Candidates who pass all three subtests of CSET: Multiple Subjects AND CSET: Writing Skills will be considered proficient in the basic skills of reading, writing and mathematics and will not be required to take the CBEST to earn a teaching credential.

### **Required courses:**

- ED 110 Educational Psychology (4)
- ED 120 Social Studies and Science Instruction in Diverse Elementary Classrooms (4)
- ED 130 Special Education for the Classroom Teacher (2)
- ED 150 Math Instruction for All Students in Diverse Elementary Classrooms (4)
- ED 170 Reading & Language Arts Instruction in Diverse Elementary Classrooms (4)
- ED 190 Student Teaching (12)
- ED 195 Student Teaching Seminar (3)

**Required support courses:**

(Normally these are taken prior to entering the Credential program, but one of these may also be taken simultaneously with the program):

- ED 100 Explorations in Teaching (4)
- ED 105 Perspectives on Cultural Diversity and Education (4)
- ED 160 Computers for the Classroom Teacher: Elementary (2)
- ENG 106 Language Acquisition (4)
- KNS 156 Health Education for the Classroom Teacher (2)

Note that candidates must also demonstrate knowledge of the U.S. Constitution (by completing POL 010; or passing an approved examination, available through the Westmont Department of Education) and complete CPR training/certification (infant/child/adult level). Certification must be valid at the time of application for credential—see Program Assistant for details.

Note that in addition to two state tests required for entry to Credential program, elementary candidates must later pass a state examination in reading instruction (the RICA), in order to receive their California credential.

As of the 2007-08 academic year, candidates must pass the California Teaching Performance Assessment (TPA) prior to being recommended for the credential.

A course fee of \$300 will be attached to ED 110/111 to cover in part institutional expenses associated with administering and scoring the TPA.

The candidate's first response on each of the four tasks of the TPA will be scored as part of the standard course fee. If the candidate is not successful on the first attempt, an additional fee of \$75 per task will be applied to the candidate's College account to cover in part the costs of re-scoring. If the candidate is not successful on the second attempt, he or she may be required to repeat the course in which that particular task was assigned, and will have one final opportunity to pass, at which time an additional \$75 fee will be posted. Candidates may not submit a response more than three times.

There is an additional fee for late responses, as noted in the Candidate Handbook.

## Single Subject Credential Requirements (Secondary)

Candidates for the Single Subject Credential must achieve a passing score on the appropriate CSET (California Subject Examinations for Teachers) exam and CBEST (see options at [www.ctc.ca.gov/credentials/leaflets/c1667.pdf](http://www.ctc.ca.gov/credentials/leaflets/c1667.pdf)).

**Required courses:**

- ED 101 Explorations in Teaching: Culturally Diverse Secondary Schools (4)
- ED 111 Educational Psychology (4)

*One of the following:*

- ED 122 English Curriculum and Instruction (4)
- ED 123 History/Social Science Curriculum and Instruction (4)
- ED 124 Mathematics Curriculum and Instruction (4)
- ED 125 Science Curriculum and Instruction (4)
- ED 126 Spanish Curriculum and Instruction (4)
- ED 127 Art Curriculum and Instruction (4)

## EDUCATION PROGRAM

ED 128 Music Curriculum and Instruction (4)

ED 129 Physical Education Curriculum and Instruction (4)

ED 151 Curriculum, Classroom Management, and Instruction in Diverse Secondary Classrooms (2)

ED 171 Content Area Literacy in Diverse Secondary Classrooms (4)

ED 191 Student Teaching: Secondary (12)

ED 196 Student Teaching Seminar (3)

### **Required support courses**

(Normally these are taken prior to entering the Credential program, but one or two of these may also be taken simultaneously with the program):

ED 105 Perspectives on Cultural Diversity and Education (4)

ENG 106 Language Acquisition (4)

ED 161 Computers for the Classroom Teacher: Secondary (2)

ED 130 Special Education for the Classroom Teacher (2)

KNS 156 Health Education for the Classroom Teacher (2)

Candidates must also demonstrate knowledge of the U.S. Constitution (by completing POL 010; or passing an approved examination, available through the Westmont Department of Education) and complete CPR training/certification (infant/child/adult-level). Certification must be valid at the time of application for credential—see Program Assistant for details.

As of the 2007-08 academic year, candidates must pass the California Teaching Performance Assessment (TPA) prior to being recommended for the credential. Please see note under Multiple Subject above, regarding fees and policy for re-taking the TPA.

### **Admission Procedures (For students completing a credential program, elementary or secondary, as part of their Westmont undergraduate degree)**

1. File an application with the education department during the junior or senior year by March 1.
2. Obtain a handbook for the credential program (multiple or single subject) from the education department. This booklet provides further details on all requirements.

*Formal Admission.* The Teacher Education Advisory and Candidate Selection Committee bases admission to the teacher preparation program upon:

1. Academic qualifications (A minimum GPA of 2.75 required, as is a passing score on the appropriate CSET [California Subject Examinations for Teachers] exam and the CBEST or equivalent.)
2. Junior standing or above.
3. Completion of ED 100 or ED 101, or evidence of 100 contact hours with children or adolescents.
4. Personal recommendations by faculty.

*Student Teaching.* Prior to approval for student teaching, the teacher candidate must:

1. Complete all courses required in the teacher preparation program.
2. Complete all application forms, including the one for student teaching.
3. Qualify for senior status or be officially admitted to the advanced studies program.
4. Complete the health requirement (chest x-ray or PPD test) required by the Commission on Teacher Credentialing.
5. Complete Certificate of Clearance Application required by the Commission on Teacher Credentialing.
6. Pass California Basic Education Skills Test (CBEST or equivalent).
7. Maintain a 2.85 GPA in the semester prior to student teaching.
8. Pass the appropriate CSET (California Subject Examinations for Teachers) exam or complete an appropriate Waiver Program.

## **Fifth Year: Advanced Studies Program (Elementary or Secondary)**

Graduates of Westmont or other colleges who choose not to earn their credential as part of their four-year program have the option of completing a fifth-year, post-baccalaureate program at Westmont.

Teacher candidates planning to enroll in the fifth year program should complete as many of the following requirements as possible, at Westmont or elsewhere, prior to beginning the fifth year. Normally, one to three of these courses (up to 6 credits) may be taken as part of the fifth year.

ED 100/101 Explorations in Teaching (4)

ED 105 Perspectives on Cultural Diversity and Education (4)

ED 130 Special Education for the Classroom Teacher (2)

ED 160 or ED 161 Computers for the Classroom Teacher (2)

ENG 106 Language Acquisition (4)

KNS 156 Health Education for the Classroom Teacher (2)

Course or test demonstrating knowledge of the U.S. Constitution (Westmont administers an examination, which may be taken by Westmont students up to two times without cost. There is a fee of \$50 for subsequent administrations.)

### **Admission Requirements for Advanced Studies**

1. Hold a baccalaureate degree from an accredited college with a 2.75 GPA (four point scale).
2. Submit application no later than March 1. Application should be submitted directly to the Department of Education. There is no application fee.
3. In addition to the application form, candidates must submit three letters of recommendation.

## EDUCATION PROGRAM

4. Submit official college transcripts from every institution attended and all relevant test scores to the Education Department. Passing scores on the CBEST or equivalent and appropriate CSET are required (see handbook for details).
5. Contact the Program Assistant to schedule an informal personal interview.
6. Sign statement acknowledging Community Life Expectations.
7. Additional requirements are delineated in the single subject or multiple subject handbooks.
8. A \$300 deposit to the Department of Education is due upon acceptance to the credential program in order to reserve your space. Notification of admissions decisions typically occurs by mid-April.

For other details and questions about the fifth-year program, contact the Education Department. Students wishing to apply for financial aid should contact Westmont's Financial Aid Office directly.

Fifth-year candidates who hold a B.A. degree, live off campus, and are not enrolled in classes on campus, will receive a scholarship equal to a 55% reduction in tuition during the semester they do student teaching.

## Course Descriptions

**ED 011 Windows Into Teaching** (1) This 1-unit seminar offers a window into the field of teaching. Recommended for students considering teaching as a career. Explores dispositions needed to succeed in teaching, professional opportunities available for educators, and steps to obtaining a teaching credential at Westmont. Exemplary educators will share about their experiences in the field.

**ED 100 Explorations in Teaching -- Elementary** (4) An introduction to contemporary educational issues, with an emphasis on understanding how teaching and learning are impacted by forces outside the classroom. A 40-hour field experience in an ethnically and/or socio-economically diverse classroom in or near Santa Barbara is a major component of the course. State-approved fingerprinting (fee) is required, along with evidence of TB testing, in order to begin field experience.

**ED 101 Explorations in Teaching -- Secondary** (4) An introduction to contemporary educational issues, with an emphasis on understanding how teaching and learning are impacted by forces outside the classroom. A 40-hour field experience in an ethnically and/or socio-economically diverse classroom in or near Santa Barbara is a major component of the course. State-approved fingerprinting (fee) is required, along with evidence of TB testing, in order to begin field experience.

**ED 105 Perspectives on Cultural Diversity and Education** (4) Introduces students to the changing cultural diversity in California and issues of multicultural education relevant to K-12 schooling. Crosscultural field experiences required.

**ED 108 Mexican Schools Field Experience** (2) Pre-requisite: Signature of Education Department Chair and current WIM faculty leader. Internship offered in conjunction with the Westmont in Mexico program. Students interested in exploring teaching study the Mexican educational system and visit a variety of public and private school classrooms, including urban, rural, and indigenous settings. For ten weeks students serve as a teacher's aide, under the supervision of IUSI professionals.

**ED 109 Liberal Studies Seminar** (1) Capstone course for Liberal Studies major. Focus will be the preparation and presentation of a comprehensive portfolio wherein student demonstrates academic achievement and reflection upon the major as a whole.

**ED 110 Educational Psychology -- Elementary** (4) Introduces candidates to research-based concepts, principles, and theories of learning, management, and motivation and how that information applies to the full range of learners in diverse classrooms.

**ED 111 Educational Psychology -- Secondary** (4) Introduces candidates to research-based concepts, principles, and theories of learning, management, and motivation and how that information applies to the full range of learners in diverse classrooms.

**ED 130 Special Education for the Classroom Teacher** (2) Covers needs of exceptional children in the area of diagnosis, program development, special learning needs and techniques, cultural and linguistic characteristics, material modification, social and career goals, professional services, and individual educational programs. Attention given to legislative requirements and parent involvement. Encompasses competencies required in Title 5 Regulations: Section 80032.2 and Section 44259 related to special education training for the classroom teacher.

**ED 160 Computers for the Classroom Teacher: Elementary** (2) Emphasis placed on hands-on experiences with software appropriate for elementary subjects and grade levels. Encompasses competencies required in Title 5 Regulations: Section 80422 related to computer education coursework.

**ED 161 Computers for the Classroom Teacher: Secondary** (2) Emphasizes hands-on experiences with software appropriate for secondary subjects and grade levels. Encompasses competencies required in Title 5 Regulations: Section 80422 related to computer education coursework required for the classroom teacher.

**ED 172 Literature for Children and Adolescents** (4) Survey of selected writing for children, representing different developmental stages, a range of world cultures, and major literary genres. Course themes include criteria for evaluating literature, relationship of literature to culture and society, and the utilization of literature in K-8 classrooms.

**Enrollment in the following courses is limited to students who have been accepted in the Teacher Preparation Program.**

## EDUCATION PROGRAM

**ED 120 Social Studies and Science Instruction -- Elementary** (4) An introduction to developmentally appropriate instructional strategies, curriculum materials, and conceptual frameworks for teaching these subjects in the elementary classroom. Emphasis given to working with California K-6 content standards and adapting instruction to the needs of culturally and linguistically diverse learners.

**ED 122 English Curriculum and Instructional Planning -- Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.

**ED 123 History/Social Curriculum and Instructional Planning -- Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.

**ED 124 Mathematics Curriculum and Instructional Planning -- Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.

**ED 125 Science Curriculum and Instructional Planning -- Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.

**ED 126 Spanish Curriculum and Instructional Planning -- Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.

**ED 127 Art Curriculum and Instructional Planning -- Elementary and Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.

- ED 128 Music Curriculum and Instructional Planning – Elementary and Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.
- ED 129 Physical Education Curriculum and Instructional Planning – Elementary and Secondary** (4) Offers an introduction to instructional strategies, curriculum, materials, the preparation of instructional plans, and conceptual frameworks specific to candidate's major content area. Emphasis given to working with California 7-12 content standards and adapting instruction to the needs of culturally and linguistically diverse learners. Fieldwork (15 hours) in a local public school is required.
- ED 150 Math Instruction for All Students -- Elementary** (4) Explores the organization, planning and instruction of mathematics curriculum in diverse elementary classrooms. The course includes content knowledge, developmental learning and creative instructional strategies. Fieldwork (15 hours) in a local public school is required.
- ED 151 Curriculum, Classroom Management, and Instruction -- Secondary** (2) Functional concepts of learning, curricular content, instructional planning, teaching techniques, classroom management, and methods of diagnosing and evaluating student performance in culturally/linguistically diverse classrooms at the middle and high school levels. Includes exposure to the structure/role of central office administration, building principals and support staff/systems. Through on-site visits, guest lectures and working with practitioners in local schools students develop lessons focusing on their particular subject matter disciplines. Includes field experiences.
- ED 170 Reading and Language Arts -- Elementary** (4) Provides candidates with the knowledge, skills, and instructional strategies needed to assess, plan, and teach a comprehensive program of systematic instruction in reading, writing, listening and speaking to the full range of students in diverse elementary classrooms. Fieldwork (15 hours) in a local public school is required.
- ED 171 Content Area Literacy -- Secondary** (4) Examines literacy as it applies to the study and acquisition of subject matter content. This course provides candidates with the knowledge, skills, and instructional strategies needed to assess, plan, and teach content-based literacy skills to a full range of students in diverse secondary classrooms. Fieldwork (15 hours) in a local public High school is required.
- ED 180 Topics in Education: Elementary** (1-4) Prerequisite: approval of the instructor. Content as announced.
- ED 181 Topics in Education: Secondary** (1-4) Prerequisite: approval of the instructor. Content as announced.
- ED 190 Student Teaching Elementary** (12) Requires completion of all prerequisites to student teaching. Candidates student teach for a semester in culturally diverse elementary schools. (P/NC grading only)



## EDUCATION PROGRAM

**ED 191 Student Teaching Secondary** (12) Requires completion of all pre-requisites to student teaching. Candidates student teach for a semester in culturally diverse secondary schools. **Student teaching continues beyond the close of Westmont's spring semester.** (P/NC grading only)

**ED 195 Student Teaching Seminar Elementary** (3) Registration is concurrent with ED 190 or ED 191. Weekly seminars focus on issues relevant to student teaching in culturally diverse settings.

**ED 196 Student Teaching Seminar Secondary** (3) Registration is concurrent with ED 190 or ED 191. Weekly seminars focus on issues relevant to student teaching in culturally diverse settings.

# Engineering Physics

*Professors K. Kihlstrom (chair), H. M. Sommermann*

*Associate Professor J. Mitchell*

*Instructor T. Whittemore*

**Description of the Major.** The rapid growth of scientific knowledge and its applications has generated a large demand for men and women well-trained in physics and engineering. Physicists seek a fundamental understanding of the physical universe. Engineers apply scientific knowledge to design and develop structures, machines, and products.

Students may pursue the engineering physics major with an emphasis in either area. The physics emphasis stresses fundamental science and mathematics essential for graduate study or professional work in physics. The engineering emphasis, while not a formal engineering program, provides a strong conceptual base for an engineering career. In addition, the “3-2” dual-degree program allows for a full engineering program. See p. 230.

Recent acquisitions of state-of-the-art instrumentation enrich students’ experience in the laboratory. Opportunities exist for involvement in research.

**Distinctive Features.** In addition to pursuing the regular B.S. or B.A. degree offered in the engineering physics major, students have the option of combining the Westmont liberal arts and sciences curriculum with study at an engineering school. This program usually requires three years at Westmont and two years at an engineering school. Students receive both a formal engineering degree from the engineering school (such as Colorado School of Mines, UCSB, USC, or Washington University) and a B.A. from Westmont. Students are encouraged to participate in an off-campus program during the junior or senior year.

**Career Choices.** Completion of the engineering physics degree enables students with good academic records to enter graduate study in physics or engineering.

The engineering physics major also prepares students for a variety of careers such as medicine, law, secondary or college-level teaching, and church ministry. It develops their ability to think logically and analytically regarding the objective behavior of physical systems.

Competencies developed in the engineering physics major also help students acquire specific technical skills needed in a variety of careers such as technical writing, patent work, geophysical or marine exploration, and medical technology.

## Requirements for a B.S. in Engineering/Physics: 60 units

**Required Lower-Division Courses: 35 units**

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

## ENGINEERING PHYSICS

PHY 025 Modern Physics (4)  
PHY 026 Modern Physics Laboratory (1)  
PHY 040 Differential Equations (4)  
MA 009, 010 Elementary Calculus I, II (4,4)  
MA 019 Multivariable Calculus (4)  
One four unit laboratory science class (such as CHM 005 or BIO 005) (4)

### **Required Upper-Division Courses: 25 units**

PHY 115 Mathematical Physics (4)  
PHY 130 Mechanics (4)  
PHY 142 Circuits and Electronics (4)  
PHY 143 Electronics Laboratory (1)  
PHY 150 Electricity and Magnetism (4)  
PHY 195 Senior Seminar (1)  
*One of the following (4)*  
    PHY 151 Electromagnetic Waves and Optics (4)  
    PHY 121 Quantum Mechanics (4)  
    PHY 160 Thermodynamics (4)  
*One of the following: (1)*  
    PHY 170 Advanced Physics Lab (1)  
    PHY 190 Internship (1)  
    PHY 198 Physics Research (1-4)

## **Requirements for a B.A. in Engineering/Physics: 48-50 units**

### **Required Lower-Division Courses: 35 units**

PHY 021, 023 General Physics I, II (4,4)  
PHY 022, 024 General Physics Laboratory I, II (1,1)  
PHY 025 Modern Physics (4)  
PHY 026 Modern Physics Laboratory (1)  
PHY 040 Differential Equations (4)  
MA 009, 010 Elementary Calculus I, II (4,4)  
MA 019 Multivariable Calculus (4)  
One four unit laboratory science class (such as CHM 005 or BIO 005) (4)

### **Required Upper-Division Courses: 13-14 units**

PHY 130 Mechanics (4)  
PHY 150 Electricity and Magnetism (4)  
PHY 195 Senior Seminar (1)  
*One of the following: (4-5)*  
    PHY 115 Mathematical Physics (4)  
    PHY 142, 143 Circuits and Electronics, Laboratory (4,1)  
    PHY 160 Thermodynamics (4)

## **Requirements of Engineering/Physics 3-2 Program: 44 units**

### **Required Lower-Division Courses: 35 units**

PHY 021, 023 General Physics I, II (4,4)  
PHY 022, 024 General Physics Laboratory I, II (1,1)  
PHY 025 Modern Physics (4)  
PHY 026 Modern Physics Laboratory (1)  
PHY 040 Differential Equations (4)  
CHM 005 General Chemistry I (4)  
MA 009 Elementary Calculus I (4)  
MA 010 Elementary Calculus II (4)  
MA 019 Multivariable Calculus (4)

### **Required Upper-Division Courses: 9 units**

PHY 130 Mechanics (4)  
PHY 142 Circuits and Electronics (4)  
PHY 143 Electronic Laboratory (1)

### **Strongly Recommended**

PHY 115 Mathematical Physics (4)  
PHY 150 Electricity and Magnetism (4)

## **Requirements for an Engineering/Physics Minor: 23-24 units**

### **Required Lower-Division Courses: 15 units**

PHY 021, 023 General Physics I, II (4,4)  
PHY 022, 024 General Physics Laboratory I, II (1,1)  
PHY 025 Modern Physics (4)  
PHY 026 Modern Physics Laboratory (1)

### **Required Upper-Division Courses from the following: 8-9 units**

PHY 115 Mathematical Physics (4)  
PHY 130 Mechanics (4)  
PHY 142, 143 Circuits and Electronics, Laboratory (4,1)  
PHY 150 Electricity and Magnetism (4)  
PHY 160 Thermodynamics (4)

**See Physics for Course Descriptions**

# English

*Professors P. Delaney, C. Larsen Hoeckley, R. VanderMey,*

*P. Willis*

*Associate Professor S. Skripsky (chair)*

*Assistant Professors E. Hess, C. McCain*

**Description of the Major.** Studies in English lead to mastery in the skills of reading literature with precision and care, researching thoroughly, and writing with clarity and imagination. Literature invites us to attend to places, times, and selves beyond our own. It allows us to journey with those whose experiences—resulting from their historical moment, race, class, or gender—differ from our own, giving us a wider view of the world and our particular place in it. Learning to engage with the voices of others in literature with intellectual rigor, curiosity, and compassion increases our capacities for enacting justice and mercy in our communities and our world. By reminding us continually that there is more to life than the physical or the quantifiable, literature can stimulate imagination in ways that enhance and challenge faith.

Through both reading and writing, the English major develops the capacity for critical thinking and the ability to communicate in rhetorically sensitive prose. Thus, the major helps to fulfill the English Department's Mission Statement:

**The study of language and literature offers practice in the discipline of paying attention to the beauty and brokenness of the created order as students learn to read carefully, think critically, and write with rhetorical sensitivity.**

As our students explore various genres across various centuries, they will investigate the interplay of form and content as well as the interaction of text and historical context. As they wrestle with the ethical questions implicit in texts, they will examine their own assumptions, even as they witness an expansion of their sympathies. As they gain new knowledge of the understanding and use of the English language, our students will view the expressive capacity of English, in all its complexity, as an invaluable gift of which they are to be faithful stewards.

**Distinctive Features.** The biennial study tour in England, directed by regular department faculty in fall semesters, combines the study of literature with a program of travel to literary and cultural centers. During the period of residential study students concentrate on well-known English writers with some attention given to emerging and less-remembered voices. They also attend theatre productions in Edinburgh, London, and Stratford-upon-Avon, as well as learn about the historical contexts and local cultures in which great British literature has been written. Additionally, students visit important historic and cultural sites. Past locations have included Oxford, Canterbury, York, Birmingham, and the Lake District of the Romantic poets.

The major offers a strong program for students interested in the general study of English, with two possible areas of concentration, literature or writing. The writing

concentration is for those who desire the benefits, in college and after, of significant exercise in various kinds of written expression including creative writing, film analysis, and journalism.

The student-led Literary Society affords students a chance to socialize while exploring their passion for literature in a series of special events open to majors, non-majors, and the general public.

**Career Choices.** An English major prepares students to enter a wide variety of fields after the college years. English majors typically develop abilities—to read closely, to research and analyze astutely, to write cogently—that equip them particularly well to enter any area requiring professionals who are discerning and articulate. Both the required internship and the capstone seminar provide students with experience to demonstrate their practical skills and creative gifts.

Students who love literature but also wish to pursue an interest in some other field find it convenient to double major in English and religious studies, biology, economics and business, political science or some other discipline. Graduating majors have entered the fields of teaching, writing, editing, publishing, law, medicine, pastoral and para-church ministries, missions, drama, film production, information and library science, public relations, real estate, finance, and commercial and industrial management.

## Requirements for an English Major: 40 units (20 units minimum upper division)

All English majors will complete **a minimum of 40 units** in the study of literature, writing and language. Of the 40 units for the major, at least 24 must be upper-division courses and at least 24 must be in literature. While completing the eight requirements below, students may use any single course to count for no more than two requirements.

*One course as an introduction to the major: (4)*

ENG 007H First-Year Honors Seminar in Literature (4)

ENG 060 Writers in Conversation (4)

ENG 090 Literary Analysis (4)

*One historically organized course that spans more than a century of writing: (4)*

ENG 046 Survey of British Literature to 1800 (4)

ENG 047 Survey of British Literature 1800-Present (4)

ENG 160 Women Writers (4)

ENG 165 Topics in World Literature (4)

ENG 170 British Novel 1700-Present (4)

*One course in literature written in English prior to 1800: (4)*

ENG 046 Survey of British Literature to 1800 (4)

ENG 117 Shakespeare (4)

ENG 151 Milton and the Early 17th Century (4)

ENG 152 Chaucer and Medieval Literature (4)

ENG 158 Literature of the English Renaissance 1485-1600 (4)

ENG 166 Neoclassic Literature 1660-1798 (4)

## ENGLISH

*One course focusing in a single author or pair of authors and requiring a critical research paper: (4)*

- ENG 117 Shakespeare (4)
- ENG 135 Faulkner (4)
- ENG 151 Milton and the Early 17th Century (4)
- ENG 152 Chaucer and Medieval Literature (4)
- ENG 163 Authors in Context (4)

*One upper-division course focusing on identity: (4)*

- ENG 134 Ethnicity and Race in American Literature (4)
- ENG 160 Women Writers (4)
- ENG 165 Topics in World Literature (4)
- ENG 185 Modern and Contemporary Irish Literature (4)

*One course focusing on American or Anglophone literature: (4)*

- ENG 130 American Writers to 1865 (4)
- ENG 131 American Writers 1865-1914 (4)
- ENG 132 American Writers 1914-1945 (4)
- ENG 133 American Writers: Special Topics (4)
- ENG 134 Ethnicity and Race in American Literature (4)
- ENG 135 Faulkner (4)
- ENG 044 Studies in World Literature (4)
- ENG 165 Topics in World Literature (4)
- ENG 185 Modern and Contemporary Irish Literature (4)

*One internship experience*

- ENG 167 Writers' Corner (2)
- ENG 168 Student Publications: Horizon (2 or 4)
- ENG 169 Student Publications: Phoenix (2)
- ENG 190 Internship (2 or 4)
- IS 190 Urban Internship (4-8)
- APP 168 Student Publications: Horizon (2 or 4)

*One capstone experience completed in the ultimate or penultimate semester: (2-4)*

- ENG 192 Capstone (2)
- ENG 199 Major Honors (2 or 4)

(Any of the above may be replaced by an approved England Semester course.)

## Writing Concentration

For a writing concentration, majors should complete a total of 16 writing units from among the following core and elective courses:

### Required Core: 8-12 units

- ENG 104 Modern Grammar and Advanced Composition (4)
- ENG 192 Capstone (2 or 4)

*Internship: (2 or 4)*

- ENG 167 Writers' Corner Internship (2)
- ENG 168 Journalism Internship (2 or 4)
- ENG 169 Journalism Internship (2 or 4)
- ENG 190 or IS 190 (2 or 4)

**Electives**

- ENG 087 Introduction to Journalism (4)
  - ENG 105 History and Structure of English (4)
  - ENG 111 Screenwriting I (4)
  - ENG 112 Screenwriting II (4)
  - ENG 113 Screenwriting III (4)
  - ENG 142 Workshop in Creative Writing (4) \*may be repeated as genres vary
  - ENG 167 Writers' Corner Internship (2)
  - ENG 168 Student Publications: Horizon (1-4)
  - ENG 169 Student Publications: Phoenix (1-2)
  - ENG 190 Internship (2 or 4)
  - IS 190 Approved Urban Internship (4)
- (Any of the above may be replaced by an approved England Semester course.)

## **Guidelines for Graduate Study Preparation in English Literature: 54-62 units**

English majors who wish to pursue graduate study in literature must meet the general requirements for an English major but should complete a minimum of 54-62 units using the following general guidelines. Courses may be substituted for with an approved off-campus alternative.

**A modern or ancient language at the intermediate level: 0-8 units****Lower-Division Courses: 8-12 units**

- ENG 090 Literary Analysis (4)
- ENG 044 Studies in World Literature (4) or ENG 045 Studies in Classic Literature (4)
- ENG 046 Survey of British Literature to 1800 (4)
- ENG 047 Survey of British Literature 1800-Present (4)

**Upper-Division Courses: 42-46 units**

- ENG 117 Shakespeare (4)
- Three of the following: (12)*
  - ENG 121 Romantic Literature 1798-1832 (4)
  - ENG 122 Victorian Literature 1832-1900 (4)
  - ENG 151 Milton and the Early 17th Century (4)
  - ENG 152 Chaucer and Medieval Literature (4)
  - ENG 158 Literature of the English Renaissance 1485-1600 (4)
  - ENG 166 Neoclassic Literature 1660-1798 (4)
  - ENG 170 British Novel 1700-Present (4)

*Two of the following: (8)*

- ENG 130 American Writers to 1865 (4)
- ENG 131 American Writers 1865-1914 (4)
- ENG 132 American Writers 1914-1945 (4)
- ENG 133 American Writers: Special Topics (4)
- ENG 135 Faulkner (4)

*Two of the following: (8)*

- ENG 134 Ethnicity and Race in American Literature (4)



## ENGLISH

ENG 136 Jewish American Literature (4)

ENG 160 Women Writers (4)

ENG 164 Topics in Classic Literature (4)

ENG 165 Topics in World Literature (4)

ENG 195 Seminar (4)

*Two of the following:* (8)

ENG 181 Modern and Contemporary Poetry (4)

ENG 182 Modern and Contemporary Fiction (4)

ENG 183 Modern and Contemporary Drama (4)

ENG 185 Modern and Contemporary Irish Literature (4)

ENG 186 British and Irish Theatre (4)

*One of the following:* (2-6)

ENG 197 Comprehensive Examination (2) (Written essay exam to be prepared for and taken in the student's last semester. Students preparing for the exam will be expected to review English and American literary history and theory, meeting for two hours a week with each other and with different department members as appropriate.)

ENG 199 Major Honors Project (6)

### **Recommended:**

*Two of the following:* (8)

HIS 171 Colonial and Revolutionary America (4)

HIS 173 Civil War and Reconstruction America (4)

HIS 175 Recent America (4)

HIS 185 Imperialism and Independence (4)

*One of the following:* (4)

ART 131 Theory and Criticism in the Arts (4)

HIS 142 European Intellectual History, 1650-Present (4)

PHI 135 Philosophy of Language (4)

Any upper-division literature course in a language other than English (4)

## **Guidelines for Teacher Preparation for Secondary Teachers of English: 54-60 units**

Students who hope to teach English at the secondary level in California need to complete the requirements for an English major, using the following recommended course of study, which prepares candidates to take the CSET English exam. The CSET (California Subject Examinations for Teachers) English exam requires knowledge in four domains:

literature and textual analysis

language, linguistics, and literacy

composition and rhetoric

communications - speech, media, and creative performance

If approved, England Semester or London Mayterm courses may substitute for the courses listed below.

### **Literature and Textual Analysis: 32 units**

ENG 117 Shakespeare (4)

*Two of the following:* (8)

ENG 046 Survey of British Literature to 1800 (4)

ENG 047 Survey of British Literature 1800-Present (4)

ENG 121 Romantic Literature 1798-1832 (4)

ENG 122 Victorian Literature 1832-Present (4)

ENG 151 Milton and the Early 17th Century (4)

ENG 152 Chaucer and Medieval Literature (4)

ENG 158 Literature of the English Renaissance 1485-1600 (4)

ENG 166 Neoclassic Literature 1660-1798 (4)

ENG 170 British Novel 1700-1900 (4)

*Two of the following:* (8)

ENG 130 American Writers to 1865 (4)

ENG 131 American Writers 1865-1914 (4)

ENG 132 American Writers 1914-1945 (4)

ENG 133 American Writers: Special Topics (4)

ENG 135 Faulkner (4)

*Two of the following, including ENG 134 or 160:* (8)

ENG 044 Studies in World Literature (4)

ENG 134 Ethnicity and Race in American Literature (4)

ENG 136 Jewish-American Literature (4)

ENG 160 Women Writers (4)

ENG 165 Studies in World Literature (4)

ENG 182 Modern and Contemporary Fiction (4)

*One of the following:* (4)

ENG 006 Studies in Literature (4)

ENG 044 Studies in World Literature (4)

ENG 045 Studies in Classic Literature (4)

ENG 181 Modern and Contemporary Poetry (4)

ENG 185 Modern and Contemporary Irish Literature (4)

ENG 195 Seminar (4)

An additional course from the options for British, American, or world literature  
(above)

### **Language, Linguistics, and Literacy: 8 units**

ENG 106 Language Acquisition (4)

Modern/Foreign Languages (4) – a college-level course in any modern spoken language (e.g., Spanish, French, or German) or ancient language (e.g., Greek or Hebrew)

### **Composition and Rhetoric: 6-12 units**

ENG 104 Modern Grammar and Advanced Composition (4)

*One of the following:* (2-4)

ENG 002 Composition (4) (unless waived by department-approved alternative)

ENG 090 Literary Analysis (4)

ENG 167 Writers' Corner (2)

COM 006 Messages, Meaning and Culture (4)

SP 100 Advanced Spanish (4)

**Communications: Speech, Media and Creative Performance: 8 units**

*Two of the following:* (8)

ENG 087 Introduction to Journalism (4)

ENG 101 Film Studies (4)

ENG 141 Creative Writing (4) or ENG 142 Workshop in Creative Writing

ENG 183 Modern and Contemporary Drama (4)

ENG 186 British and Irish Theatre [England Semester or London Mayterm] (4)

COM 015 Public Speaking (4)

COM 125 Mass Communication (4)

COM 140 Studies in Communication Ethics (4)

TA 010 Acting (4)

In order to complete a fifth-year Credential Program at Westmont, students should also complete eight or more units of the following prior to applying to the program:

KNS 156 Health Education for the Classroom Teacher (2)

ED 101 Explorations in Teaching: Secondary (4)

ED 105 Perspectives on Cultural Diversity and Education (4)

ED 130 Special Education for the Classroom Teacher (2)

ED 161 Computers for the Classroom Teacher: Secondary (2)

In many cases, it is possible to complete requirements for the major and the Westmont Credential Program in four years. Such a “fast-track” program requires early planning. Students wishing to complete such a program should refer to more specific advising materials available on the Education Department webpage.

All students wishing to explore secondary teaching are strongly encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, in addition to consulting with their major advisor.

## **Requirements for a Minor: 20 units**

To satisfy the requirements for an English minor, students must complete 20 units of English, which must include at least 12 units of literature and at least 12 units of upper-division coursework.

## **Lower-Division Course Descriptions**

**ENG 002 Composition** (4) Provides practice and critique in a variety of forms and modes of exposition including personal reflection, analysis, synthesis, and evaluation. Requires six to eight formal papers, including a documented research paper. (Does not apply to the English major or minor.)

**ENG 006 Studies in Literature** (4) An exploration of the ways of knowing provided by narrative, poetry and drama. The course invites us to see how literature reveals things we cannot know except by inference or by metaphor. Further, by encouraging us to practice compassion by imagining the other, the course involves us in ways of knowing that are inherently ethical. Content varies; faculty usually include selections from historically underrepresented writers. Requires at least four formal papers or the equivalent, involving a minimum of sixteen pages of analytic writing.

**ENG 007H First-Year Honors Seminar in Literature** (4) Prerequisite: By invitation only. A small group of honors students form a learning community around the pleasures of attentive reading and rigorous discussion of literature from a variety of cultural and historical contexts. Students also strengthen their skills as readers of each others' written work. To further foster that community, the seminar incorporates activities outside of class, including attendance at live theater performances.

**ENG 044 Studies in World Literature** (4) Topics in modern and contemporary literature from around the world. Readings may include works by African, Asian, Middle Eastern, Latin American, or Native American writers and range from indigenous work to writing in colonial and post-colonial contexts, including both literature in translation and Anglophone writers. May be repeated for credit as topics vary.

**ENG 045 Studies in Classic Literature** (4) Topics in classic literature of the Western World. Such topics as classical mythology, Dante, and the Bible as literature may range from genre studies to courses on individual writers and may range in time from the writers of classical antiquity to modern European authors. May be repeated for credit as topics vary.

**ENG 046 Survey of British Literature to 1800** (4) Historical overview of authors, genres, and literary developments, as well as relevant cultural context, from the medieval through the Renaissance, seventeenth-century, and eighteenth-century eras.

**ENG 047 Survey of British Literature 1800-Present** (4) Historical overview of authors, genres, and literary developments, as well as relevant cultural context, in the Romantic, Victorian, Modern and Contemporary periods.

**ENG 060 Writers in Conversation** (4) Prerequisite: Completion of the first-year writing requirement. This course emphasizes the dialogic nature of literature, involving an intellectual and imaginative conversation between authors across cultures or across times. Readings include works of two or more writers who respond to each other, including at least one author from an underrepresented tradition. Topics foreground an understanding of literary studies as rigorous, inclusive, faithful, ethically minded and may include multicultural literature, global literature, gender and literature, and film and literature, among others. Because this course will introduce students to the skill set necessary for the study of English, it is intended to be taken during the first semester of the English major or minor.

**ENG 087 Introduction to Journalism** (4) Prerequisite: Completion of the first-year “Writing for the Liberal Arts” requirement. Extensive experience in news reporting and feature writing. Consideration given to current professional and ethical issues facing the press. Serves as writing elective.

**ENG 090 Literary Analysis** (4) Prerequisites: completion of the first-year writing requirement. Intensive written practice in methods of analyzing and interpreting works of drama, fiction, or poetry in genre-specific ways, as preparation for upper-division literature courses. Serves as writing elective.

## Upper-Division Course Descriptions

**ENG 101 Film Studies** (4) Prerequisite: one literature course and completion of the first-year “Writing for the Liberal Arts” requirement. Consideration of film as a narrative and visual medium. Includes practice in analysis of plot structure, theme, symbolism, and literary sources. Serves as writing elective.

**ENG 104 Modern Grammar and Advanced Composition** (4) Prerequisite: completion of the first-year “Writing for the Liberal Arts” requirement. Strategies and practice in writing non-fiction, expository prose. Special emphasis on revision and style. Includes mini-lessons, peer editing, in-class writing, workshops, and oral presentations. Serves as writing elective.

**ENG 105 History and Structure of English** (4) Prerequisite: ENG 046. History of the language including modern developments in grammar and Anglophone dialects.

**ENG 106 Language Acquisition** (4) An examination of the basic structures of English usage and the process of acquiring and developing a first and second language. Course includes historical and current theories of language acquisition as well as teaching methodologies. Serves as an upper-division elective.

**ENG 111 Screenwriting I** (4) Prerequisites: ENG 006, completion of the first-year writing requirement. Introduction to theory and technique of dramatic writing for film and TV. Offered in fall semesters. Serves as writing elective.

**ENG 112 Screenwriting II** (4) Prerequisite: ENG 111. Fundamentals of screenwriting focusing on conflict and character, structure, scenes, dialogue, and dramatic action. Alternates with ENG 113 in spring semesters. Serves as writing elective.

**ENG 113 Screenwriting III** (4) Prerequisite: ENG 111. Examination of methods of adapting fiction and non-fiction material to film and TV. Serves as writing elective.

**ENG 117 Shakespeare** (4) Prerequisite: one literature course or consent of instructor. Representative comedies, histories, and tragedies.

**ENG 121 Romantic Literature 1798-1832** (4) Prerequisite: one literature course or consent of instructor. Poetry, prose, and drama by major and other authors of the Romantic period from Blake to Keats.

**ENG 122 Victorian Literature 1832-1900** (4) Prerequisite: one literature course or consent of instructor. Readings from novelists including the Brontës, Dickens, Eliot, and Hardy; and poets such as Arnold, the Brownings, and Tennyson, along with less-remembered literary figures. Course includes cultural context from nineteenth-century conversations of faith and secularism, gender ideology, industrialization, political reform, and Empire.

- ENG 130 American Writers to 1865** (4) Writers from the American Puritans to Frederick Douglas. Achievements of the American Renaissance by Hawthorne and Melville in fiction, Emerson and Thoreau in prose non-fiction, and Whitman in poetry.
- ENG 131 American Writers 1865-1914** (4) Writers of American realism—Mark Twain, James, and Howells; Dickinson and other forerunners of modern poetry; and such early 20th century authors as Wharton and Dreiser.
- ENG 132 American Writers 1914-1945** (4) Works of 20th century novelists as Faulkner, Hemingway, Fitzgerald, and Cather; poetry of Frost and Eliot; plays of O'Neill and Williams.
- ENG 133 American Writers: Special Topics** (4) Prerequisite: two literature courses or consent of instructor. Intensive study of one topic in American letters such as Southern writers, the expatriate writers, Jewish-American writers, contemporary novelists, or a single author.
- ENG 134 Ethnicity and Race in American Literature** (4) Prerequisite: one literature course or consent of instructor. Explorations of traditions in America's diverse cultural literatures, and literary representations of relations between and within different ethnic and racial groups. Texts and emphases vary.
- ENG 135 Faulkner** (4) Prerequisite: two literature courses or consent of instructor. A study of the writer who attracts more critical attention than any writer in English except Shakespeare and Chaucer. The seminar explores the way Faulkner creates a literary world on his postage-stamp of Yoknapatawpha soil in such works as *Absalom, Absalom! As I Lay Dying*, *The Sound and the Fury*, and *Go Down, Moses*.
- ENG 136 Jewish-American Literature** (4) An exploration of selected literature related to the history, traditions, and life of Jewish people in twentieth-century America. Emphases include assimilation, the Holocaust, and the changing voice in Jewish-American literature after World War II. Writers studied include Singer, West, Roth, Wallant, Salinger, Bellow, Malamud, Ozick, and Potok.
- ENG 141 Creative Writing** (4) Prerequisite: two literature courses. Theory and practice of writing poetry, fiction, and drama. Serves as writing elective.
- ENG 142 Workshop in Creative Writing** (4) Prerequisite: two literature courses. Workshop in creative writing in a single genre, such as poetry, prose fiction, drama, or creative nonfiction. May be repeated for credit as genres vary. Serves as writing elective.
- ENG 151 Milton and the Early 17th Century** (4) Prerequisite: ENG 046 or 117. Poetry, prose, and drama from Jonson to Milton.
- ENG 152 Chaucer and Medieval Literature** (4) Prerequisite: ENG 046. Old English texts in translation; Chaucer and other Middle English authors in the original.
- ENG 158 Literature of the English Renaissance 1485-1600** (4) Prerequisite: ENG 046 or 117. Poetry, prose, and drama from Malory to Spenser, excluding Shakespeare.

**ENG 160 Women Writers** (4) Writing by women in a variety of genres, arranged chronologically or thematically to focus on questions related to gender, class, race, and spirituality. With instructor's permission, may be repeated for credit as topics vary.

**ENG 163 Authors in Context** (4) Prerequisite: one literature course. Authors in this course will vary across literary period and genre, as well as across national traditions. As topics vary, the course will bring two authors (e. g. Toni Morrison and Virginia Woolf; William Wordsworth and Jane Austen) into conversation. Discussion and written assignments will tend to details of each writer's cultural contexts, as well as to persistent stylistic, formal and thematic choices, while also practicing an awareness of how the tensions and commonalities between two writers leads to a richer experience of both. This course requires a research paper.

**ENG 164 Topics in Classic Literature** (4) Advanced study of topics ranging from the writers of classical antiquity to modern European authors. May be repeated for credit as topics vary.

**ENG 165 Topics in World Literature** (4) May focus on key figures or on a special topic in world literature in translation (such as visionary literature), or on an emerging field such as Anglophone poetry or post-colonial fiction. May be repeated for credit as topics vary.

**ENG 166 Neoclassic Literature 1660-1798** (4) Prerequisite: one literature course or consent of instructor. English literature from the Augustan Age and the 18th century, including Restoration drama, satire, heroic verse, periodical essays, and the rise of the novel, by writers such as Bunyan, Dryden, Behn, Pope, Swift, Johnson, Burney, and Fielding.

**ENG 167 Writers' Corner** (2) Prerequisite: by invitation. A course in composition theory and pedagogy that establishes a community of scholar-practitioners among students who work at Writers' Corner and equips them with the training needed to serve as effective writing tutors. Serves as writing elective.

**ENG 168 Student Publications: Horizon** (1-4) Prerequisite: ENG 087. Semester-long course of experiential learning in news writing, and perhaps in editing, page layout or photography, and production of a student newspaper. The editor-in-chief may receive 4 units per semester, section editors may receive 2 units per semester, and other staff may receive one unit per semester. (A maximum of 4 units of publication credit may apply toward the English major.) P/NC grading only, unless letter grading is approved by instructor.

**ENG 169 Student Publications: Phoenix** (1-2) Supervised experience in editing the student literary magazine, the *Phoenix*, published in April of each year. The editor or co-editors may receive 2 units per semester and assistant editors may receive 1 unit per semester. Offered spring semester only. (A maximum of 4 units of publication credit may apply toward the English major.)

- ENG 170 British Novel 1700-Present** (4) Prerequisites: two literature courses or consent of instructor. A study of the British novel from its origins to the present. While closely tending to the works of novelists such as Behn, Defoe, Burney, Fielding, Austen, Scott, Brontë, Eliot, Dickens, Hardy, Joyce, Forster and Woolf, the course will also consider questions about the novel as a genre, about the novel's place in British culture, and about shifting understandings of the term "British" in relation to the novel.
- ENG 181 Modern and Contemporary Poetry** (4) Prerequisite: two literature courses or consent of instructor. British and American poetry by poets such as Hopkins, Hardy, Yeats, Eliot, Frost, Bishop and Williams with some works from more recent poets.
- ENG 182 Modern and Contemporary Fiction** (4) Prerequisite: two literature courses or consent of instructor. British, European, Commonwealth and Third World novelists and short story writers of the 20th century.
- ENG 183 Modern and Contemporary Drama** (4) Prerequisite: one literature course or consent of instructor. British, American and European works by playwrights such as Ibsen, Chekhov, O'Neill, Beckett, Miller, Stoppard, Lorraine Hansberry, August Wilson, Brian Friel, and Caryl Churchill. Field trips to performances of both new and established plays.
- ENG 185 Modern and Contemporary Irish Literature** (4) Prerequisite: two literature courses or consent of instructor. An examination of modern and contemporary Irish literature of the 20th century. The post-colonial crafting of a national identity by writers from Yeats, Joyce, and Synge to Heaney and Friel—and the reexamination of that identity by more recent women writers from Eavan Boland to Nuala Ní Dhomhnaill, Eiléan Ní Chuilleanáin, Christina Reid and Marina Carr.
- ENG 186 British and Irish Theatre I** (4) Study of plays available in live production in London, Stratford-upon-Avon, and Dublin ranging from Shakespeare to modern classics to world premieres. Offered on England Semester in even-numbered years and on London Theatre Mayterm in odd-numbered years.
- ENG 187 British and Irish Theatre II** (4) Study of plays available in live production in London, Stratford-upon-Avon, and Dublin ranging from Shakespeare to modern classics to world premieres. Offered on London Theatre Mayterm in odd-numbered years.
- ENG 190 Internship** (1-4) Internships related to English at a variety of employers in Santa Barbara or San Francisco. Such experiential learning is set in context through reflection, both in writing and in discussion, on the significance of the experience. The Westmont in San Francisco Internship Program offers opportunities to select internship experiences in journalism and writing, editorial work with publishing houses, or in teaching English as a second language. Internships in journalism, writing, or editing have a prerequisite of ENG 087 for students to receive English credit. A maximum of 4 units of internship credit may apply toward the English major.
- ENG 191SS Reading in the Community** (0) (Co-requisite: enrollment in an upper-division literature course) Students receive help and training in the art of oral



## ENGLISH

interpretation and read selections of the literature they are studying to an elderly or otherwise underserved person or audience for an hour a week. Fulfills the General Education expectation of Serving Society. (P/NC grading only)

**ENG 192 Capstone Seminar** (2 or 4) Requirement for completion of the English major, to be taken in the final semester of the student's major course of study on campus. A synthesis of the student's previous course work involving a substantial original project under faculty supervision. Topics vary by course and by individual. Projects require collaboration among students, mature critical reflection in writing, oral presentation, and completion of a portfolio of original critical and/or creative work.

**ENG 195 Seminar** (4) Prerequisite: two literature courses or consent of instructor. Advanced study on a single author or topic such as literary theory, satire, or literature of place. Topics vary. May be repeated for credit.

**ENG 197 Comprehensive Examination** (2) Weekly seminar in English and American literary history and theory in preparation for a written essay exam.

# English - Modern Language

*Professors D. Cardoso (chair), M. Collier, M. Docter,  
Associate Professor L. Elías*

**Description of the Major.** Westmont offers regular modern language courses in French, German Studies, and Spanish. These courses emphasize communication skills at the elementary and intermediate levels. Beyond the classroom, regular use of language materials and internet resources encourage the development of skills. Students learn about the culture and civilization through reading selected portions of literature as well as through a variety of media. The College offers upper-division courses and majors in French and Spanish. In these programs students study masterpieces of the literature and discuss them in their original languages.

**Distinctive Features.** Personally acquainted with the culture of the languages they teach, the professors incorporate personal experiences and insights in lectures and discussions. Small class sizes, close student-faculty relationships, and a flexible curriculum all contribute to fulfilling students' needs and demands in studying modern languages and their literature.

**Career Choices.** Becoming proficient in a second language and understanding people of another culture are competencies valuable in any profession or career. They can help us live and move in the global community as attractive and articulate witnesses for Christ. In every field, including foreign missions, domestic human services agencies, business, education, government, and the arts, there is a need for people capable of communicating meaningfully with others.

## Requirements for a Major: 36 units

ENG 117 Shakespeare (4)

*Literature Survey: Two courses selected from one of the following categories (8)*

A. British Literature

ENG 046 Survey of British Literature to 1800 (4)

ENG 047 Survey of British Literature 1800-Present (4)

OR

B. American Literature

ENG 130 Major American Writers to 1865 (4)

ENG 131 Major American Writers 1865-1914 (4)

ENG 132 Major American Writers 1914-1945 (4)

ENG 133 Major American Writers: Special Topics (4)

*Two upper-division electives in English Literature (8)*

*Four upper-division literature courses in a Single Foreign Language (16)*

## Course Descriptions

### French (see French major)

### German Studies

**GER 001 Elementary German** (4) Introduction to various aspects of the German-speaking world as a way of enabling them to begin building communicative abilities in German in reading, listening, writing, and speaking. This course establishes a basic knowledge of simple sentence patterns and grammatical features of German forms and explores the rich cultural tradition of German-speaking countries of Central Europe. German 1 is for students who have not studied German or whose placement-test score indicates German 1.

**GER 002 Elementary German** (4) Review of the basic grammar from German Studies 1 and further develops communicative abilities in reading, listening, writing, and speaking German. This course builds on a basic knowledge of simple sentence patterns to introduce more grammatical features of German forms and explores the rich cultural tradition of German-speaking countries of Central Europe. Prerequisite: Placement test, German 1 at the college level, or instructor's consent.

**GER 003 Intermediate German** (4) The further examination of various aspects of the German-speaking world as a way to develop communicative abilities in German in reading, listening, writing, and speaking. In addition to expanding major sentence patterns and grammatical features of German forms, the course explores the rich cultural tradition and political histories of German-speaking countries of Central Europe, integrating current technology (e.g. computer programs, the Internet, e-mail, video and film). Prerequisite: Placement test, German 2 at the college level, or instructor's consent.

**GER 004 Intermediate German** (4) The continuation of examining various aspects of the German-speaking world as a way to develop speaking. In addition to expanding major sentence patterns and grammatical features of German forms, the course explores the rich cultural tradition and political histories of German-speaking countries of Central Europe, integrating current technology (e.g. computer programs, the Internet, e-mail, video and film). Prerequisite: Placement test, German 3 at the college level, or instructor's consent.

### Spanish (see Spanish major)

# Ethnic Studies Minor

***Description of the Minor.*** The ethnic studies minor is designed to provide students with the opportunity to study the cultural, historical, political, and social dimensions of a variety of national racial and ethnic groups. The minor is interdisciplinary in nature and draws upon various departments for its course offerings.

## **Requirements for a Minor: 24 units**

### **Required Courses: 8 units**

IS 196 Ethnic Studies Seminar (4)  
SOC 189 Sociology of Race and Ethnicity (4)

### **Electives: 16 units**

ED 105 Perspectives on Cultural Diversity and Education (4)  
ENG 134 Ethnicity and Race in American Literature (4)  
ENG 136 Jewish-American Literature (4)  
HIS 175 Recent America (4)  
HIS 178 California Experience (4)  
RS 143 North American Religions (4)

# European Studies Major

**Description of the Major.** The European Studies major is designed to allow students to combine an interest in modern languages with an interdisciplinary exploration of culture and history. Using demonstrated competence in French, German or Spanish as a foundation, students will undertake coursework in the humanities and social sciences in order to develop an understanding of and appreciation for the complexities of a given European (culture/nation/region) and its place on the world stage.

The major will be supervised by faculty drawn from the departments of Art History, French, Economics, German, Spanish, History, and Political Science.

**Distinctive Features of the Major.** The European Studies major is intentionally interdisciplinary. To complete this course of study, students will engage faculty and peers in several departments: modern languages, history, art, anthropology, philosophy, economics, and political science. This major is also attentive to both individual interests and disciplinary concerns. Students are encouraged not only to pursue their unique interest in each of these fields, but to become conscious of the methods and assumptions that differ from discipline to discipline. Finally, the European studies major integrates an off-campus semester into the student's experience, affording opportunities to hone language skills, take courses within a European educational context, and benefit from immersion in a foreign culture.

**Career Choices.** Students pursuing a major in European studies develop a range of skills and sensibilities that are valuable assets in the worlds of business, arts, civil service, ministry, and education. Linguistic facility, historical understanding, and cultural sensitivity are invaluable, whether one's interests lie in the field of international business, mission work, politics, or teaching.

**Course Template.** Students will complete one semester of 14-16 units in an overseas program determined by their foreign language proficiency and approved by their major advisor in consultation with the off-campus program office. This semester should include at least three courses that would count toward their major.

## Requirements for a Major: 46-48 units

Students will select courses appropriate to their geographic area of study in consultation with their academic advisor.

8 units of appropriate foreign language, at least 4 of which must be in literature. This may assume additional prerequisite language study.

8 units of upper division history: two appropriate upper-division history courses from among the following:

HIS 133 Renaissance Europe (4)

HIS 134 Spirituality and Ritual in Medieval and Early Modern Europe (4)

## EUROPEAN STUDIES

- HIS 140 European Politics and Diplomacy Since 1789 (4)
- HIS 141 European Society and Culture Since 1789 (4)
- HIS 142 European Intellectual History 1650-present (4)
- HIS 156 France, 1500 to present (4)
- HIS 195 Topics in History, if appropriate (4)
- SP 110 Hispanic Cultures: Spain (4)
- 4 units of politics: One of the following
  - EB 189 Economics of the European Union (4)
  - HIS 140 European Politics and Diplomacy Since 1789 (4)
  - POL 122 European Politics (4)
- 4 units of appropriate art history
  - ART 122 Medieval Europe (France/Germany) (4)
  - ART 124 Italian Renaissance Art (4)
  - ART 125 Northern Renaissance Art (Germany) (4)
  - ART 126 Seventeenth Century Art (All) (4)
  - ART 127 Nineteenth Century Art (France) (4)
  - ART 128 Modern and Contemporary Art (France/Germany) (4)
  - ART 129 Special Topics, when relevant (4)
- 4 units of interdisciplinary seminar
- 8 units of cognates
  - Any upper-division art listed above
  - Any upper-division history listed above
  - Any appropriate upper-division foreign language or literature course
  - EB 189 Economics of the European Union (4)
  - POL 122 European Politics (4)
  - PHI 101 Ancient and Medieval Philosophy (4)
  - PHI 102 Modern and Contemporary Philosophy (4)
- 14-16 units in one semester off campus. The 14-16 units include 4 of the 8 units of cognates listed above.

Appropriate courses are courses selected in consultation with the student's academic advisor and relevant for the student's geographic area of emphasis (Spain, Germany, France).

# French

*Professor M. Collier*

**Description of the Major.** The study of a foreign language prepares us to live in an ever-shrinking world. But the joy of studying a language and its literature lies in our widening perspective and growing appreciation, not only of the world's rich and varied cultural heritage, but of people shaped by a civilization different from our own. Historically, the French have had a pivotal influence on diplomacy, politics, and economics as well as on mathematics, the sciences, theology, philosophy, literature, and every form of art.

The great body of French literature, whose importance in every period and genre is comparable only to that of English, allows us to live vicariously the history, philosophy, sociology, and psychology of another nation. The French major develops the capacities for a sensitive and refined use of language and affection and admiration for a people whose cultural achievement is distinguished.

**Distinctive Features.** The French major combines the experience of living and studying in a foreign country with that of the residential liberal arts college. French majors may choose either fall or spring semester, usually in their junior year, to take a full course of study (15-16 units) at an approved university in a region where French is the native language. Course offerings vary from year to year and from university to university, but always include language, literature, and civilization and culture classes. Westmont students majoring in French may choose one of these institutions in France: the CIEE (Council of International Education Exchange) in cooperation with the Université de Paris-Sorbonne; Université Paul Valéry-Montpellier, Institut Méditerranéen de Langues de Spécialités; or IAU (Institute American Universities in Aix-en-Provence) College. Students who wish for personal or family reasons to study in French Canada, French Switzerland, French Belgium, or French Africa may petition for approval of a program in one of those regions.

Close student-faculty relationships, small class sizes, excellent language materials and internet resources, and flexibility in the curriculum all contribute to meet students' needs in studying French.

Due to the role France and the French have played in the world's culture and civilization, the French major lends itself particularly well to doubling with majors in English, religious studies, political science, philosophy, economics and business, mathematics, history, art, music, and theatre arts, among others.

**Career Choices.** A liberal arts and sciences education opens the door to a broad range of vocations. French majors usually develop the skill to express themselves gracefully and the cultural sensitivity to understand others. These competencies enhance their contribution to every profession. Every field needs people prepared to communicate meaningfully with others, especially foreign missions, domestic human-service agencies, medicine, education, international business, law, and government services, and the arts.

## Requirements for a Major: 40-44 units

### A. Language and Literature Track: 40 units

French majors must take 40 upper-division units in French, including one semester of 15-16 units at an approved university in a region where French is the native language. The minimum prerequisite to study abroad toward the major is four semesters of college French (or equivalent), one four-unit course in upper-division work, and FR 150, Cross-Cultural Studies. It is recommended that students fulfill their general-education, or distribution, requirements with courses that contribute to their understanding of France's role in world history and civilization, such as European history, international relations, and art and music history.

### B. French Studies Track: 44 units

FR 150 Cross-Cultural Studies (4)

*Three of the following:* (12)

FR 101 Survey of French Literature I (4)

FR 102 Survey of French Literature II (4)

FR 103 French Theatre of the 17th Century (4)

FR 104 French Novel of the 19th Century (4)

FR 105 French Literature of the 20th Century (4)

FR 195 Seminar (4)

*Three of the following:* (12)

ART 122 The Arts of Medieval Europe (4)

ART 127 Nineteenth Century Art (4)

ENG 106 Language Acquisition (4)

HIS 134 Spiritual and Ritual in Medieval and Early Europe (4)

HIS 140 European Politics and Diplomacy Since 1789 (4)

HIS 141 European Society and Culture Since 1789 (4)

HIS 142 European Intellectual History, 1650 to Present (4)

HIS 156 France, 1500 to Present (4)

POL 122 European Politics (4)

PHI 135 Philosophy of Language (4)

#### Off-Campus Semester: 15-16 units

Upper-division level courses in language, literature, civilization, and culture approved by the major advisor in France, Québec, or French Switzerland.

## Requirements for a Minor: 20 units

FR 101 Survey of French Literature I (4)

FR 102 Survey of French Literature II (4)

*Upper-Division FR elective* (4)

*Additional FR electives* (8)



## Lower-Division Course Descriptions

- FR 001 Elementary French I** (4) Pronunciation, conversation, essentials of grammar and composition. For students who have had no French at all or whose language placement test results indicate French I.
- FR 002 Elementary French II** (4) Prerequisite: FR 001 or Language Placement Test. A continuation of French 001.
- FR 003 Intermediate French I** (4) Prerequisite: French 002 or Language Placement Test. Review and reinforcement of pronunciation, grammar and composition. Reading of selected materials for discussion in French and an introduction to French literature and culture.
- FR 004 Intermediate French II** (4) Prerequisite: FR 003 or Language Placement Test. Continuation of French 003.

## Upper-Division Course Descriptions

- FR 101 Survey of French Literature I: Middle Ages to 1800** (4) Prerequisite: FR 004. An historical overview of French literature through the medieval and renaissance periods, 17th and 18th centuries. All lectures, oral presentations, and class discussions given in French; all papers and examinations written in French.
- FR 102 Survey of French Literature II: 1800 to Present** (4) Prerequisite: FR 004. An historical overview of French literature through romanticism, realism, symbolism, and modern periods. All lectures, oral presentations, and class discussions given in French; all papers and examinations written in French.
- FR 103 French Theatre of the 17th Century** (4) Prerequisite: FR 004. Masterpieces from the Baroque and classical periods in 17th century drama, tragedy and comedy. Original texts read and discussed in French; all papers and examinations written in French.
- FR 104 French Novel of the 19th Century** (4) Prerequisite: FR 004. Literary classics of the romantic, realist, and naturalist movements. Original texts read and discussed in French; all papers and examinations written in French.
- FR 105 French Literature of the 20th Century** (4) Prerequisite: FR 004. Major achievements in novel, poetry, drama, and screenplay. Original texts read and discussed in French; all papers and examinations written in French.
- FR 150 Cross-Cultural Studies** (4) A course designed to help you get the most out of your study abroad experience by preparing you for it intellectually, culturally, emotionally, and spiritually. Taught each Spring for students planning to study abroad the following academic year. (Note: This course is taught in English and does not count for the French minor.)
- FR 190 Internship** (2,4) Prerequisite: consent of the instructor. Supervised field work in the Santa Barbara area in which the student has the opportunity to use his or her French. Field work may be in schools, businesses, churches, social service agencies, etc. An ongoing personal log and a portfolio of work accomplished as well as regular sessions with the supervisor are required.

**FR 195 Seminar** (2,4) Prerequisite: FR 101, FR 102, FR 103, FR 104 or FR 105.  
Advanced study on a single author, genre, or topic. Recent seminar: The Chivalric Tradition in French Literature.

# Gender Studies Minor

*Professors J. Blondell, D. Cardoso, D. Dunn, C. Larsen Hoeckley (Program Co-Coordinator), C. Mallampalli, S. Penksa, H. Rhee, M. Robins*  
*Associate Professors H. Keaney, C. Reeder (Program Co-Coordinator), F. Song, S. Skripsky*  
*Assistant Professors S. Jirek, M. Whitnah*

**Description of the Minor.** The gender studies minor is designed to be an interdisciplinary exploration of genders in historical contexts, global expressions and theoretical frameworks. Students will examine the significance of gender to politics, culture, history, philosophy, psychology, theology, communication, theater, language and religion.

**Career Choices.** Students with a minor in gender studies gain knowledge and develop skills relevant to contemporary ministry, management, social work and education, as well as for government and not-for-profit leadership. The program's interdisciplinary nature provides students with opportunities to sharpen their awareness of current issues and theoretical frameworks in gender and to hone the sophistication of their thinking, speaking and writing across a variety of academic and professional audiences—the church, management, education, politics, the arts. In short, a minor in gender studies prepares students to step into significant conversations and activities happening throughout academia and the public sphere.

## Requirements for a Minor: 24 units

### Required Courses: 4 units

RS 134 Gender in Theological Perspective (4)

### Electives: 20 units

*At least 4 of the elective units must be chosen from the following:*

AN 135 Gender and Sex Roles in Cross-Cultural Perspective (4)

HIS 187 Women in Asian History (4)

HIS 188 Women in the Middle East (4)

POL 126 Sex, Gender and Power (4)

*At least 4 of the elective units must be chosen from the following:*

ENG 160 Women Writers (4)

TA 140 Ethnicity and Gender on the American Stage (4)

SP 180 Latin American Women Writers

*Remaining electives may be chosen from the courses above, or from the following courses, but no more than eight units from a single academic department may count toward the minor:*

ENG 60 Writers in Conversation (4) (when topics focus on gender)

SOC 130 Sociology of the Family (4)

SOC 170 Interpersonal Violence (4)

Practica (190, up to 4 units) and Special topics (195) courses focusing on gender as offered by various departments.

# History

*Fletcher Jones Foundation Chair in the Social Sciences, Professor R. Pointer  
(chair)*

*Professors C. Mallampalli, M. Robins, A. Chapman*

*Associate Professor H. Keaney*

**Description of the Major.** History is the study of human activity in the world and its meaning from the earliest times to the present. It explores different dimensions of human interactions in their environments, including politics, economics, religion, culture, and ecology, and thereby enables students to interpret their own society better.

The study of history sharpens analytical and critical skills essential to intelligent citizenship in today's world. It fosters the ability to ask good questions, to understand situations from several vantage points, to cultivate humility, and to understand and appreciate other times, people, and cultures. Students learn to conduct research and communicate their findings clearly. All these skills are readily transferable to a wide range of careers.

The history department provides courses in a variety of time periods and geographic areas. Students gain familiarity with the methodology and philosophy of historical study. All courses nurture research and writing skills.

**Distinctive Features.** The history major begins with Foundations of History, a course that teaches students the skills of the historian's trade, namely reading primary and secondary sources, historical research, and writing with a clear argument and good evidence. Upper-division classes require students to use these skills as they learn about a particular area and time period. Courses emphasize careful reading, discussion, integrity in the handling of sources, writing, and analysis of differing interpretations. Students complete their major in a senior seminar that requires them to produce a substantial piece of historical research on a topic of their choosing.

Many students spend a semester abroad during the course of their studies. Some do so as part of the major's International Studies track. There is also a track for those who wish to pursue a career in secondary education. Students considering graduate work in history are encouraged to do the Graduate Studies track, which requires significant work in a foreign language.

**Career Choices.** History graduates pursue a wide range of careers. Most make their way into fields such as law, business, non-profit work, management, government service, and Christian ministry. The major's emphasis on research and writing produces clear thinkers and able communicators who flourish in a variety of occupations. Other graduates pursue a teaching career in elementary or secondary schools. Some proceed to graduate school and become professional historians, archivists, or other types of public historian.

## Requirements for a Major: 40-52 units

### A. Standard Track: 40 units

#### Required Courses: 12 units

- HIS 009 World Civilizations to 1750 (4)
- HIS 099 Foundations of History (4)
- HIS 198 Senior Research Seminar (4)

#### Required Upper-Division Courses: 20 units

*One of the following:* (4) Modern Europe

- HIS 140 European Politics and Diplomacy Since 1789 (4)
- HIS 141 European Society and Culture Since 1789 (4)
- HIS 142 European Intellectual History, 1650-Present (4)

*One of the following:* (4) United States

- HIS 171 Colonial and Revolutionary America (4)
- HIS 173 Civil War and Reconstruction America (4)
- HIS 175 Recent America (4)

*One of the following:* (4) Early Modern Europe

- HIS 121 Medieval Mediterranean (4)
- HIS 133 European States and Peoples, 1350-1750 (4)
- HIS 134 European Intellectual and Cultural History, 1350-1650 (4)

*Two of the following:* (8) Non-Western/Non-U.S.

- HIS 161 Latin America to Independence (4)
- HIS 162 Modern and Contemporary Latin America (4)
- HIS 180 The Age of Islamic Empires, 600-1800 (4)
- HIS 181 The Modern Middle East, 1800-Present (4)
- HIS 182 History of the Israeli-Palestinian Conflict (4)
- HIS 184 History of Christianity in Asia (4)
- HIS 185 Imperialism and Independence (4)
- HIS 186 Modern South Asia (4)
- HIS 187 Women in Asian History (4)
- HIS 188 Women in the Middle East (4)

#### Additional HIS Electives: 8 units

### B. Graduate School Track: 48 units

Completion of the Standard Track (40).

Completion of 8 units of Intermediate Modern Foreign Language (8)

*Recommended: completion of a major honors project supervised by the History Department.*

### C. International Studies Track: 52 units

The International studies track combines a regional specialty with historical context. It has three primary features: first, an inter-disciplinary component so students can craft a major that reflects their personal interests; second, a language component that reflects the historian's desire to see the world through the eyes of others; and third, an integrated study abroad experience.

*Requirements in history* (36)

HIS 009 World Civilizations to 1750 (4)

HIS 099 Foundations of History (4)

HIS 198 Senior Research Seminar (4)

24 additional units of history, of which 20 units must be upper division. Students must complete at least 8 units of upper-division history in their region of emphasis, and at least 8 outside their region of emphasis.

*Foreign language* (8)

8 units of foreign language appropriate to the region of emphasis. If the language chosen is offered on campus, 4 of the 8 units must be upper-division.

*Requirements in related fields* (8)

8 units of upper-division related coursework in the region of emphasis (e.g. SP/FR 150 Cross-Cultural Studies) as approved by their major advisor. These units may be in history.

*Off Campus requirement*

Students will complete one semester in an overseas program in the region of emphasis as approved by their major advisor and in consultation with the off-campus program office.

### Secondary Education Teacher Track: 52 units

#### Required Lower-Division Courses: 28 units

HIS 007 United States to 1877 (4)

HIS 008 United States 1877-Present (4)

HIS 009 World Civilizations to 1750 (4)

HIS 099 Foundations of History (4) POL 010 American Government (4)

EB 011 Principles of Macroeconomics (4)

EB 012 Principles of Microeconomics (4)

#### Required Upper-Division Courses: 24 units

*One of the following:* (4)

HIS 178 California Experience (4)

HIS 179 California History and Literature (4)

*One of the following:* (4)

HIS 171 Colonial and Revolutionary America (4)

HIS 173 Civil War and Reconstruction America (4)

HIS 175 Recent America (4)

HIS 198 Senior Research Seminar (4)

One upper-division course in European history (4)

## HISTORY

One upper-division course in Non-Western history (4)

One upper-division elective in history (4)

### **Recommended Courses:**

ENG 106 Language Acquisition (4)

ED 105 Perspectives on Cultural Diversity and Education (4)

ED 130 Special Education for the Classroom Teacher (2)

ED 161 Computers for the Classroom Teacher: Secondary (2)

KNS 156 Health Education for the Classroom Teacher (2)

Additional course work in American politics, international politics, the American economy, and the global economy.

## **Requirements for a Minor: 20 units**

### **Required Lower-Division Course: 4 units**

HIS 099 Foundations of History (4)

### **Required Upper-Division Courses: 16 units**

Students must complete 8 units of Western (United States, Europe) history and 8 units of non-Western (Latin America, Middle East, Asia) history.

## **Lower-Division Course Descriptions**

**HIS 007 United States to 1877** (4) A survey of America's political, economic, social, and cultural development from the first encounters of Europeans and Native Americans through the Civil War and Reconstruction.

**HIS 008 United States 1877-Present** (4) A survey of America's political, economic, social, and cultural development from the aftermath of Reconstruction through the present.

**HIS 009 World Civilizations to 1750** (4) A survey of world civilizations from earliest times to 1750. Exposes students to the historical development of a range of Western and non-Western cultures and emphasizes global contacts in all historical eras. Given the number of elementary teaching candidates enrolled in this class, careful attention is given to the content required by the State of California, as delineated in Appendix A of the *Standards of Program Quality and Effectiveness for the Subject Matter Requirement for the Multiple Subject Teaching Credential* and the *History-Social Science Content Standards for California Public Schools, K-12*.

**HIS 010 Perspectives on World History** (4) An exploration of world history during the early modern and modern eras. Students will consider key themes and texts across a range of world cultures and will be encouraged to develop a thoughtful and historical approach to cultural diversity while gaining a narrative understanding of the sweep of world history. The course will expose students to various Christian perspectives within and upon world history, as well as multiple other perspectives on the past.

- HIS 012 Greece** (4) The Mycenaean period to the Roman conquest. Emphasizes political and cultural influence on the Western world.
- HIS 046 Russia, 1700 to Present** (4) Development of Russian society and culture since Peter the Great. Exploration of continuity and change from Czarist period to the fall of the Soviet Union.
- HIS 047 Reacting to the Past** (4) An exploration of two defining historical crises through role-playing games. Students take on particular roles and act out particular debates from the past. Reacting to the Past is an opportunity to put yourself in the past and see things from the perspective of people who lived there.
- HIS 083 Modern China and Japan** (4) Political, economic, and cultural development of China and Japan from 1850 to the present.
- HIS 091 Topics in Women's History** (4) An introductory class focusing on a consideration of recent theoretical and methodological trends in women's studies, as well as the history of women in a particular geographical area. Geographical area will be rotated.
- HIS 099 Foundations of History** (4) An introduction to the discipline of history. Includes development of research, analytical, and synthetic skills. Requires evaluation, organization, and writing.

## Upper-Division Course Descriptions

- HIS 121 Medieval Mediterranean** (4) A cross-cultural study of Byzantine, Islamic and Western civilizations between the first crusade and the capture of Constantinople (1085-1204). Explores themes related to the individual history of each region (political, religious, and social structures) as well as the interactions between the three civilizations (holy war, commerce, cultural and artistic exchanges).
- HIS 133 Renaissance Europe** (4) A cultural, social and political history of the European Renaissance, from the Italian Communes to Machiavelli (1200-1550).
- HIS 134 Spirituality and Ritual in Medieval and Early Modern Europe** (4) A study of the religious sentiment, daily life and political culture in Europe between 1400 and 1700.
- HIS 140 European Politics and Diplomacy Since 1789** (4) A study of the major nation states of Europe and their interaction from the French Revolution through the fall of the Soviet Union.
- HIS 141 European Society and Culture Since 1789** (4) A study of continuity and change at the level of daily life during the modern period. Explores such themes as the development of new types of political discourse, the impact of the industrial revolution, the secularization thesis, the impact of total war, and the reinvention of tradition.
- HIS 142 European Intellectual History, 1650-Present** (4) A survey of classic works of the history of ideas since 1650.



## HISTORY

- HIS 151/RS 151 History of World Christianity** (4) Surveys the history of Christianity from the New Testament to the present in Europe, Africa, Asia, and the Middle East, and from the colonial period to the present in North America and Latin America. Particular attention will be paid to intellectual, cultural, political, theological, and institutional developments in Roman Catholicism, Eastern Orthodoxy, and Protestantism.
- HIS 156 France, 1500 to Present** (4) A survey of the many forces and events, such as religious reformations, revolutions, intellectual strife and strikes that have shaped French history. Special emphasis will be placed in the various constructions of French identity as seen through cultural sources (literature, music, art, and film).
- HIS 161 Latin America to Independence** (4) Latin America from pre-Columbian times through the wars of independence.
- HIS 162 Modern and Contemporary Latin America** (4) Nineteenth and twentieth centuries; inter-American relations; the role of Latin America in world affairs.
- HIS 171 Colonial and Revolutionary America** (4) A study of early American politics, society, and culture from the era of first contacts through the gaining of independence and the writing of the constitution.
- HIS 173 Civil War and Reconstruction America** (4) An intensive study of the United States amid sectional conflict, civil war, and Reconstruction in the mid-nineteenth century.
- HIS 175 Recent America** (4) A study of the United States since 1945 emphasizing key domestic and foreign developments (e.g., Civil Rights Movement, Vietnam War) that have shaped the character of contemporary America.
- HIS 177 Transnational America: The Social, Cultural, and Political Effects of Migration and Exchange, 1880-Present** (4) Explores how transnational connections have shaped the United States politically, cultural, and socially throughout the long twentieth century. By analyzing representations of migration and exchange in popular culture and memoir, the course considers shifting American ideas about transnationalism and the ways this has shaped consumer culture, reform and social movements, and migration, policy, and the state.
- HIS 178 California Experience** (4) A multidisciplinary study of the idea and experience that is California; its Spanish/Mexican roots, its colorful past, diverse present and multicultural future. Students may not earn credit for this course if they have taken HIS/ENG 179.
- HIS 179 California History and Literature** (4) A multidisciplinary study of California history and literature from Native American beginnings through contemporary California. Students may not earn credit for this course if they have taken HIS/POL 178.
- HIS 180 The Age of Islamic Empires, 600-1800** (4) An examination of the social organizations, cultural expressions, political institutions, and religious commitments that evolved in the so-called "Islamic World" from the rise of Islam in Mecca to its Imperial capitals in Baghdad, Isfahan, Delhi, and Istanbul.
- HIS 181 The Modern Middle East, 1800-Present** (4) An introduction to the political, intellectual, religious, and cultural encounters that have shaped the Middle East, from the reform and break-up of the Ottoman Empire to European imperialism

and the rise of nation states. The course provides regional and historical context for such topics as women's rights in Islam, the Israeli-Palestinian conflict, Islamism, the Iranian Revolution, and the Arab Spring.

**HIS 182 History of the Israeli-Palestinian Conflict** (4) An intensive study of the historical roots and contemporary realities of the Arab-Israeli conflict.

**HIS 184 History of Christianity in Asia** (4) An overview of the history of Christian movements in India, China, Korea and Japan. This includes a discussion of ancient Christian presence in Asia, along with the role of Catholic and Protestant missionaries and indigenous agents in the emergence of an Asian Church.

**HIS 185 Imperialism and Independence** (4) Prerequisites: HIS 010. An exploration of the ideology and politics of British imperialism during the nineteenth and twentieth centuries, along with "anti-imperial" movements in Asia, Africa and the Middle East. Special attention is given to cultural, religious and intellectual responses to colonial modernity by non-Western peoples.

**HIS 186 Modern South Asia** (4) An exploration of Mughal, East India Company, and British rule in South Asia, and the evolution of Islamic, Hindu and secular nationalism. The course features the career and philosophy of Mohandas K. Gandhi as a reconciler of difference and a voice of anti-colonial resistance.

**HIS 187 Women in Asian History** (4) This course explores how notions of gender have evolved in India, China and parts of southeast Asia since the 19<sup>th</sup> century. It examines cultural values have defined the roles of men and women and how those values came to be re-evaluated through Asia's encounter with the West.

**HIS 188 Women in the Middle East** (4) This course compares the portrayal of women in Islamic texts with the lived experience of women in the Middle East and explores the rise of feminist movements as a part of modern anti-imperialist and nation building projects. The course engages with debates about the potential for "Islamic" and "western" feminisms to empower and oppress women and challenges the assumption that culture and religion, rather than politics and economics, are more determinative for women in the Middle East.

**HIS 190 Internship** (4-8) Supervised field work in historical societies, government, business, and related areas in Santa Barbara or San Francisco.

**HIS 195 Topics in History** (4) A seminar class that focuses on a selected subject. Sample topics include the American West, Church/State relations in Latin America, the Black Death, the Enlightenment, and the Jewish question in European history. The course may be repeated if the topic of concentration changes.

**HIS 195 History of the Body in Medieval and Early Modern Europe** (4) This course examines a selection of themes concerning the history of the body in Western Europe from the Middle Ages to the end of the 19th century. We will focus particularly on the body and social identity (e.g., dress, cleanliness, and eating), the religious significance of the body (e.g., saints' bodies, religious violence, and "holy anorexia") and the changing definitions and perceptions of bodily impairment (e.g., the treatment of the elderly and blindness).

**HIS 195 History of the Body in Medieval and Early Modern Europe** (4) This course examines a selection of themes concerning the history of the body in Western Europe from the Middle Ages to the end of the 19th century. We will

## HISTORY

focus particularly on the body and social identity (e.g., dress, cleanliness, and eating), the religious significance of the body (e.g., saints' bodies, religious violence, and "holy anorexia") and the changing definitions and perceptions of bodily impairment (e.g., the treatment of the elderly and blindness).

**HIS 198 Senior Research Seminar** (4) Prerequisite: Junior standing and HIS 1.  
Guided research on a problem of historical interest. Culminates in a major paper.

# Interdisciplinary Studies

## Lower-Division Course Descriptions

- IS 001 Research Across the Disciplines** (2) Encourages students to embrace research methodology as a fundamental way in which we can study and interact with the world around us. Explores how humanists, social scientists, and natural scientists approach these issues through close examination of phenomena, texts, and other artifacts. Invites students to critically examine their assumptions about research and prepares them to participate in scholarly discourse. Increases students' confidence to locate, evaluate and incorporate sources into their academic work. Course is graded but can also be taken as P/NC.
- IS 010H Honors: Augustine and the Christian Tradition I: Faith Seeking Understanding** (4) This course offers an in-depth introduction to higher education as a Christian calling. Emphasizing excellence in the pursuit of truth, it explores key questions of how knowledge can be acquired, the types and limits of human knowledge, how faith and learning interrelate, how behaviors, affections, characters, and relationships relate to learning. It emphasizes how the pursuit of truth is a lifelong journey that is closely linked to our spiritual commitments. The course will introduce students to the writings of St. Augustine of Hippo, the Fourth and Fifth Century North African bishop renowned for his contributions to Christian thought. It will proceed to consider a range of perspectives from great writings from within the Christian tradition, emphasizing key texts, seminar discussions, and student writing.
- IS 020H Honors: Augustine and the Christian Tradition II: Pilgrim Citizens** (4) Starting with St. Augustine—a 4th and 5th century North African Bishop—and continuing into the broader Christian tradition, this course introduces students to social engagement and service, grounded in basic commitments to ecclesial, familial, social, and civic relationships. In keeping with St. Augustine's rich theology of the two cities, this course emphasizes the centrality of the Church—both locally and globally—as the City of God on earth. It provides a framework for understanding a range of social institutions with which all people interact. Further, it invites students to explore questions of calling and vocation as highly personal perspectives on how Christians are called to engage and serve the world. Thus, the course pursues a corporate vision for faithful citizenship, reflectively encouraging a range of activities and service involvements from the Augustinian Scholars. It continues and deepens the first semester's emphasis on formation, relating this to faithfulness in using one's gifts in service to God and others.
- IS 070 Introducing Christian Liberal Arts Education** (2) This course explores the distinctive nature, purposes, and value of a Christian liberal arts education as well as its place in the wider landscape of American higher education. Issues addressed include the historical development of liberal arts education, the relationship between the Christian faith and higher education, different kinds of academic

## INTERDISCIPLINARY STUDIES

institutions in contemporary American higher education, the college selection and admissions processes, and the demographics of higher education.

**IS 070SS Liberal Arts Ambassadors** (0) The ambassadors work in local high schools, junior high schools and elementary schools as tutors for young people with limited academic resources who risk being ill-prepared for college. Class members will serve as tutors through programs like Cal-SOAP, AVID, and Read America. The ambassadors will be able to talk knowledgeably with the students they are helping about the value of college, about the range of college options available to them, and particularly about the value of the liberal arts alternative. Meets the Serving Society and Enacting Justice GE requirement.

### Upper-Division Course Descriptions

**IS 121 - IS 129 Culture and Society** (4) Studies various aspects of history, thought, arts, society, culture, science, economy and politics while resident in a foreign country. Special effort is made to understand the heritage and contemporary society in relation to larger world contexts. Emphasizes thoughtful consideration of Christian and cultural concerns through preparatory readings, lectures, extensive discussion, and essay writing.

**IS 140 Global Studies Seminar I** (4) Global Studies is the academic study of political, economic, ecological, and cultural relations and processes that affect communities around the world. Oriented around the study and forces of “globalization”, the field incorporates areas as diverse as market relations, the movement of commodities, global communications and consumption, refugees, migrants and other movements of people around the globe. Global Studies also incorporates transnational and local trends in its curriculum insofar as they illustrate broader questions of global change.

**IS 170 Turkish Culture and Society** (4) This course will be offered on the Westmont in Istanbul off-campus program. Students will engage with debates about modernization and what characterizes a modern society; whether or to what degree there is a universal modernity, and how different members and groups within Turkish society are contesting what it means to be Turkish and what it means to be modern. These themes are closely connected to debates about citizenship, national identity, the role of the state, and who can participate in the public square and on what basis. The course will use democratization, secularization, human rights and economic development as four doors through which to enter Turkish modernity and society.

**IS 185 Orientation Off-Campus Program** (2) Designed for students intending to participate in an off-campus program. The overarching goal of the course is to help students get the most out of their study abroad experience by preparing them for it intellectually, culturally, emotionally, and spiritually.

**\*IS 190 Urban Internship** This course engages students in a highly structured internship experience aimed at cultivating new vocational, cross-cultural and critical-reflective skills amidst a broad range of professional settings. Students will receive 8 units of credit for the course, some or all of which may be done for major credit (departments vary in this regard). Through the course it is expected that students will gain a deeper awareness of the integrative links between faith and

world, theory and praxis, action and reflection, in ways that foster a deeper sense of Christian vocation. The extent to which this awareness is realized will depend upon the commitment of each student to make the most of his/her unique learning opportunities as well as cultivating an open, receptive attitude toward the diverse issues, people and challenges encountered.

**IS 192 Orientation to Westmont in Mexico** (2) Designed for students intending to participate in Westmont in Mexico (WIM). The overarching goal of the course is to help students get the most out of their study abroad experience by preparing them for it intellectually, culturally, emotionally, and spiritually. Satisfies the Integrating the Major Discipline general education requirement for Spanish majors only.

**IS 193 Seminar: Engaging Culture** (3) Required of all Westmont in Mexico (WIM) students. This seminar is a continuation of the spring orientation course and is designed to deepen understanding of Mexican culture and to maximize your experience abroad. This course complements the activities of other WIM classes and provides a framework for examining the issues and questions they present. Students will participate in several field trips and projects outside of the classroom designed to help them “engage culture.” A cultural journal, multiple reflective essays, and oral presentations will be regular parts of this course.

**\*IS 194 Independent Study** (2-4 units, by request) In collaboration with San Francisco based faculty and with relevant departmental colleagues, a student may self-design a course which integrates the unique environment of San Francisco into the study of their discipline (example: SF social services and the effect on poverty and homelessness in the city; cultural impact on international trade relations; Chinatown’s familial structures and the effect on social capital; a survey of church positions on homosexuality, etc.)

**\*IS 195 Seminar in Urban Studies** (4 units) Study San Francisco and you get a glimpse at the future of American thoughts and trends. Many issues, such as poverty, homelessness and ethnic diversity are more accessible in this urban environment along with broader issues of racism, sexual orientation and diversity of faith community commitments to human needs. Interaction with local guest speakers supplement significant text readings, reflective writing and guided discussions.

*\*Note: These courses are taught on off campus programs. Admission to these courses is contingent on admission to the programs.. Applications can be found on line at <http://www.westmont.edu/offices/ocp/>, or secured from the Off-Campus Programs Office.*

**IS 196 Ethnic Studies Seminar** (4) The seminar course is designed to synthesize the course work of the minor under an interdisciplinary rubric. Main objectives include learning interdisciplinary theoretical perspectives and research methods, further compounding the variables of race and gender with other variables, such as social class and religion, and placing interdisciplinary perspectives and course themes within a Christian context. Students will also learn about the value and practical application of this kind of research within academia and for society.

**IS 197 Reentry Seminar** (2) Designed for students who have just returned from the Westmont in Mexico semester. In the course, students will continue to reflect upon and process the overseas experience, to identify and explore unanswered questions provoked by the experience, to continue to refine cross-cultural skills, to learn

## INTERDISCIPLINARY STUDIES

appropriate ways to deal with challenges faced by reentry, and to find positive and practical ways to reconnect with the Westmont community.

# Kinesiology

*Professors G. Afman, R. Smelley*

*Associate Professors C. Milner (chair), J. Moore, D. Wolf*

*Assistant Professors C. Toms, T. Van Haitsma, T. Walters*

**Description of the Major.** The discipline of kinesiology is the study of the art and science of human movement. This organized body of knowledge emphasizes scientific and educational research. General areas of study include the biophysical, sociocultural and behavioral spheres of kinesiology. Within these spheres are numerous subdisciplines, including biomechanics, physiology of exercise, motor learning, sport psychology, sport sociology, and pedagogy. The clinical arm of kinesiology includes subdisciplines such as clinical nutrition, clinical exercise physiology and gerontology.

The major curriculum provides a sound liberal arts background and an area of academic specialization. The department offers two tracks: 1) B.S. in Movement and Exercise Science, with particular emphasis in exercise science, pre- physical and occupational therapies, physician assistant, cardiac rehabilitation and other allied health fields and 2) B.S. in Movement and the Medical Sciences, providing coursework for students seeking to gain admission to medical school.

**Distinctive Features of the Major.** The kinesiology major gives the student the opportunity to study the many subdisciplines associated with the allied health professions and approach this discipline with a liberal arts and science focus. There are early internships where students have the chance to elect options in the work place (e.g. occupational therapy, physical therapy aid; assisting in the training room; assisting in a medical clinic). This helps students with self-selection of professional choices early in their academic experience. Seminar and small group discussion, multi-media use, and active learning practices characterize courses.

The Kinesiology Department recognizes the tremendous value of an off-campus experience. In addition to campus-wide programs available to all students, three programs are available which offer unique application to the discipline of kinesiology. Courses in each of these programs meet requirements for the kinesiology major.

The Westmont in San Francisco program offers unique opportunities to select internship experiences in physical and occupational therapy, corporate fitness, and physician assistant programs. In addition, an optional research tutorial is available for students.

Students can take part in a research internship program hosted at the University of Bath, Bath England where kinesiology students participated in several research projects alongside Westmont faculty, University of Bath faculty and doctoral graduate students. Note: This program does not run every summer.

The Westmont Global Health Partnership with Uganda Studies, on the campus of Uganda Christian University (UCU) in Mukono, Uganda, is based on a partnership between Westmont College, UCU's Center for Global Engagement and the Uganda Studies Program (USP) operated by the Council for Christian Colleges and



Universities (CCCU). Global health coursework, including pre and post classes on Westmont's campus and in Uganda, provides a significant global health experience for Westmont and other CCCU students.

**Career Choices.** The purpose of this liberal arts major is to provide a foundation of understanding and competencies in the discipline with an integrated Christian world view. Career options include: cardiac rehabilitation, coaching, corporate fitness, disability related pursuits, fitness management, gerontology services for older adults, graduate studies in the sport or health sciences, medicine, medical technician, nurse practitioner, occupational therapy, personal trainer, physical therapy, physician assistant, sports medicine, and teaching.

**Distinctive Features of PEA.** Physical education activity classes at Westmont encourage successful psychomotor development and provide a rationale for making exercise a priority in the stewardship of our bodies. Courses give students skills and principles for continuing a physically active life, including an exercise program to maintain physical well-being. The instruction-based program is diverse and developmental, and it encourages healthful, active, lifetime, leisure-based activities.

## Requirements for the B.S. Major Movement & Exercise Science Track: 50 units

### Required Lower-Division Courses: 18 units

KNS/BIO 011 Human Anatomy (4)  
KNS/BIO 012 Human Physiology (4)  
KNS/BIO 040 Human Nutrition (4)  
KNS 072 Foundations of Kinesiology (2)  
MA 005 Introduction to Statistics (4)

### Required Upper-Division Courses: 24 units

KNS 101 Basic Biomechanics (4)  
KNS 105 Physiology of Exercise (4)  
KNS 157 Psychology and Sociology of Movement (3)  
KNS 166 Movement: Pedagogy and Leadership (4)  
KNS 181 Special Populations (4)  
KNS 185 Motor Behavior (2)  
KNS 190 Internship (1)  
KNS 195 Senior Capstone (2)

### Electives: 8 units

KNS 054 First Aid/CPR (2)  
KNS 110 Cardiovascular Dynamics (3)  
KNS 120 Nutrition for Athletes (2)  
KNS 122 Nutrition for the Health Professional (2)  
KNS 141 Politics of Sports (4)  
KNS 150 Topics Courses (2-4)  
KNS 151 Prevention/Treatment of Athletic Injuries (3)  
KNS 152 Therapeutic Exercise and Modalities (2)

KNS 155 Fundamentals of Movement (2)  
 KNS 156 Health Education for the Classroom Teacher (2)  
 KNS 160 Strength and Conditioning (3)  
 KNS 161 Fitness for Older Adults (2)  
 KNS 162 Physical/Psychological/Social Aspects of Aging (2)  
 KNS 190 Internship (1-4)  
 KNS 198 Research (1-4)  
*One course from approved list of Natural and Behavioral Sciences courses (4)*

## **Movement & the Medical Sciences Track: 79**

### **Required Lower-Division Courses: 14 units**

KNS/BIO 011 Human Anatomy (4)  
 KNS/BIO 040 Human Nutrition (4)  
 KNS 072 Foundations of Kinesiology (2)  
 MA 005 Introduction to Statistics (4)

### **Required Upper-Division Courses: 20 units**

BIO 102 Physiology (4)  
 KNS 101 Basic Biomechanics (4)  
 KNS 105 Physiology of Exercise (4)  
 KNS 181 Special Populations (4)  
 KNS 185 Motor Behavior (2)  
 KNS 195 Senior Capstone (2)

### **Medical Science Courses: 45 units**

BIO 005, 006 General Biology I, II (4,4)  
 BIO 113 Biochemistry (4)  
 BIO 114 Genetics (4)  
 CHM 005, 006 General Chemistry I, II (4,4)  
 CHM 101, 102 Organic Chemistry I, II (4,4)  
 PHY 011, 013 Physics for Life Sciences I, II (4,4)  
 PHY 014 Physics for Life Sciences Laboratory (1)  
 PSY 001 General Psychology (4)

## **Requirements for a Minor: 24 units**

Minor tracks are offered in coaching, fitness/wellness, and movement science.

### **Movement Science Minor: 24 units**

KNS/BIO 011 Human Anatomy (4)  
 KNS/BIO 012 Human Physiology (4)  
 KNS 101 Basic Biomechanics (4)  
 KNS 105 Exercise Physiology (4)

and

8 units from upper-division kinesiology electives

### **Coaching Minor: 24 units**

## KINESIOLOGY

KNS/BIO 011 Human Anatomy (4)  
KNS 101 Basic Biomechanics (4)  
KNS 105 Exercise Physiology (4)  
KNS 157 Psychology/Sociology of Movement (3)  
KNS 166 Movement: Pedagogy and Leadership (4)  
KNS 190 Internship (2)

Choose one:

KNS 151 Prevention and Treatment of Athletic Injuries (3)  
KNS 160 Strength and Conditioning (3)

## Preparation for Teaching Physical Education at the Elementary or Secondary Level

Students wishing to teach physical education should complete the regular requirements for the B.S. major. In order to complete a fifth-year Credential Program at Westmont, students should also complete four or more of the following (minimum of 12 units) prior to applying to the program.

KNS 156 Health Education for the Classroom Teacher (2)  
ENG 106 Language Acquisition (4)  
ED 101 Explorations in Teaching: Secondary (4)  
ED 105 Perspectives on Cultural Diversity and Education (4)  
ED 130 Special Education for the Classroom Teacher (2)  
ED 161 Computers for the Classroom Teacher: Secondary (2)

In many cases, it is possible to complete requirements for the major and the Westmont Credential Program in four years. Such a “fast-track” schedule requires early planning, ideally beginning in the first year. Students wishing to complete such a program should refer to more specific advising materials available on the department webpage.

All students wishing to explore teaching physical education are also strongly encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, in addition to their major advisor.

## Major Courses Lower-Division Course Descriptions

**KNS/BIO 011 Human Anatomy** (4) A systems approach to the study of tissues and organ systems that make up the human body. An emphasis is given to skeletal muscle. Course is designed with careers such as nursing, physician, physician assistant, physical therapy, and sports medicine in mind. Lab required.

**KNS/BIO 012 Human Physiology** (4) Not for credit toward the B.S. in biology. Functional characteristics and interrelationships of the organ systems of the human body. Lab required.

**KNS/BIO 040 Human Nutrition** (4) Not for credit toward the B.S. in biology. Role of nutrients in human growth, development, and maintenance, including the chemistry and metabolism of carbohydrate, fat, and protein and the role of vitamins

and minerals. The principles of energy balance, essentials of an adequate diet throughout the life cycle, and nutritive values of foods. Nutrition concepts applied to current nutrition issues and controversies. (taught without laboratory)

**KNS 054 First Aid and CPR** (2) American Red Cross certification course designed to develop competence in the emergency treatment of victims of injury or sudden illness and cardiopulmonary resuscitation.

**KNS 072 Foundations** (2) Prerequisite: Freshman or sophomore standing only, or declared Kinesiology major. Recommended for students considering a kinesiology major or minor. Includes an overview of the discipline of kinesiology, historical roots, introduction to scholarly journals and an investigation of vocational and professional opportunities.

## Upper-Division Course Descriptions

**KNS 101 Basic Biomechanics** (4) Prerequisites: Junior standing, KNS/BIO 011. Functional anatomy of the human skeletal and muscular systems. Muscle and joint action with emphasis on the mechanical concepts and physical laws involved. PEAK Performance (computer motion analysis) technology is emphasized. Lab required.

**KNS 105 Physiology of Exercise** (4) Prerequisites: KNS/BIO 12 or concurrent enrollment in KNS/BIO 12. Introduces the specialized knowledge associated with the metabolic, cardiorespiratory, and muscular responses and adaptations to exercise. Topics of endurance, strength, fatigue, and environmental factors will be applied to both health and fitness as well as performance objectives. Concurrent lab required.

**KNS 110 Cardiovascular Dynamics** (3) Prerequisites: KNS/BIO 012. Physiology of the cardiorespiratory system. Includes ECG interpretation, stress test administration, exercise prescription, and pathophysiology.

**KNS 120 Nutrition for Athletes** (2) This course addresses the unique nutritional needs of various athletic populations. The athletic issues addressed are: weight gain, weight loss, ergogenic aids, endurance nutrition, and the female athlete triad. Also included in the course is an overview of the principles of normal nutrition and a healthy diet. A student project is an important part of the class.

**KNS 122 Nutrition for the Health Professional** (2) This course addresses the special nutritional needs of various clinical populations that the allied health professional will encounter. The clinical populations addressed are: the senior citizen, the diabetic, the cardiovascular disease patient, cancer, renal and liver disease, stress and gastro-intestinal diseases. Also included in the course is an overview of the principles of normal nutrition and a healthy diet.

**KNS/AN 140 Food Systems** (4) Surveys food production and consumption systems practiced in cultures around the world. Addresses issues of hunger, ethics of consumption and social and environmental justice.

**KNS/POL 141 Politics of Sports** (4) This cross-listed course examines the intersection of politics and sports. Because sports occupy an important place in most cultures, it is of little surprise that they are also highly politicized. Governments not only regulate athletics, but have used sports both as a tool of political socialization and as a means to advance the national interest in international affairs.

**KNS 150 Topics Courses** (2-4) These courses are taught periodically and may be used as elective hours for a particular emphasis in the major or minor.

**KNS 151 Prevention and Treatment of Athletic Injuries** (3) Prerequisite: Junior standing. Students learn to organize and administrate a training room, acquire theoretical understanding and practical skills in first-aid protocol, injury evaluation, rehabilitation techniques, and recognize common injury pathologies.

**KNS 152 Therapeutic Exercise and Modalities** (2) Prerequisite: KNS 151. Students will develop competencies in injury evaluation, rehabilitation techniques and program prescription and design. In addition, students will gain an understanding of the theory, application and physiological effects of the electromagnetic spectra and how this relates to therapeutic modalities. Course includes considerable laboratory experiences.

**KNS 155 Fundamentals of Movement** (2) Examines the psychomotor performance of children, including: basic movement patterns with complex applications, cognitive and affective dimensions, fitness, and choosing appropriate pedagogy.

**KNS 156 Health Education for the Classroom Teacher** (2) Overview of health-related issues based on the philosophical model of wellness education. Includes strategies and curriculum ideas for teaching health education. Meets the health education requirement for the California Teaching Credential.

**KNS 157 Psychology and Sociology of Movement** (3) Application of psychological and sociological principles to the sporting and exercise environment. Topics include exercise adherence, personality research, motivation, anxiety, stress and aggression, as well as basic intervention strategies. Issues related to gender ethnic diversity will also be addressed.

**KNS 160 Strength and Conditioning** (3) Prerequisite: KNS 105. Students will analyze strength and conditioning methodology in preparation for certification in either personal training or as a strength and conditioning specialist. The course will emphasize conditioning programs for varied populations. An integral aspect of the course is participation in all aspects of training within an individual or group setting.

**KNS 161 Fitness for Older Adults** (2) This course is designed to incorporate theoretical knowledge with opportunities for practical application involving exercise for older adults. Particular attention will be given to the impact of exercise on the aging process and the overall quality of life.

**KNS 162 Physical/Psychological/Social Aspects of Aging** (2) This seminar course is designed to expose students interested in the allied health fields to the growing body of knowledge in gerontology. Current research in areas such as cognitive functioning, the role of exercise on the aging process, the importance of social connections, personality changes in later life and other topics relevant to this stage

in life are explored. This course has a practical component, providing opportunities for students to work closely with older adults in the Santa Barbara community.

**KNS 166 Movement: Pedagogy and Leadership** (4) Prerequisites: Junior standing. This course is designed to analyze and develop pedagogical practices and leadership skills. The strategies and tools for facilitating successful psychomotor outcomes for client, patient or learner are explored. Students are given opportunities to enhance their competencies in the role of facilitator through observations of a professional leader and by taking part in a cooperative learning and leadership role. This class is designed as a speech-intensive course, requiring extensive public speaking opportunities that place the student in a role fully in charge of teaching others.

**KNS 181 Special Populations** (4) The study of disabilities encountered in medical and educational settings. Exploration of theories, strategies and methods based on current legislative mandates.

**KNS 185 Motor Behavior** (2) Prerequisites: Junior standing and KNS 072. Understanding the neurophysiological bases of learning and performance, with applications to clinical and other instructional settings.

**KNS 190 Internship** (1-4) Prerequisites: Junior standing. This course provides the opportunity for pre-professional internship opportunities in the community. The internship supervisor must approve laboratory teaching and other field experiences.

**KNS 195 Senior Capstone** (2) Prerequisite: Senior standing. Survey of relevant issues and trends in the discipline, culminating in a debate series. Students begin networking interviews, construct a professional resume, gain exposure to various career options and write a culminating senior paper.

**KNS 198 Research** (1-4) Laboratory and/or field research with a faculty member. Students will conduct experiments, analyze data and present written and/or oral findings based on their work. Integrating the major discipline within the liberal arts.

## Physical Education Activity Courses

(General Education Requirement: PEA 032, Fitness for Life, required of all entering students during the first or second semester of attendance. A total of four different PEA courses must be completed.)

Students may receive credit for a maximum of eight (8) units of PE Activity coursework toward their degree. This includes any transfer PE credit plus Westmont PEA credit.

Varsity athletes only are allowed to repeat their PEA varsity sport four times for credit and receive up to four (4) units of credit toward their degree. However, only one of their PEA varsity sport courses will be counted toward their PEA General Education requirement.

Students may be enrolled in only one PEA course per semester for credit.

**Exception: Declared** KNS majors may be enrolled in two PEA courses for credit in a given semester.

All students must complete PEA 032 Fitness for Life and three different PE Activity courses to satisfy the PEA General Education requirement. Subsequent PEA

## KINESIOLOGY

courses in a given activity must be at a higher level. The varsity sport is considered the highest level.

Transfer students must complete one Westmont PE Activity course for each full year they are enrolled at Westmont, including PEA 032 Fitness for Life, or complete all four (4) PE Activity course requirements.

*Please note: Reapplicants who originally entered Westmont as first-year students are not considered transfer students regardless of the length of time they were away from Westmont or the number of units they “transfer” back to Westmont on their return.*

**PEA (001-099) Physical Activity** (1) Schedule of classes will indicate course numbers.

General offerings for all students: Aerobics, Archery, Badminton, Ballet Basics, Ballroom/Swing, Ballroom/Latin Swing, Creative Modern Dance, Dance Technique, Fencing, Fitness for Life, Fitness by the Sea, Folk Dance, Functional Training, Golf, Hip Hop, Jazz Basics, Lifeguard Training, Outrigger Canoeing, Outdoor Education, Personal Conditioning, Pickle-Ball, Pilates, Scuba, Self-Defense, Soccer, Swimming, Tennis, Ultimate Frisbee, Volleyball, Water Aerobics, Weight Training, Yoga. Courses are offered depending on the availability of instructors.

**PEA 032 Fitness for Life** (1) The study and practical application of the health-related components of fitness. Founded on the “wellness model,” the course emphasizes lifestyle changes and decisions leading to good health. Emphasis is on individualized programs based on pre-assessed fitness needs. The student will complete a 9-week program of aerobic activities selected by the student with instructor approval.

# Liberal Studies

*Associate Professor M. Hughes, Program Coordinator*

## Subject Matter Preparation for Elementary Teaching Candidates

**Description of the Major:** The liberal studies program is a multi-disciplinary major designed for those preparing to become elementary teachers. More than other majors at Westmont, the liberal studies major requires students to develop themselves in a wide range of academic fields. Although some courses are designed specifically with teacher candidates in mind, the primary emphasis of the program is to develop candidates' subject matter expertise.

Westmont's liberal studies program was designed with California Commission on Teacher Credentialing content standards (Elementary Subject Matter) in mind. Accordingly, the program offers prospective elementary teachers strong preparation for the California Subject Examination for Teachers (CSET), required as of 2003 for entry into a state-approved credential program.

Typically, students completing the liberal studies major immediately go on to enroll in a one-year Multiple Subject (K-6) credential program. For information on Westmont's Credential programs, refer to Education, p. 87.

**Distinctive Features:** With proper planning, students may complete the liberal studies major (including Westmont's general education requirements) and the teacher preparation program in four years, beginning their professional careers immediately after receiving the B.A. degree.

Careful, one-on-one advising guides liberal studies students at Westmont through the sometimes bewildering maze of California requirements leading to a teaching credential. Program personnel are consistently available and responsive to individual student questions.

Field placements in local elementary schools throughout the liberal studies major help to prepare students for the demands of a teaching credential program and the responsibilities of full-time teaching.

Liberal studies students who have completed the B.A. degree and who live off campus receive a scholarship (equal to a 55% reduction in tuition) during the student teaching semester. Note that this is given in lieu of other Westmont scholarships students may have received previously.

**Career Choices:** As noted above, the liberal studies major is explicitly designed for those pursuing a career in elementary teaching. In many cases, graduates of the Westmont program eventually go on to careers in special education, school administration, teacher education, or writing.



## **Requirements for Liberal Studies (Multiple Subject) Major: 112-116 units**

*Note: The outline of requirements below incorporates all of Westmont's General Education Requirements.*

### **I. Language and Literature (20-24 units)**

ENG 002 Composition (4) (waived if a score of 580 on the SAT I Writing Component) or a score of "4" or "5" on AP language exam  
ENG 104 Modern Grammar and Advanced Composition (4)  
ENG 006 Studies in Literature (4)  
ED 172 Literature for Children and Adolescents (4)  
ENG 106 Language Acquisition (4)  
General Education Language Requirement (4)

For details of how students fulfill the College's writing intensive course requirements, please see Liberal Studies Handbook.

### **II. History/Social Science (16 units)**

HIS 009 World Civilization to 1750 (4)  
HIS 007 United States History to 1877 (4)  
HIS 178 California Experience (4)  
ED 105 perspectives on Cultural Diversity and Education (4)

### **III. Mathematics and Computer Science (8 units)**

MA 160 Fundamentals of Mathematics I (4)  
MA 165 Fundamentals of Mathematics II (2)  
ED 160 Computers for the Classroom Teachers: Elementary (2)

### **IV. Natural Science (12 units)**

LS 012 Introduction to Life Science (4)  
PHS 011 Introduction to Physical Science (4)  
PHS 114 Earth Science (4)

### **V. Visual and Performing Arts (8 units)**

ART 180 Art for Children (4)  
MU 184 Music for Children (4)

### **VI. Health and Physical Education (7 units)**

KNS 156 Health Education for the Classroom Teacher (2)  
KNS 155 Fundamentals of Movement (2) [counts as one PE activity course]  
PEA 032 Fitness for Life (1)  
Two additional one-unit PEA courses (2)

### **VII. Human Development (4 units)**

PSY 115 Child Development: Infancy Through Adolescence (4)

**VIII. Preprofessional coursework (5 units)**

ED 100 Explorations in Teaching: Elementary (4)

ED 109 Liberal Studies Seminar (1)

**IX. Academic Concentration (10-12 units)**

Each Liberal Studies major selects three full (3-4 unit) courses totaling no less than 10 units, beyond the requirements above, in one of the following areas. For details, see Liberal Studies Handbook.

1. American Studies
2. Hispanic Studies (Spanish)
3. English
4. History/Social Science
5. Art
6. Music
7. Mathematics
8. Physical Science
9. Environmental Science

Liberal Studies majors may appeal to create other concentrations, aside from those above. In any case, the proposed concentration should meet the goal of equipping prospective elementary teachers with content knowledge appropriate for the K-6 classroom.

**X. Additional courses to fulfill General Education requirements (16 units)**

PHI 006 Philosophical Perspectives (4)

RS 001 Introduction to Old Testament (4)

RS 010 Introduction to New Testament (4)

RS 020 Introduction to Christian Doctrine (4)

Transfer students *may* have reduced requirements for Religious Studies courses. See departmental advisor for details.

Students taking courses that do not appear on the list above must gain approval from the education department in order for the coursework to be validated as part of their major.

## Sample Four-Year Course Sequence

### Liberal Studies Program—Fast-track option (3 years Liberal Studies Major + 1 year Credential Program)

#### First Year

##### *Fall (17)*

RS 020 (4)  
ENG 002 (4)  
HIS 007 (4)  
PHS 011 (4)  
PEA 032 (1)

##### *Spring (17)*

RS 010 (4)  
ENG 006 (4)  
GE Language Requirement (4)  
LS 012 (4)  
PEA elective (1)

#### Second Year

##### *Fall (18)*

ART 180 (4)  
HIS 009 (4)  
PHS 114 (4)  
MA 160 (4)  
KNS 155 (2)

##### *Spring (19)*

RS 001 (4)  
MA 165 (2)  
PSY 115 (4)  
ED 172 (4)  
Concentration elective (4)  
PEA elective (1)

#### Third Year

##### *Fall (20)*

ENG 104 (4)  
ENG 106 (4)  
ED 105 (4)  
PHI 006 (2)  
Concentration elective (4)

##### *Spring (19)*

HIS 178 (4)  
ED 160 (2)  
ED 100 (4)  
ED 109 (1)  
MU 184 (4)  
Concentration elective (4)

#### Fourth Year (Credential Program)

##### *Fall (20)*

ED 110 (4)  
ED 120 (4)  
ED 150 (4)  
ED 170 (4)  
ED 130 (2)  
KNS 156 (2)

##### *Spring (15)*

ED 190 (12)  
ED 195 (3)

**Notes on sample four-year schedule:**

Students who choose not to complete the teacher preparation program as part of their four-year program, or who have not been admitted to the credential program, will replace the education courses in the fourth year, above, with elective units.

Four semesters shown in the sample four-year course sequence consist of schedules exceeding the regular limit of 18 units. Not all students are eligible to exceed this limit. Students may use Mayterm, approved summer coursework from other institutions, or approved AP coursework from high school to keep from having to enroll in more than 18 units in any given semester.

For students on the “fast-track” schedule, the baccalaureate degree would officially be awarded at the conclusion of the first semester of the fourth year. Students participate in graduation ceremonies the following May. A student in this program would have, at the conclusion of the four years, fifteen post-baccalaureate credit hours.

# Mathematics

*Kathleen Smith Chair of the Natural & Behavioral Sciences R. Howell,  
Professors D. Hunter, P. Hunter, C. R. Rosentrater (chair)  
Assistant Professor A. Scirratt*

**Description of the Major.** Mathematics is a language capable of clear and precise expression and an analytic tool that can solve complex problems. It is important because of its applications, but many mathematicians view the subject as a creative art in which human reason finds its purest expression. The attention to reasoning, abstraction, and creativity in mathematics makes the subject central to the liberal arts and sciences. Students who major in mathematics will increase their knowledge of mathematics, become more proficient communicators of mathematical ideas, enhance their creative capacities, and ponder the connections between faith and mathematics.

**Distinctive Features.** Students in the program join a community of learners made up of fellow students and faculty. Small class sizes allow students and faculty to work closely together, getting to know each other well. Students have opportunities to participate in summer research projects at Westmont and at other institutions. They help prepare and run an annual high school mathematics contest hosted by Westmont, and have opportunities to tutor in local schools. For more information on teacher preparation in mathematics, see p. 87.

**Career Choices.** The bachelor's degree in mathematics prepares students well for a wide variety of careers and opportunities. Graduating majors have entered fields such as finance, accounting, teaching (high school and college), cryptanalysis, nursing, linguistics, and biomedical research. The major also provides the essential foundation for graduate work. Graduates have gone on to medical and law school and to graduate school in mathematics, statistics, economics, and public health.

## Admissions Math Requirement

The admissions math requirement is a prerequisite for all mathematics courses, unless otherwise noted. The requirement is as follows: Three years of high school math, including Algebra II, or a math SAT I score of 550 or ACT math score of 22. For further information, see p. 241.

## Requirements for a B.A. Major: 46 units

### Lower-Division Courses: 24 units

MA 009, 010 Elementary Calculus I, II (4,4)  
MA/CS 015 Discrete Mathematics (4)  
MA 019 Multivariable Calculus (4)

MA 020 Linear Algebra (4)

*One of the following applied courses: (4)*

CS 010 Design and Implementation of Solutions to Computational Problems (4)

CHM 005 General Chemistry I (4)

PHY 021 General Physics I (4)

**Foundational Courses: 4 units**

*Take one of the following:*

MA 108 Mathematical Analysis (4)

MA 110 Modern Algebra (4)

**Problem Solving: 1 unit**

MA 180 Problem Solving Seminar (1)

**Internship and/or Problem Solving: 1 unit**

*Take one of the following:*

MA 180 Problem Solving (1)

MA 190 Internship (1)

**Capstone Course (Choose one of the following): 4 units**

MA 136 Geometry (4)

MA 140 Complex Analysis (4)

MA 155 History of Mathematics (4)

**Breadth: 12 units**

*(Choose any 12 additional units chosen from upper-division mathematics courses.)*

## **Requirements for a B.S. Major: 54 units**

**Lower-Division Courses: 28 units**

MA 009 Elementary Calculus I (4)

MA 010 Elementary Calculus II (4)

MA/CS 015 Discrete Mathematics (4)

MA 019 Multivariable Calculus (4)

MA 020 Linear Algebra (4)

CS 010 Design and Implementation of Solutions to Computational Problems (4)

CS 030 Abstract Models for Concrete Problems Using Java (4)

**Foundation Courses: 8 units**

MA 108 Mathematical Analysis (4)

MA 110 Modern Algebra (4)

**In-Depth Study (Choose one of the following): 4 units**

MA 109 Advanced Mathematical Analysis (4)

MA 111 Applied Modern Algebra (4)

**Problem Solving: 1 unit**

MA 180 Problem Solving Seminar (1)

**Internship and/or Problem Solving: 1 unit**

*Take one of the following:*

MA 180 Problem Solving (1)

MA 190 Internship (1)

**Capstone Course (Choose one of the following): 4 units**

MA 136 Geometry (4)

MA 140 Complex Analysis (4)

MA 155 History of Mathematics (4)

**Breadth: 8 units**

*(Choose any 8 additional units chosen from upper-division mathematics courses.)*

**Requirements for a Mathematics Minor: 24 units**

MA 009, 010 Elementary Calculus I, II (4,4)

MA/CS 015 Discrete Mathematics (4) *or* MA 19 Multivariable Calculus (4)

MA 020 Linear Algebra (4)

*One of the following: (4)*

MA 110 Modern Algebra (4)

MA 123 Number Theory (4)

MA 136 Geometry (4)

MA 155 History of Mathematics (4)

*One of the following: (4)*

MA 108 Mathematical Analysis (4)

MA 121 Introduction to Numerical Analysis (4)

MA 130 Probability and Statistics (4)

MA 140 Complex Analysis (4)

**Preparation for Teaching Mathematics at the  
Secondary Level**

Students wishing to teach mathematics at the high school or junior high level should complete the requirements for a B.A. or B.S. degree. In order to complete a fifth-year Credential Program at Westmont, students should also complete four or more of the following prior to applying to the program:

KNS 156 Health Education for the Classroom Teacher (2)

ENG 106 Language Acquisition (4)

ED 101 Explorations in Teaching: Secondary (4)

ED 105 Perspectives on Cultural Diversity and Education (4)

ED 130 Special Education for the Classroom Teacher (2)

ED 161 Computers for the Classroom Teacher: Secondary (2)

In many cases, it is possible to complete requirements for the mathematics major and the Westmont Credential Program in four years. Such a “fast-track” program requires early planning. All students wishing to explore secondary teaching are strongly encouraged to consult with faculty advisors in the Department of Education as early in their undergraduate program as possible, in addition to their major advisor.

## Lower-Division Course Descriptions

**MA 003 Statistics for Public Health** (4) Statistical methods are critical in public health. Descriptive statistics can help a worker identify the existence and magnitude of a public health problem. Certain types of graphical presentations can aid in identifying the source of a problem. Inferential statistics are used to determine whether a proposed solution is actually having an effect or whether the observed changes could be the result of random variation. The purpose of this course is to explore how to construct and interpret descriptive statistics using such tools as plots, measures of central tendency (what is typical), measure of variability, and correlation. The course will conclude with an introduction to the basic inferential methods. Statistics for Public Health is designed to be offered as a modular course associated with an off-campus program. It is not part of the cycle of mathematics courses and does not carry credit for the mathematics major.

**MA 004 Mathematics in Context** (4) Prerequisite: Admissions math requirement. A survey of some of the great ideas and questions in mathematics in the context of their historical/cultural formulation. Emphasis on conceptual rather than computational skills.

**MA 005 Introduction to Statistics** (4) Prerequisite: Admissions math requirement. A truly liberally educated person must have a basic knowledge of statistics, as its use permeates society. This course provides that grounding. Topics include exploratory data analysis, correlation, hypothesis testing, and regression. Graphs that model certain phenomena such as the normal,  $t$ , and chi-square distributions are set in an applied context. Non-parametric tests, such as the goodness-of-fit and Mann-Whitney, are also explored. The course involves extensive use of spreadsheets.

**MA 006 Statistical Modeling** (4) Prerequisite: MA 005, POL 040, or SOC 109. This course takes a case study approach to the fitting and assessment of statistical models with application to real data. Specific topics include simple and multiple linear regression; one-way and two-way analysis of variance; logistic and multiple logistic regression. The approach focuses on problem-solving tools, interpretation, mathematical models underlying analysis methods, and written statistical reports.

**MA 007 Finite Mathematics** (4) Prerequisite: Admissions math requirement. Discrete mathematics: probability, linear programming, game theory, matrices, Markov chains.

**MA 008 Functions and Models** (4) Prerequisite: College Algebra or equivalent. Mathematical models enable us to understand natural and social phenomena in systematic ways so that we can make predictions about those phenomena. This course prepares students to use powerful tools of mathematics to model real-world problems in biology, chemistry, economics, and physics. In particular, it focuses on linear, polynomial, rational, logarithmic, exponential, and trigonometric functions. As you learn how to use these functions, you will develop the algebraic knowledge and skills necessary to be successful in calculus



**MA 009, 010 Calculus I, II** (4,4) Prerequisite for MA 009: MA 008 or Precalculus.

Prerequisite for MA 010: MA 009 or equivalent. Calculus is the mathematical language that describes the natural world. The tools of this language are functions, graphs, limits, derivatives, integrals, sequences, and series. Students will solve some classic problems in mathematics and explore applications in science, technology, and engineering.

**MA 010H Honors Calculus II** (4) Prerequisite: MA 009 or equivalent and instructor approval. Functions, graphs, limits, differentiation, integration, sequences, series. Emphasis on theoretical aspects of the calculus, with extensive computer use to illustrate patterns and perform complex computations.

**MA/CS 015 Discrete Mathematics** (4) Prerequisite: Admissions Math Requirement. If calculus is analog, then discrete mathematics is digital; it is the study of things that you count, rather than things that you measure. Topics include logic (organizing thought), set theory (organizing objects), graph theory (representing relationships), combinatorics (clever ways of counting), and algorithms (analyzing processes). Students will learn how mathematicians prove theorems and how computer scientists solve problems.

**MA 019 Multivariable Calculus** (4) Prerequisite: MA 010 or 010H. Elementary calculus studies quantities that change, but that depend on only one variable. Real-world applications, however, usually require building models that require several inputs. This course studies quantities that have been liberated from that “single-input” constraint, and covers the standard topics of “multivariable” calculus: vector functions, partial derivatives, gradients, multiple integrals, line integrals, Green’s Theorem, Stoke’s Theorem, and the Divergence Theorem.

**MA 020 Linear Algebra** (4) Prerequisite: MA 010 or 010H or MA/CS 015. Many physical and mathematical systems have the structure of a vector space. This course explores these spaces and their transformations using matrices. Important concepts include independence, bases, eigenvectors, orthogonality, and diagonalization. These ideas form an important pathway to higher mathematics, and also have applications to differential equations and optimization problems.

**MA/PHY 040 Differential Equations** (4) Prerequisite: MA 010 or 010H. First-order equations, linear equations, systems of linear equations. Series solutions, transform methods, numerical methods. Applications. Existence and uniqueness theorems.

## Upper-Division Course Descriptions

**MA 108 Mathematical Analysis** (4) Prerequisite: MA 020. Is calculus built on a rock-solid foundation, or are its results suspect because there is no firm basis for believing them? This course takes a careful look at the great results of calculus and proves them rigorously using the current standards of mathematics. It explores exciting generalization of some calculus ideas, such as the topology of metric spaces, and investigates functions with unexpected properties, such as being continuous everywhere, but differentiable nowhere.

- MA 109 Advanced Mathematical Analysis** (4) Prerequisite: MA 108 and instructor approval. When Fourier solved the differential equation modeling heat diffusion, much of the mathematical community rejected his work. They were at least partially correct in doing so since Riemann's definition of the integral is inadequate to support the calculations Fourier used. This course traces the development of alternate formulations of the integration which provide a solid platform for Fourier's techniques.
- MA 110 Modern Algebra** (4) Prerequisite: MA 020. Abstract algebraic patterns pervade modern mathematics. Given simple definitions of groups, rings, and fields, this course develops the intricate theory of these objects, including permutation groups, subgroups, quotient groups and rings, isomorphisms, and extension fields.
- MA 111 Advanced Modern Algebra** (4) Prerequisite: MA 110 and instructor approval. In 1832, when Évariste Galois was 20 years old, he was shot and killed in a duel. The night before, he wrote a letter to a colleague detailing his work on some of the most profound mathematical questions of the time. This course investigates the work of Galois, combining advanced group theory and field theory to understand the nature of polynomial equations. (Additional topics may be included at the discretion of the instructor.)
- MA 121 Introduction to Numerical Analysis** (4) Prerequisite: MA 010 or 10H, Recommended: CS 010. Numerical methods in the solution of equations; polynomial approximations; integration, and the solution of differential equations. Use of computer where applicable.
- MA 123 Number Theory** (4) Prerequisite: MA 019 or MA/CS 015 or MA 020. Prime factorization and the distribution of primes. Congruences and residue class arithmetic; quadratic residues and Gauss reciprocity. Primality testing and pseudoprimes with applications to cryptography. Arithmetic functions. Theorems on sums of squares and other results inspired by Fermat.
- MA 130 Probability and Statistics** (4) Prerequisite: MA 010 or 010H. The use of probability and statistics is ubiquitous in our society, but most people do not realize that these tools rest on deep mathematical formulations. You will learn those concepts in this course. Topics covered include probability spaces, random variables, conditional probability, and types of distributions (e.g., normal, binomial, Poisson). Applications include the Central Limit Theorem, hypothesis testing, and point estimation.
- MA/CS 135 Formal Languages and Automata** (4) Prerequisite: CS/MA015 Discrete Mathematics. In his early thirties, Alan Turing cracked the Enigma code while establishing the theoretical foundation for what is computable, and what is not. He died tragically at the age of 41. This course explores what it means to compute, what features are necessary for a machine to compute, and the respective limits on what different machines can compute.
- MA 136 Geometry** (4) Prerequisite: MA 020. For 2000 years, mathematicians knew of only one system of geometry. In the nineteenth century, creative innovations led to strange new geometric worlds. This course revisits the familiar Euclidean geometry from an advanced axiomatic standpoint, and goes beyond to study hyperbolic geometry and other topics such as projective geometry and transformations.
- MA 140 Complex Analysis** (4) Prerequisite: MA 019. A study of the calculus of complex numbers, which are sometimes dubbed "imaginary" numbers because they

involve  $\sqrt{-1}$ . You will learn, however, that there is nothing imaginary about them. Indeed, complex numbers play a fundamental role in modern physics and (surprisingly) make some calculations with real variables extremely simple. Topics include analytic and harmonic functions, integrals, series, residues and poles, conformal maps, and the classical theorems of complex analysis. In-course honors and research opportunities are available per discussion with the instructor.

**MA 150 Topics** (4) Prerequisite: MA 019 or MA 020. Course content varies from year to year, depending on interests of faculty and students. Possible topics include: coding theory, mathematical biology, geometric modeling, statistical modeling, philosophy of mathematics.

**MA 155 History of Mathematics** (4) Prerequisite: MA 019 or MA 020. We strive in this course to gain an understanding of how mathematics has developed since ancient times. We will study historical texts, seeking to place them in their broader scientific, intellectual, and social contexts. Our aim will be to consider the work of past mathematicians on its own terms, asking, “What did these mathematicians think they were doing? What were their goals, interests, and methods? What did they think they had accomplished?” Topics included: mathematics in ancient Greece, mathematics in China and India during the medieval period, the mathematics of Islam, the evolution of ideas in such areas as geometry, number theory, calculus, algebra, and set theory. Includes exploration of historiographical questions and of questions about the nature of mathematical discovery and proof. Emphasizes use of primary sources.

**MA 160, 165 Fundamentals of Mathematics I, II** (4,2) Not for credit toward mathematics major. This course examines familiar mathematics from a more sophisticated perspective. It focuses on the abstract structure of mathematics, emphasizing problem solving, communication, and reasoning. Put another way, we will be exploring and communicating the ideas and reasons behind the mathematical ideas. Topics include: logic, sets, numbers, natural numbers, numeration systems, algorithms for arithmetic operations, geometry, and probability. MA 160 is a prerequisite for MA165.

**MA 180 Problem Solving Seminar** (1) Corequisite: MA 015 or MA 020. At its heart, mathematics is problem solving. In most undergraduate courses, the problems assigned are intimately connected with the current topic of discussion in the class and in the text. This practice gives an unrealistic picture of the way the mathematics generally works. In most non-classroom situations, problems and questions are unstructured and come without external clues as to what approach will be useful or how difficult the problem is likely to be. In this seminar, you will be introduced to “context free” problems from sources such as *The American Mathematical Monthly*, *Mathematics Magazine*, or *Math Horizons*, and you will learn how to devise your own approach to finding a solution. You will have the opportunity to submit your solutions to the mathematics journals in which the problems appeared. May be repeated for credit. Does not satisfy the Breadth requirement for the mathematics major.

**MA 190SS, 191SS Mathematics Seminar for Service Learning Internship** (1,0) Prerequisite: Consent of instructor. Students will spend one (MA-191SS) or three hours (MA-190SS) per week either (1) tutoring elementary, junior high, or high school students, primarily in mathematics or (2) running after-school enrichment

programs in mathematics or computer science in local elementary, junior high, or high schools. Students will also attend three 1-hour course meetings, and write a reflective paper on the experience. Does not satisfy the Breadth requirement for the mathematics major. (By arrangement.)

**MA 198 Research** (1-4) In their research, mathematicians ask and answer new questions and push the frontiers of knowledge. This experience can be both terrifying and exhilarating. Research under the direction of a faculty mentor gives you the opportunity to develop new mathematical ideas, pose mathematical questions, and seek their answers.

# Music

*Adams Chair of Music and Worship, Professor M. Shasberger (chair)*  
*Professors G. Brothers, S. Butler, S. Hodson*  
*Assistant Professor HS. Kim*

**Mission Statement.** The Music Department equips students for the serious study, composition and performance of great music within the scope of the liberal arts tradition and the context of the Christian faith and worship. The primary objective of the Music Department is to develop skilled musicians with Christian insight into their art and craft at an advanced level. The Music Department works toward that objective in many ways unique to the arts, and always as part of and in harmony with the total College community.

**Description of the Major.** The music major is designed to develop musical skills, knowledge, and attitudes. Professors place special emphasis on encouraging and developing creativity. Students majoring in music may complete one of four tracks on the Bachelor of Arts in Music Degree: Liberal Arts, Performance, Composition or Worship Leadership, or the Bachelor of Music Education degree.

**Distinctive Features.** The music major at Westmont is distinctive in the great amount of personal attention given students and the emphasis on drawing out and developing creativity.

**Career Choices.** Traditionally, people have tended to view a music major as useful for persons who wish to perform or teach. However, many students are finding rewarding careers in music outside of performing and teaching. Exciting opportunities exist in church music, music publishing, music management, music business, recording, broadcasting and other areas. The music major at Westmont is designed to provide a solid foundation in music and yet offer enough flexibility for a student to earn a legitimate liberal arts degree and prepare for a variety of careers.

For students seeking a career in classroom teaching, the Music Department offers the Bachelor of Music Education degree and teacher certification program in conjunction with the Department of Education. Westmont College is accredited by the National Association of Schools of Music.

## Requirements for B.A. Major:

### Liberal Arts Track: 48 units

#### Required Lower-Division Courses: 10 units

MU 010 Principles of Music I (4)  
MU 012 Principles of Music II (4)  
MU 015 Conducting (2)  
MU 093 Junior Recital/Project (0)

**Required Upper-Division Courses: 26 units**

MU 110 Principles of Music III (4)  
MU 112 Principles of Music IV (4)  
MU 120 History of Western Music I (4)  
MU 121 History of Western Music II (4) ART 131 Theory and Criticism in the Arts (4)  
Upper-Division MU Electives (4)  
Upper-Division MU or MUA Elective (2)

**Required Applied Music Courses: 12 units**

Private Instruction: A minimum of 6 semesters in one area.

MUA 030/130 Private Composition (1/2)  
MUA 040/140 Private Organ (1/2)  
MUA 050/150 Private Piano (1/2)  
MUA 060/160 Private Guitar (1/2)  
MUA 070/170 Private Voice (1/2)  
MUA 080/180 Private Orchestral Instrument (1/2)

Ensembles: A minimum of 6 units in a major ensemble.

MUA 071/171 College Choir (1)  
MUA 078/178 Choral Union (1) (Up to 2 units may count toward major ensemble requirement.)  
MUA 081/181 Wind Ensemble (1)  
MUA 082/182 Jazz Ensemble (1) (Up to 2 units may count toward major ensemble requirement.)  
MUA 083/183 Orchestra (1)

**Music Performance Track: 58 units****Required Lower-Division Courses: 10 units**

MU 010 Principles of Music I (4)  
MU 012 Principles of Music II (4)  
MU 015 Conducting (2)  
MU 093 Junior Recital/Project (0)

**Required Upper-Division Courses: 26 units**

MU 110 Principles of Music III (4)  
MU 112 Principles of Music IV (4)  
MU 120 History of Western Music I (4)  
MU 121 History of Western Music II (4)  
ART 131 Theory and Criticism in the Arts (4)  
MU 193 Senior Recital (2)  
Upper-Division MU Electives (4)

**Required Applied Music Courses: 22 units**

Private Instruction: 16 units with a minimum of 12 units in one area.

MUA 030/130 Private Composition (1/2)  
MUA 040/140 Private Organ (1/2)

MUA 050/150 Private Piano (1/2)  
 MUA 055/155 Private Harp (1/2)  
 MUA 060/160 Private Guitar (1/2)  
 MUA 070/170 Private Voice (1/2)  
 MUA 080/180 Private Orchestral Instrument (1/2)  
 Ensembles: A minimum of 6 units in a major ensemble.  
 MUA 071/171 College Choir (1)  
 MUA 078/178 Choral Union (1) (Up to 2 units may count toward major ensemble requirement.)  
 MUA 081/181 Wind Ensemble (1)  
 MUA 082/182 Jazz Ensemble (1) (Up to 2 units may count toward major ensemble requirement.)  
 MUA 083/183 Orchestra (1)

## **Music Composition Track: 58 units**

### **Required Lower-Division Courses: 10 units**

MU 010 Principles of Music I (4)  
 MU 012 Principles of Music II (4)  
 MU 015 Conducting (2)

### **Required Upper-Division Courses: 26 units**

MU 110 Principles of Music III (4)  
 MU 112 Principles of Music IV (4)  
 MU 117 Orchestration and Arranging (4)  
 MU 118 Form and Analysis (2)  
 MU 120 History of Western Music I (4)  
 MU 121 History of Western Music II (4)  
 ART 131 Theory and Criticism in the Arts (4)

### **Required Applied Music Courses: 22 units**

Private Instruction: 16 units with a minimum of 12 of those units in composition.

MUA 030/130 Private Composition (1/2)  
 MUA 040/140 Private Organ (1/2)  
 MUA 050/150 Private Piano (1/2)  
 MUA 055/155 Private Harp (1/2)  
 MUA 060/160 Private Guitar (1/2)  
 MUA 070/170 Private Voice (1/2)  
 MUA 080/180 Private Orchestral Instrument (1/2)

Ensembles: A minimum of 6 units in a major ensemble.

MUA 071/171 College Choir (1)  
 MUA 078/178 Choral Union (1) (Up to 2 units may count toward major ensemble requirement.)  
 MUA 081/181 Wind Ensemble (1)  
 MUA 082/182 Jazz Ensemble (1) (Up to 2 units may count toward major ensemble requirement.)  
 MUA 083/183 Orchestra (1)

## **Worship Leadership Track: 61 units**

### **Required Lower-Division Courses: 10 units**

MU 010 Principles of Music I (4)  
MU 012 Principles of Music II (4)  
MU 015 Conducting (2)  
MU 093 Junior Recital/Project (0)

### **Required Upper-Division Courses: 39 units**

ART 131 Theory and Criticism in the Arts (4)  
MU 110 Principles of Music III (4)  
MU 112 Principles of Music IV (4)  
MU 117 Orchestration and Arranging (4)  
MU 120 History of Western Music I (4)  
MU 121 History of Western Music II (4)  
MU 122 Music in the Worshipping Church (4)  
MU 190 Worship Leadership Internship (3)

One each in the context of:

- The Westmont Chapel program (which may include membership on the Worship Team)
- A historic liturgical church setting
- A contemporary evangelical church setting

Upper-Division MU Electives (4)

RS 151 History of World Christianity (4)

### **Required Applied Music Courses: 12 units**

Private Instruction: A minimum of 6 semesters in one area.

MUA 030/130 Private Composition (1/2)  
MUA 040/140 Private Organ (1/2)  
MUA 050/150 Private Piano (1/2)  
MUA 060/160 Private Guitar (1/2)  
MUA 070/170 Private Voice (1/2)  
MUA 080/180 Private Orchestral Instrument (1/2)

Ensembles: A minimum of 6 units in a major ensemble.

MUA 071/171 College Choir (1)  
MUA 078/178 Choral Union (1) (Up to 2 units may count toward major ensemble requirement.)  
MUA 081/181 Wind Ensemble (1)  
MUA 082/182 Jazz Ensemble (1) (Up to 2 units may count toward major ensemble requirement.)  
MUA 083/183 Orchestra (1)

Note: Students are encouraged to consider one elective from each of the two groupings of RS courses listed below to experience a more in depth theological and historical perspective:

RS Elective from among RS 119, 120, 121, 122, 123

RS or Art Elective either RS 125 or 127 or ART 133

and are highly advised to elect PHY 007 for the 4-unit MU elective in the Major



requirements which also fulfills the GE Quantitative and Analytical Reasoning component, and RS 103 Apologetics which also fulfills GE Reasoning Abstractly component.

It is also recommended that students consider exploring electives in public speaking and rhetoric with particular consideration of:

- COM 015 Public Speaking
- COM 115 Advanced Public Speaking
- COM 127 Group Communication and Leadership
- COM 129 Persuasion and Propaganda

Students will be required to pass a basic proficiency exam on Guitar, and Organ in addition to the piano proficiency exam required of all majors.

## **Requirements for a Bachelor of Music Education Major**

A total of 126 units (including general education courses) are required on this degree

### **Required Lower Division Courses: 10 units**

- MU 010 Principles of Music I (4)
- MU 012 Principles of Music II (4)
- MU 015 Conducting (2)
- MU 093 Junior Recital/Project (0)

### **Required Upper Division Courses: 50 units**

- ED 101 Introduction to teaching (4)
- ED 161 Computers in the Classroom (2)
- ENG 106 Language Acquisition (4)
- MU 110 Principles of Music III (4)
- MU 112 Principles of Music IV (4)
- MU 115 Advanced Conducting (2)
- MU 120 History of Western Music I (4)
- MU 121 History of Western Music II (4)
- MU 123 Survey of World Music (4)
- MU Pedagogy Courses (6)*
  - MU 165 Brass Instrument Techniques (1)
  - MU 166 Woodwind Instrument Techniques (1)
  - MU 167 String Instrument Techniques (1)
  - MU 168 Percussion Instrument Techniques (1)
  - MU 175 Vocal Techniques (2)
- MU 184 Music For Children (4)
- MU 185 Music in the Secondary Schools (4)
- PHY 007 Physics of Music (4)

### **Required Applied Music Courses 18 units**

Private Instruction: A minimum of 7 semesters in one area.

MUA 030/130 Private Composition (1/2)  
MUA 040/140 Private Organ (1/2)  
MUA 050/150 Private Piano (1/2)  
MUA 060/160 Private Guitar (1/2)  
MUA 070/170 Private Voice (1/2)  
MUA 080/180 Private Orchestral Instrument (1/2)

And at least 2 units in voice for instrumentalists or an instrument for singers

Ensembles: A minimum of 8 units in a major ensemble.

MUA 071/171 College Choir (1)  
MUA 078/178 Choral Union (1) (Up to 2 units may count toward major ensemble requirement.)  
MUA 081/181 Wind Ensemble (1)  
MUA 083/183 Orchestra (1)  
MUA 082/182: Jazz Ensemble (1)

### **5<sup>th</sup> Year Credential Program: 32 Units**

A post-baccalaureate credential program is offered that includes the following 32 units of courses offered through the Education Department to qualify for the CA State credential certification exams:

Required courses:

ED 105 Perspectives on Cultural Diversity and Education (4)  
ED 111 Educational Psychology – Secondary (4)  
ED 130 Special Education for the Classroom Teacher (2)  
ED 151 Curriculum, Classroom Management, and Instruction – Secondary (2)  
ED 171 Content Area Literacy – Secondary (3)  
ED 191 Student Teaching Secondary (12)  
ED 196 Student Teaching Seminar Secondary (3)  
KNS 156 Health Education for the Classroom Teacher (2)

## **Requirements for a Minor: 24 units**

MU 010 Principles of Music I (4)  
MU 012 Principles of Music II (4)

*Four units of the following:*

MU 020 Survey of Music (4)  
MU 120 History of Western Music I (4)  
MU 121 History of Western Music II (4)

*Private Lessons: Four semesters of the following areas:*

MUA 030/130 Private Composition (1/2)  
MUA 040/140 Private Organ (1/2)  
MUA 050/150 Private Piano (1/2)  
MUA 055/155 Private Harp (1/2)  
MUA 060/160 Private Guitar (1/2)  
MUA 070/170 Private Voice (1/2)  
MUA 080/180 Private Orchestral Instrument (1/2)

*Ensembles: Four units in a major ensemble:*

MUA 071/171 College Choir (1)

MUA 078/178 Choral Union (1) (Up to 2 units may count toward major ensemble requirement.)

MUA 081/181 Wind Ensemble (1)

MUA 082/182 Jazz Ensemble (1) (Up to 2 units may count toward major ensemble requirement.)

MUA 083/183 Chamber Orchestra (1)

*MU Electives: (4)*

Notes:

1. All incoming MU 010 students will be required to take a basic music placement test in the second week of class.
2. All incoming music majors will be required to take a piano proficiency exam. Students who do not pass the exam will be advised to take MUA 050 until the exam is passed.
3. All music majors must be approved for study beyond the 4th semester in their chosen applied area (a minimum of 6 semesters in one applied area is required in each degree program). Approval for study beyond the 4th semester will be conducted via the Upper-Division Exam, to take place during the regular semester jury exams. Approval will be based on successful achievement in the applied area, and a review of progress toward the degree by the music faculty. Upon successful review, a note of approval for continued study will be placed in each major's student file.
4. PHY 007 Physics of Music is an approved upper division music elective for the purposes of the major or minors above except where required.

## Lower-Division Course Descriptions

**MU 001 Basic Musicianship** (2) A course designed to acquaint students with the basics of music reading, writing and performing. (Not applicable to major or minor requirements but may be required of music theory students with deficiencies.)

**MU 010 Principles of Music I** (4) An entry level study of music theory, this course introduces the student to the elements of harmonic materials and analysis. All four levels of the Principles of Music sequence incorporate the development of sight singing skills, rhythmic perception, aural proficiency, and the integration of computers with the conventional study of music.

**MU 012 Principles of Music II** (4) Prerequisite: MU 010. A continuation of MU 010, the theoretical study in MU 012 introduces the student to the elements of more advanced harmonic writing and analysis skills using inversion principles, cadential formulae, phrases, periods and non-chord tones.

**MU 015 Conducting** (2) Prerequisite: MU 012. An introduction to basic conducting skills.

**MU 020 Survey of Western Music** (4) A historical survey of the music of European culture.

**MU 093 Junior Recital/Project** (0) A course for Junior Performance Track and Music Education majors to perform a half recital assigned by faculty with another student. The length of the joint recital should be approximately 75 minutes.

## Upper-Division Course Descriptions

**MU 110 Principles of Music III** (4) Prerequisite: MU 012. A continuation of MU 012, the theoretical study in MU 110 introduces the student to the elements of more advanced harmonic writing and analysis skills incorporating seventh chords, secondary functions, modulation, and binary-ternary formal relationships.

**MU 112 Principles of Music IV** (4) Prerequisite: MU 110. A continuation of MU 110, the theoretical study in MU 112 introduces the student to mode mixture, the Neapolitan chord, the augmented sixth chords, as well as a comprehensive study of 20th - 21st century techniques.

**MU 115 Advanced Conducting** (2) Prerequisite: MU 015. Advanced conducting techniques. Students may choose to emphasize choral or instrumental conducting.

**MU 117 Orchestration and Arranging** (4) Prerequisite: MU 012. The study of orchestration will introduce the student to the complexities of writing, arranging, and transcribing music for the symphony orchestra as well as the orchestration and arranging of church music. Each family of instruments will be examined and exercises of transcription, transposition, and score-reading will offer a solid foundation in understanding orchestral concepts. Alongside the traditional study of orchestration will be an intentional focus on the application of applied music ministry by charting music for contemporary band, and arranging hymns for a variety of ensembles.

**MU 118 Form and Analysis** (2) Prerequisite: MU 112. Examination of musical form and function by comprehensive analysis of major works.

**MU 120 History of Western Music I** (4) Prerequisite: MU 012. A study of the development of music through the great eras of history, from Antiquity through the Baroque. Concentrates primarily on Western music in the context of a global arena, making comparisons to non-Western music where appropriate.

**MU 121 History of Western Music II** (4) Prerequisite: MU 012. A study of the development of music through the great eras of history, from the Classic through the present. Concentrates primarily on Western music in the context of a global arena, making comparisons to non-Western music where appropriate.

**MU 122 Music in the Worshipping Church** (4) A practical and philosophical study of music in the worship of the Christian Church, including a survey of the historical development of worship and worship music and an assessment of current styles.

**MU 123 Survey of World Music** (4) A survey of the music of the world's cultures. An introduction to the discipline of ethnomusicology.

**MU 184 Music for Children (4)** A course designed to provide ideas and tools for instruction in music by elementary school teachers.

**MU 185 Music in the Secondary Schools (4)** Study will focus on the preparation for teaching instrumental and choral music at the middle and high school levels of secondary schools. Topics will include the following: basic philosophical considerations and aesthetics of music education, teaching musical notation, music education history and development, objectives, curriculum, evaluation, motivation, administration, recruiting and scheduling, teaching class lessons, tone quality, intonation and blend, bowing and articulation, phrasing and interpretation, acquiring performance technique, rehearsal techniques, assessment, and ensemble rehearsal procedures. Observations of secondary music ensembles and classes will also be incorporated as field experiences. Some opportunities for internship experiences may also be available during the semester.

**MU 190 Internship (1-4)** Practical field experience in music administration, business, music production, church music, and related areas.

**MU 193 Senior Recital/Project (2)**

## Applied Music Courses

### Class Lessons (1)

Not applicable to major requirements, but may be required of music majors with deficiencies. May be repeated up to four semesters.

MUA 005 Preparatory Piano (1)

MUA 006 Class Guitar (1)

MUA 007 Class Voice (1)

### Private Lessons (1-2)

Private lessons may be taken for 2 units of credit per semester only by completing a two semester prerequisite at the 1-unit level.

MUA 030/130 Private Composition (1/2)

MUA 040/140 Private Organ (1/2)

MUA 050/150 Private Piano (1/2)

MUA 055/155 Private Harp (1/2)

MUA 060/160 Private Guitar (1/2)

MUA 070/170 Private Voice (1/2)

MUA 080/180 Private Orchestral Instrument (1/2)

MUA 135 Advanced Individual Study in Conducting (1) This private lesson includes score preparation, rehearsal organization, and performance with instrumental and/or choral ensembles.

### Ensembles (1)

By audition. May be repeated for credit.

MUA 071/171 College Choir (1)

MUA 072/172 Chamber Singers (1)

MUA 078/178 Choral Union (1)

MUA 076/176 New Sounds (1)

MUA 077/177 Musical Drama Workshop (1)

MUA 081/181 Wind Ensemble (1)

MUA 082/182 Jazz Ensemble (1)

MUA 083/183 Orchestra (1)  
MUA 084/184 Chamber Instrumental Ensemble (1)

## Pedagogy

**MUA 077/177 Musical Drama Workshop** (1) The study and performance of scenes from the opera and musical theater repertoire.

**MU 165 Brass Instrument Techniques** (1) This course offers students an overview of teaching brass instruments. It explores the history of the instruments and its notable performers, as well as delving into methodology, technique, interpretation and repertoire.

**MU 166 Woodwind Instrument Techniques** (1) This course offers students an overview of teaching woodwind instruments. It explores the history of the instruments and its notable performers, as well as delving into methodology, technique, interpretation and repertoire.

**MU 167 String Instrument Techniques** (1) This course offers students an overview of teaching stringed instruments. It explores the history of the instruments and its notable performers, as well as delving into methodology, technique, interpretation and repertoire.

**MU 168 Percussion Instrument Techniques** (1) This course offers students an overview of teaching percussion instruments. It explores the history of the instruments and its notable performers, as well as delving into methodology, technique, interpretation and repertoire.

**MU 175 Vocal Techniques** (2) This course is designed to instruct singers in how to teach private or class voice. The course will explore the various techniques and methods used to teach singing and will include the study of IPA (International Phonetic Alphabet) in order to be able to teach repertoire in French, German, Italian, English, Latin and Spanish.

# Natural Science

## Lower-Division Course Descriptions

- LS 012 Introduction to Life Sciences** (4) An introduction to the processes of life, from the biochemical to ecological/evolutionary levels of organization. Includes discussions of nutrition, heredity, genetic technologies, racial variation, sexual behavior, ecological principles, population growth, and evolutionary theory.
- LS 013 Biology, Values and the Developing World** (4) An introduction to biological processes, with emphasis on third world issues. Discussion of population growth and the Malthusian controversy, global resources and the Cornucopian debate, biological theories of racial variation, adaptations of indigenous cultures, appropriate technology, third world agriculture and health, equatorial natural history, and environmental challenges to tropical/global ecosystems.
- PHS 007 Astronomy: Discovering the Universe** (4) History of astronomy, the stars and constellations of the night sky, celestial mechanics, exploration of the solar system, survey of planets and moons, discussion of the properties of stars and galaxies, structure of the universe, introduction to cosmogony. Observatory and planetarium sessions.
- PHS 011 Introduction to Physical Sciences** (4) An introduction to physics, chemistry, earth science, and astronomy including mechanics, electricity and magnetism, energy, theories of the atom, periodic table, chemical reactions, plate tectonics, continental drift, weather, cosmology, and the solar system.
- PHS 017 The Physics of Music** (4) An exploration of music and sound from the perspective of classical physics. Topics include basic physical principles of vibrating systems, wave propagation, and resonance; the ear and the perception of sound, pitch, tone quality, and harmony; scales and temperament; musical instruments and the human voice; the electronic reproduction of sound; and room acoustics. Course will include some “hands-on” activity and attendance of at least one local music production or recital.

## Upper-Division Course Descriptions

- PHS 114 Earth Science** (4) An introduction to astronomy, geology, meteorology, and oceanography.
- PHS 117 Exploration of the Universe** (4) A seminar course focusing on the connections between scientific and religious views of the universe.

# Philosophy

*Kenneth and Peggy Monroe Chair of Philosophy, Professor M. Nelson  
Professors J. Taylor (chair), D. Vander Laan*

**Description of the Major.** Philosophy is a thorough and systematic examination of the most fundamental questions facing human beings. At Westmont, the program in philosophy is designed to foster the ability to think critically and analytically, communicate clearly and logically, interact with the philosophical tradition, and explore the relationship between philosophy and the Christian faith.

The program also provides a philosophical framework for specific academic disciplines (such as philosophy of science and philosophy of religion), and it helps students acquire the intellectual skills needed in integrating knowledge. Philosophy courses provide an exposure to the ideas essential in understanding our political, literary, and religious heritage.

**Distinctive Features.** Philosophy at Westmont is a serious attempt to find answers to crucial questions of human existence, knowledge, values, and society that do justice to the Christian faith. Whereas Christian philosophers are not committed to specific answers on all philosophical issues by virtue of the Christian position, they are aware that the Christian faith has important, and at times crucial, implications.

The Westmont chapter of Phi Sigma Tau, a national honor society in philosophy, invites speakers to talk on a variety of topics. It also provides an active forum for student discussion. In addition, students may join the Society of Christian Philosophers, which holds a West Coast regional conference and brings well-known Christian philosophers to the area.

**Career Choices.** Besides having an integrity of its own, a major in philosophy provides a foundation for graduate work in philosophy and valuable preparation for professional training in such fields as law, management, and the ministry. Philosophy majors consistently excel in their performance on graduate admissions tests in law (LSAT), in management (GMAT) and on the Graduate Record Exam (GRE). Given the variety of student objectives, the major provides five concentrations: graduate school, pre-law, pre-M.B.A., pre-seminary, and social issues and the human condition.

## Requirements for a Major: 36 units

### Required Philosophy Major Core: 20 units

PHI 006 or PHI 006H Philosophical Perspectives (4)

PHI 108 Formal Logic (4)

PHI 195 Senior Seminar (4)

*Two of the following four courses:*

PHI 103 Ancient Philosophy (4)



## PHILOSOPHY

- PHI 105 Medieval Philosophy (4)
- PHI 106 Modern Philosophy (4)
- PHI 107 19th and 20th Century Philosophy (4)

It is recommended that Philosophy majors take PHI 108, and two of the four history of philosophy courses (103, 105, 106, and 107) early on, preferably before taking additional upper-division courses.

### **Elective Courses: 16 units**

Students may select elective courses from one of the areas of concentration below or select elective courses from among the various concentrations to meet the 16 elective unit requirement. At least 12 of the 16 elective units must be in upper division Philosophy courses.

#### **Elective Courses Recommended for the Graduate School Concentration: 16 units**

- PHI 104 Ethics (4)
- PHI 170 Epistemology (4)
- PHI 175 Metaphysics (4)
- Upper-Division PHI Elective (4)*
- Strongly recommended (but not required) beyond the major requirements: 12 units of upper-division Philosophy coursework*

#### **Elective Courses Recommended for the Pre-M.B.A. Concentration: 16 units**

- Two of the following: (8)*
  - PHI 104 Ethics (4)
  - PHI 113 Contemporary Moral Problems (4)
  - PHI 133 Political and Legal Philosophy (4)
  - PHI 137 Justice and Public Policy (4)
- Two of the following: (8)*
  - PHI 130 Philosophical Theology (4)
  - PHI 135 Philosophy of Language (4)
  - PHI 163 Philosophy of Religion (4)
  - PHI 170 Epistemology (4)
  - PHI 175 Metaphysics (4)
- Suggested but not available for major credit:*
  - EB 011 Principles of Macroeconomics (4)
  - EB 003 Principles of Accounting (4)

#### **Elective Courses Recommended for the Pre-Law Concentration: 16 units**

- Two of the following: (8)*
  - PHI 015 Intellectual Virtue and Civil Discourse (4)
  - PHI 104 Ethics (4)
  - PHI 113 Contemporary Moral Problems (4)
  - PHI 133 Political and Legal Philosophy (4)
  - PHI 137 Justice and Public Policy (4)
- Two of the following: (8)*
  - PHI 012 Critical Reasoning and Logic (4)
  - PHI 130 Philosophical Theology (4)

PHI 135 Philosophy of Language (4)

PHI 163 Philosophy of Religion (4)

PHI 170 Epistemology (4)

PHI 175 Metaphysics (4)

*Suggested but not available for major credit:*

POL 104 Constitutional Law (4)

POL 130 Classical Political Theory (4)

**Elective Courses Recommended for the Pre-Seminary Concentration: 16 units**

*Two of the following:* (8)

PHI 104 Ethics (4)

PHI 170 Epistemology (4)

PHI 175 Metaphysics (4)

*Two of the following:* (8)

PHI 015 Intellectual Virtue and Civil Discourse (4)

PHI 130/RS 130 Philosophical Theology (4)

PHI 135 Philosophy of Language (4)

PHI 163/RS 163 Philosophy of Religion (4)

*Suggested but not available for major credit:*

RS 103 Christian Apologetics (4)

RS 121 Modern Christianity (4)

RS 122 Contemporary Christianity (4)

RS 125 Theology (4)

RS 126 Topical Theology (4)

RS 142 World Religions (4)

**Elective Courses Recommended for the Social Issues and the Human Condition Concentration: 16 units**

*Two of the following:* (8)

PHI 015 Intellectual Virtue and Civil Discourse (4) PHI 104 Ethics (4)

PHI 113 Contemporary Moral Problems (4)

PHI 133 Political and Legal Philosophy (4)

PHI 137 Justice and Public Policy

*One of the following:* (4)

PHI 130 Philosophical Theology (4)

PHI 135 Philosophy of Language (4)

PHI 163 Philosophy of Religion (4)

PHI 170 Epistemology (4)

PHI 175 Metaphysics (4)

*Off-Campus Program (spring or fall):* (4)

The off-campus semester's work will be planned in consultation with the philosophy department.

On the Westmont in San Francisco Program and the American Studies Program in Washington, D.C., four units of philosophy credit will be given for a philosophically-oriented internship that focuses on social issues and the human condition.

On the Oregon Extension Program, four units of philosophy credit will be given for any one of the following courses: "Selected Social Issues in Philosophical Perspective (Ph 396)," "Philosophical Perspectives on the Human Condition (Ph 397)," and "Topics in the Philosophy of Religion (Ph 398)."

## Requirements for a Minor: 20 units

Completion of 20 units of Philosophy, which must include at least 12 units of upper-division Philosophy coursework.

## Lower-Division Course Descriptions

**PHI 006 Philosophical Perspectives** (4) An introduction to the main ideas and methods of philosophy and central problems, significant figures in the philosophical tradition, and some of the significant schools of thought. Also a philosophical introduction to the Christian liberal arts. Attention is given to the assessment of world and life views and to the development of a Christian world and life view.

**PHI 006H Philosophical Perspectives: Honors** (4) Prerequisite: By invitation only. An advanced introduction to philosophy and its main ideas and methods. Also a philosophical introduction to the Christian liberal arts.

**PHI 012 Critical Reasoning and Logic** (4) A study of correct reasoning. Emphasizes the ability to detect fallacious arguments and construct sound ones. Includes the analysis of informal argumentation in everyday discussions. Attention to some formal logical skills. Highly recommended for pre-law students.

**PHI 015 Intellectual Virtue and Civil Discourse** (4) A philosophical introduction to the topics of intellectual virtue and civil discourse that includes theoretical principles, personal models, and conversational practice.

## Upper-Division Course Descriptions

**PHI 103 Ancient Philosophy** (4) Prerequisite: PHI 006 or PHI 006H. A critical survey of major Western philosophers from the pre-Socratics to philosophers of the late ancient Greco-Roman period. Includes emphasis on abstract reasoning.

**PHI 104 Ethics** (4) Prerequisite: Junior standing and PHI 006 or PHI 006H. Emphasizes the full variety of normative ethical theories; addresses current issues in meta-ethics, including moral skepticism, justification of ultimate norms, and the question of justice and rights.

**PHI 105 Medieval Philosophy** (4) Prerequisite: PHI 006 or PHI 006H. A critical survey of major Western philosophers from late antiquity to the late medieval period. Includes emphasis on abstract reasoning.

**PHI 106 Modern Philosophy** (4) Prerequisite: PHI 006 or PHI 006H. A critical survey of major Western philosophers of the modern period from Descartes through Kant to Thomas Reid. Includes emphasis on abstract reasoning.

**PHI 107 19<sup>th</sup> and 20<sup>th</sup> Century Philosophy** (4) Prerequisite: PHI 006 or PHI 006H. A critical survey of major Western philosophers from Hegel to Rorty. Includes emphasis on abstract reasoning.

- PHI 108 Formal Logic** (4) A study of symbolic logical systems. Includes propositional logic, predicate logic, modal logic, and basic results of metatheory. May include other topics in philosophical methodology. Substantial attention to formal logical skills.
- PHI 113 Contemporary Moral Problems** (4) Prerequisite: PHI 006 or PHI 006H. Addresses moral issues such as abortion, animal rights, euthanasia, suicide, the death penalty, war, life-boat ethics, marriage and sexual integrity, homosexuality, pornography, and women's issues.
- PHI 130/RS 130 Philosophical Theology** (4) Prerequisites: PHI 006 and RS 020. Analysis of God's attributes (omniscience, immutability, eternity); the relation of time to eternity; the Trinity; God's foreknowledge and human freedom; morality and God's will; the logic of the Incarnation.
- PHI 133 Political and Legal Philosophy** (4) Prerequisite: PHI 006 or PHI 006H. The basis and justification of political authority; individual rights and the common good, freedom, equality, and democracy; concepts used in law: punishment, insanity, negligence, strict liability, liberty, and tolerance.
- PHI 135 Philosophy of Language** (4) Prerequisite: PHI 006 or PHI 006H. An investigation of philosophical questions about language raised by both analytic and continental philosophers. Potential topics: the nature of language, philosophical hermeneutics, meaning, truth, reference, analyticity and synonymy, propositions, speech acts, metaphor and religious language. Various interdisciplinary connections.
- PHI 137 Justice and Public Policy** (4) Prerequisite: PHI 006 or PHI 006H. Analysis of philosophical accounts of distributive justice as well as policy proposals dealing with such issues as poverty, global justice, multinational corporations, human trafficking, immigration, health care and climate change.
- PHI/HIS 149 Philosophy of History** (4) Speculative and critical philosophy of history. Evaluates attempts to discern a pattern of meaning in history. Attention given to the problems of historical understanding and objectivity.
- PHI 150 Topics in Philosophy** (2,4) Prerequisite: Consent of instructor. Exploration of a selected philosophical problem, school, figure or subject.
- PHI 163/RS 163 Philosophy of Religion** (4) Prerequisites: PHI 006 or RS 020. Significance of religious phenomena and the veracity of religious beliefs.
- PHI 170 Epistemology** (4) Prerequisites: Junior standing and PHI 006 and PHI 108. Origin, nature, scope, and structure of knowledge, including a survey of the main problems and positions.
- PHI 175 Metaphysics** (4) Prerequisites: Junior standing and PHI 006 and PHI 108. Theories of reality and its most general features. Potential topics include the nature of time, identity, constitution of material objects, causation, freedom, the mind/body problem, universals, possibility and necessity.
- PHI 189 Aesthetics** (4) A critical survey of the various ways, both historical and contemporary, in which people have understood art and the aesthetic experience.

## PHILOSOPHY

**PHI 195 Senior Seminar** (4) Prerequisite: Philosophy majors only. To be taken by all philosophy majors during their last spring semester on campus. A writing-intensive capstone seminar course designed to help students to: (a) integrate their major, (b) prepare for transition to life after graduation, and (c) reconnect with fellow graduating philosophy majors.

# Physics

*Professors K. Kihlstrom (chair), H. M. Sommermann*

*Associate Professor J. Mitchell*

*Instructor T. Whittemore*

**Description of the Major.** Physicists seek a fundamental understanding of the physical universe. The skills and knowledge gained in studying physics can be applied not just in research but in several applied disciplines as well. The major includes courses in mathematics (the foundation of science) chemistry (for scientific breadth) and physics. In addition to theory courses, both laboratory classes and hands-on research provide the practical training that is relevant to both graduate school or professional work in science and engineering. For students desiring greater breadth (or a double major) there is also the B.A. degree track that allows greater flexibility.

**Distinctive Features.** Beyond coursework the opportunity to participate in research is available to students in the department. Current research opportunities include thin film superconductivity, astronomy and experimental nuclear/atomic physics. Internships and summer research programs (both on campus and NSF sponsored programs at other institutions) are available and encouraged. Students are encouraged to participate in an off-campus program during the junior or senior year.

**Career Choices.** A physics degree provides a solid foundation for a great many careers besides that of research physicist including: science writing, patent law, software development, materials research, nuclear medical science, forensic science, museum education, engineering (mechanical, electrical, process, civil, aeronautical, etc.), medicine, technician, teaching (high school or college).

## Requirements for a B.S. in Physics: 67-68 units

### Required Lower-Division Courses: 35 units

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

PHY 025 Modern Physics (4)

PHY 026 Modern Physics Laboratory (1)

PHY 040 Differential Equations (4)

MA 009, 010 Elementary Calculus I, II (4,4)

MA 019 Multivariable Calculus (4)

One four unit laboratory science class such as CHM 005 or BIO 005

### Required Upper-Division Courses: 32 units

PHY 115 Mathematical Physics (4)

PHY 121, 122 Quantum Mechanics I, II (4,4)

PHY 131 Classical Mechanics (4)

## PHYSICS

PHY 150 Electricity and Magnetism (4)

PHY 155 Computational Physics (2)

PHY 160 Thermodynamics (4)

PHY 195 Senior Seminar (1)

*One of the following:*

PHY 142, 143 Circuits and Electronics, Laboratory (4,1)

PHY 151 Electromagnetic Waves and Optics (4)

*One of the following:* (1)

PHY 170 Advanced Physics Lab (1)

PHY 198 Physics Research (1-4)

## Requirements for a B.A. in Physics: 54 units

### Required Lower-Division Courses: 35 units

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

PHY 025 Modern Physics (4)

PHY 026 Modern Physics Laboratory (1)

PHY 040 Differential Equations (4)

MA 009, 010 Elementary Calculus I, II (4,4)

MA 019 Multivariable Calculus (4)

One four unit Laboratory science class such as CHM 005 or BIO 005 (4)

### Required Upper-Division Courses: 19 units

PHY 121 Quantum Mechanics I (4)

PHY 131 Classical Mechanics (4)

PHY 155 Computational Physics (2)

PHY 195 Senior Seminar (1)

*Two of the following:* (8)

PHY 115 Mathematical Physics (4)

PHY 150 Electricity and Magnetism (4)

PHY 160 Thermodynamics (4)

## Requirements for a Physics Minor: 23 units

### Required Lower-Division Courses: 15 units

PHY 021, 023 General Physics I, II (4,4)

PHY 022, 024 General Physics Laboratory I, II (1,1)

PHY 025 Modern Physics (4)

PHY 026 Modern Physics Laboratory (1)

### Required Upper-Division Courses from the following: 8 units

PHY 121 Quantum Mechanics I (4)

PHY 131 Classical Mechanics (4)

PHY 115 Mathematical Physics (4)

PHY 150 Electricity and Magnetism (4)

PHY 160 Thermodynamics (4)

## Lower-Division Course Descriptions

- PHY 007 The Physics of Music** (4) An exploration of music and sound from the perspective of classical physics. Topics include basic physical principles of vibrating systems, wave propagation, and resonance; the ear and the perception of sound, pitch, tone quality, and harmony; scales and temperament; musical instruments and the human voice; the electronic reproduction of sound; and room acoustics. Course will include some “hands-on” activity and attendance of at least one local music production or recital.
- PHY 011, 013 Physics for Life Sciences I, II** (4,4) Prerequisite: Admissions math requirement (see p. 241). PHY 011: Kinematics: motion in one and two dimensions; vectors. Statics and dynamics: Newtonian mechanics. Linear and angular momentum, energy. Conservation principles. Elastic properties of materials. Thermodynamics. Thermal properties of materials. Fluid mechanics. PHY 013: Electricity and magnetism. Sound waves and light waves: optics. Elements of atomic and nuclear physics. Intended for biology, pre-medical, physical education, and non-science majors.
- PHY 014 Physics For Life Sciences Laboratory** (1) Corequisite: PHY 013. Weekly three-hour laboratory. Covers experiments in mechanics, electricity, magnetism, thermodynamics, and light.
- PHY 021, 023 General Physics I, II** (4,4) PHY 021: Vectors, kinematics and dynamics of translational motion; work, energy, momentum, angular momentum, conservation laws, kinematics and dynamics of rotational motion, gravity, simple harmonic motion. PHY 023: Prerequisite: MA 009 Electric charges and current, electric and magnetic fields, capacitance, inductance, waves, sound, Maxwell's equations, electromagnetic waves, refraction, reflection of light, lenses, interference and diffraction.
- PHY 022, 024 General Physics Laboratory I, II** (1,1) Corequisite for PHY 022: PHY 021. Corequisite for PHY 024: PHY 023. Weekly three-hour laboratory. Covers experiments in mechanics, thermodynamics, electricity, magnetism, and light.
- PHY 025 Modern Physics** (4) Prerequisites: PHY 023. Continuation of PHY 021, 023 requiring advanced calculus. Introductory study of special and general relativity, quantum theory, atomic physics, and elements of solid state, nuclear and particle physics.
- PHY 026 Modern Physics Laboratory** (1) Corequisite: PHY 025. Weekly three-hour laboratory. Experiments in modern physics.
- PHY/MA 040 Differential Equations** (4) Prerequisites: PHY 023, MA 019. Physical systems and first-order equations; homogeneous and non-homogeneous linear equations with applications; linear systems solved by eigenvalue and eigenvector solutions of matrix equations; Laplace transforms applied to initial value problems. Power series solutions; numerical methods; Fourier series and boundary value problems; selected partial differential equations from classical physics.



## Upper-Division Course Descriptions

- PHY 115 Mathematical Physics** (4) Prerequisite: MA 019. Vector analysis: gradient, divergence, curl; complex analysis; curvilinear coordinate systems; matrices; eigenvalue problems; orthogonal functions.
- PHY 117 Exploration of the Universe** (4) A seminar course focusing on the connections between scientific and religious views of the universe.
- PHY 121 Quantum Mechanics I** (4) Prerequisites: MA 010, and PHY 021 or 023. Postulates in quantum mechanics. Matrix mechanics, Hilbert space, angular momentum, time evolution, spin, EPR paradox, Bell inequalities, wave mechanics, harmonic oscillator, hydrogen atom.
- PHY 122 Quantum Mechanics II** (4) Prerequisites: PHY 025, PHY 040, PHY 115, PHY 121. Translational and rotational symmetry in the two body problem, bound states of central potentials, time independent perturbations, identical particles, scattering, photons and atoms.
- PHY 127 Astrophysics I** (2) Prerequisites: MA 10, Weekly two hour lecture. Covers topics in celestial mechanics, stellar stability and galactic evolution, cosmology, Special and General Relativity.
- PHY 128 Astrophysics II** (2) Prerequisites: MA 10, Weekly two hour lecture. Covers topics in celestial mechanics, stellar stability and galactic evolution, cosmology, Special and General Relativity.
- PHY 130 Mechanics** (4) Prerequisites: PHY 025 and PHY 040. Statics; kinematics and dynamics of particles and rigid bodies, conservation laws; energy analysis with attention to equilibrium of rigid bodies and the method of virtual work; motion under central forces with applications to space mechanics; impulsive forces and torques in translational and rotational motion.
- PHY 131 Classical Mechanics** (4) Prerequisites: PHY 025 and PHY 040. Newtonian mechanics, three dimensional motion, oscillations, central force motion, Lagrangian and Hamiltonian dynamics, rigid body dynamics.
- PHY 135 Materials Science** (4) Prerequisites: PHY 023, MA 019. Fundamentals (crystal structure and defects), microstructure (phase diagrams and kinetics) and properties of the major classes of materials: metals, ceramics, polymers, composites and semiconductors. Properties examined include: mechanical, electrical, optical/dielectric, magnetic, thermal and composite.
- PHY 142 Circuits and Electronics** (4) Prerequisites: PHY 023 and MA 010. Corequisite: PHY 143. A basic introduction to circuits and electronics including electrical quantities, circuit principles, signal processing circuits, semiconductor diodes, transistors and integrated circuits. Digital electronics including logic elements and microprocessors. Analog electronics including operational amplifiers and design of large and small signal amplifiers.

- PHY 143 Electronics Laboratory** (1) Corequisite: PHY 142. This weekly three-hour laboratory provides an introduction to practical electronic devices, experience in using some basic measurement techniques, and a feel for the capabilities and limitations of some common electronic instruments. The laboratory experiments are designed to supplement and complement the class (PHY 142) discussions.
- PHY 150 Electricity and Magnetism** (4) Prerequisites: PHY 025 and MA 040. Electrostatics and magnetostatics with emphasis on vector differential operators and integration related to Gauss' law, the divergence theorem, Green's theorem, the Biot-Savart law and the various laws of Maxwell; applications of Laplace's and Poisson's equations; properties of dielectrics and magnetic media; and image solutions; electric and magnetic force interactions; propagation and reflection of plane electromagnetic waves; elements of transmission line theory, Smith charts.
- PHY 151 Electromagnetic Waves and Optics** (4) Antennas, electromagnetic waves, super-position, interference, Fraunhofer and Fresnel diffraction, crystal optics, matrix optics, laser beams and resonators, guided waves, quantum aspects of light fiber optics and holography.
- PHY 155 Topics** (2-4) Prerequisites: MA 009, 010 and PHY 025. Advanced treatment of topics of current interest in physics. Currently this is being used to teach Computational Physics (2 units). Introduction to the C programming language. Numerical methods for the solution of differential equations. Modeling of complex physical systems.
- PHY 160/CHM 131 Thermodynamics** (4) Prerequisites: MA 010, and PHY 025. Classical equilibrium thermodynamics: applications of the first and second law of thermodynamics to condensed and gas phases. Compressible flow and heat transfer. Principles and applications of statistical thermodynamics.
- PHY 170 Advanced Physics Laboratory** (1) Prerequisites: PHY 026, PHY 130. Advanced experiments in several areas of physics.
- PHY 095 Seminar** (1) Developments of current interest in the sciences.
- PHY 190 Engineering Physics Internship** (1) Projects meeting three hours per week under the tutelage of practicing engineers. Up to six units of internship may be taken for elective credit.
- PHY 195 Senior Seminar** (1) Discussions of current and historical issues in physics, the role of science in both history and modern society, and the challenges of integrating science and faith.
- PHY 198 Physics Research** (1-4) Prerequisites: PHY 025, PHY 131. Students will work closely with faculty on original research and/or senior thesis.

# Political Science

*Professor S. Penksa*

*Associate Professors J. Covington (chair), T. Knecht*

**Description of the Major.** The political science major helps students understand the organization and functions of political systems, institutions, and processes in the United States and the global community. Within the major, students may select among four different tracks of study: standard, pre-law, international affairs, or international security and development. The political science minor is designed for students in other majors to consider the political perspectives of their chosen field as well as alternative careers. The department is committed to helping students become politically competent citizens in a world characterized by political, social, cultural, religious, and economic diversity.

**Distinctive Features.** The political science department faculty combines theory and political practice. They offer a balanced curriculum, research experiences, service learning, field study, and close student/faculty interaction. Students are encouraged to develop their Christian faith and to take seriously the responsibility of living that faith in the context of the public square.

Students put their classroom insights to use in career-oriented internships in Santa Barbara in legislative offices, private legal offices, the district attorney's office, city administration, regional planning agencies, police departments, occasional political campaigns, and various social service agencies.

Students may pursue similar internships through Westmont's off-campus program in the Westmont in San Francisco Program and in the nation's capital with internships in the Council for Christian Colleges and Universities' American Studies Program, Latin American Studies, the American University's Washington Semester Program, or the World Capitals Brussels Semester. In addition, the political science department's summer internship program allows students to pursue extraordinary internship opportunities virtually anywhere in the world. Pi Sigma Alpha, the National Political Science Honor Society, stimulates scholarship and intellectual interest in political science. Westmont's chapter honors academic excellence among political science majors and provides a forum for student discussion and guest lectures.

**Career Choices.** Political science majors have pursued careers in many fields, including the law, teaching, management consulting, journalism, local government administration, health policy administration, congressional staff, foreign intelligence, diplomacy, international development, national politics, the non-profit sector, real estate, investment analysis, computer sales, information technology corporate public affairs, the ministry, and missions.

## Requirements for a Major: 48-68 units

### Standard Track: 48 Units

#### Required Lower-Division Courses: 16 units

- POL 010 American Government (4)
- POL 020 International Politics (4)
- POL 030 Political Theory and Ideology (4)
- POL 040 Empirical Political Research (4)

#### Required Upper-Division Courses: 28 units

##### *American Government and Politics: Two of the following (8)*

- POL 104 Constitutional Law (4)
- POL 105 The Presidency (4)
- POL 106 Presidential Election Politics (4)
- POL 107 Voting Behavior (4)
- POL 108 Congress (4)
- POL 109 Political Parties and Interest Groups (4)
- POL 110 American Public Opinion (4)
- POL 111 American Foreign Policy (4)
- POL 141 Politics of Sport (4)
- POL 142 Politics of Film (4)

##### *International Relations and Comparative Politics: Two of the following (8)*

- POL 112 International Organizations and Law (4)
- POL 123 Comparative Foreign and Security Policies (4)
- POL 126 Sex, Gender, and Power (4)
- POL 122 European Politics (4)
- POL 124 International Development (4)

##### *Political Theory: Two of the following (8)*

- POL 130 Classical Political Theory (4)
- POL 131 Modern Political Theory (4)
- POL 132 American Political Thought (4)
- POL 133 Contemporary Political Theory (4)
- POL 140 Christianity and Politics (4)

##### *Internship*

- POL 190 Internship (4)

#### Electives: 4 units

*Upper-Division POL Electives Course (4) in consultation with major advisor*

### B. Pre-Law Track: 64 units

#### Required Lower-Division Courses: 16 units

- POL 010 American Government (4)
- POL 020 International Politics (4)
- POL 030 Political Theory and Ideology (4)
- POL 040 Empirical Political Research (4)

## POLITICAL SCIENCE

### **Required Upper-Division Courses: 32 units**

*Both of the following:* (8) (these courses may not double-count with the subfield requirements listed below)

POL 104 Constitutional Law (4)

POL 190 Internship (law related) (4)

*Two of the following:* (these courses may double-count with the subfield requirements listed below)

POL 108 Congress (4)

POL 112 International Organizations and Law (4)

POL 132 American Political Thought (4)

POL 133 Contemporary Political Theory (4)

*American Government and Politics: Two of the following* (8)

POL 106 Presidential Election Politics (4)

POL 107 Voting Behavior (4)

POL 108 Congress (4)

POL 109 Political Parties and Interest Groups (4)

POL 110 American Public Opinion (4)

POL 111 American Foreign Policy (4)

POL 141 Politics of Sport (4)

*International Relations and Comparative Politics: Two of the following* (8)

POL 112 International Organizations and Law (4)

POL 123 Comparative Foreign and Security Policies (4)

POL 126 Sex, Gender, and Power (4)

POL 122 European Politics (4)

POL 124 International Development (4)

*Political Theory: Two of the following* (8)

POL 130 Classical Political Theory (4)

POL 131 Modern Political Theory (4)

POL 132 American Political Thought (4)

POL 133 Contemporary Political Theory (4)

POL 140 Christianity and Politics (4)

### **Requirements from outside POL Department: 16 units**

*Communication: Two of the following* (8)

COM 015 Public Speaking (4)

COM 130 Argumentation and Advocacy (4)

ENG 104 Modern Grammar and Advanced Composition (4)

*Theory and Analysis: One of the following* (4)

PHI 012 Critical Reasoning and Logic (4)

PHI 104 Ethics (4)

PHI 133 Political and Legal Philosophy (4)

*Specific Emphases: One of the following* (4)

COM 133 Conflict and Reconciliation (4)

EB 012 Principles of Microeconomics (4)

EB 105 Business Law (4)

HIS 178 California Experience (4)

### **Recommended Course:**

POL 130 Classical Political Theory (4)

## **C. International Affairs Track: 68 units**

### **Required Lower-Division Courses: 16 units**

- POL 010 American Government (4)
- POL 020 International Politics (4)
- POL 030 Political Theory and Ideology (4)
- POL 040 Empirical Political Research (4)

### **Required Upper-Division Courses: 28 units**

- POL 111 American Foreign Policy (4)
- POL 190 Internship (4) (international or foreign policy related in an off-campus/study abroad program approved by the major advisor)
- American Government and Politics: One of the following (4)*
  - POL 104 Constitutional Law (4)
  - POL 105 The Presidency (4)
  - POL 106 Presidential Election Politics (4)
  - POL 107 Voting Behavior (4)
  - POL 108 Congress (4)
  - POL 109 Political Parties and Interest Groups (4)
  - POL 110 American Public Opinion (4)
  - POL 141 Politics of Sport (4)
- International Relations and Comparative Politics: Two of the following (8)*
  - POL 112 International Organizations and Law (4)
  - POL 123 Comparative Foreign and Security Policies (4)
  - POL 126 Sex, Gender, and Power (4)
  - POL 122 European Politics (4)
  - POL 124 International Development (4)
- Political Theory: Two of the following (8)*
  - POL 130 Classical Political Theory (4)
  - POL 131 Modern Political Theory (4)
  - POL 132 American Political Thought (4)
  - POL 133 Contemporary Political Theory (4)
  - POL 140 Christianity and Politics (4)

### **POL Electives: 4 units**

- Upper-Division POL Elective Course (4) in International Relations and Comparative Politics*

### **Requirements from outside POL Department: 20 units**

- EB 011 Principles of Macroeconomics (4)
- Foreign Language (8) with approval of major advisor
- AN 001 Introduction to Anthropology (4)
- One of the following: (4)*
  - HIS 140 European Politics and Diplomacy Since 1789 (4)
  - HIS 162 Modern and Contemporary Latin America (4)
  - HIS 182 History of the Israeli-Palestinian Conflict (4)
  - (Other HIS courses may be approved by major advisor)

**Recommended Courses:**

- RS 142 World Religions (4)
- EB 012 Principles of Microeconomics (4)

**D. International Security and Development Track: 68 units**

**Required Lower-Division Courses: 24 units**

- POL 020 International Politics (4)
- POL 030 Political Theory and Ideology (4)
- POL 040 Empirical Political Research (4)
- AN 001 Introduction to Cultural Anthropology (4)
- EB 011 Principles of Macroeconomics (4)
- EB 012 Principles of Microeconomics (4)

**Required Upper-Division Courses: 28 units**

- POL 112 International Organizations and Law (4)
- POL 123 Comparative Foreign and Security Policies (4)
- POL 124 International Development (4)
- POL 133 Contemporary Political Theory (4)
- POL 190 Internship (4) (international or foreign policy related in an off-campus/study abroad program approved by the major advisor)
- Foreign Language (8) with approval of major advisor

**Required Upper-Division Elective Courses: 16 units**

*One of the following: (4)*

- AN 135 Gender and Sex Roles in Cross-Cultural Perspective (4)
- POL 126 Sex, Gender and Power (4)

*One of the following: (4)*

- POL 140 Christianity and Politics (4)
- RS 142 World Religions (4)

*Two of the following: (8)*

- AN 140 Food Systems (4)
- COM 133 Conflict and Reconciliation (4)
- COM 138 International Rhetoric (4)
- EB 104 World Poverty and Economic Development
- EB 105 Business Law (4)
- HIS 162 Modern and Contemporary Latin America (4)
- HIS 182 History of the Israeli-Palestinian Conflict (4)
- HIS 185 Imperialism and Independence (4)
- HIS 186 Modern South Asia
- POL 111 American Foreign Policy (4)
- POL 122 European Politics (4)
- POL 128 Culture and Conflict in the Modern Middle East (4)

*Other elective courses may be approved by the major advisor*

## Requirements for a Minor: 24 units

### Required Lower-Division Course: 12 units

- POL 010 American Government (4)
- POL 020 International Politics (4)
- POL 030 Political Theory and Ideology (4)

### Other Required Courses: 12 units

*One of the following:* (4)

- POL 104 Constitutional Law (4)
- POL 105 The Presidency (4)
- POL 107 Voting Behavior (4)
- POL 108 Congress (4)
- POL 109 Political Parties and Interest Groups (4)
- POL 110 American Public Opinion

*One of the following:* (4)

- POL 112 International Organizations and Law (4)
- POL 122 European Politics (4)
- POL 123 Comparative Foreign and Security Policies (4)
- POL 124 International Development (4)
- POL 126 Sex, Gender, and Power (4)

*One of the following:* (4)

- POL 130 Classical Political Theory (4)
- POL 131 Modern Political Theory (4)
- POL 132 American Political Thought (4)
- POL 133 Contemporary Political Theory (4)
- POL 140 Christianity and Politics (4)

## Lower-Division Course Descriptions

**POL 010 American Government** (4) The basic concepts, background, organization, functions, and processes of the United States political system.

**POL 020 International Politics** (4) An introduction to the study of what produces conflict and cooperation in the international system, including attention to historical, social, economic, religious and political factors that impact international peace, security, and development.

**POL 030 Political Theory and Ideology** (4) An introduction to the project of political theory, locating this study within a broader framework of Christian thought and the liberal arts. The course critically examines the features and philosophical underpinnings of major political ideologies, including liberalism, conservatism, socialism, anarchism, fascism, nationalism, democracy, ideologies of gender and sexuality, race, the environment, and radical Islam.

**POL 040 Empirical Political Research** (4) An introduction to empirical methods and quantitative analysis in political research: applications of philosophy of science, survey and alternative methods of data collection, basic statistical analysis, reporting results, and ethical issues associated with research using human participants.



## Upper-Division Course Descriptions

- POL 104 Constitutional Law** (4) An introduction and analysis of the major cases, themes, theories and problems in American Constitutional Law, illuminated by comparative constitutional perspectives and including a trial simulation project; major course themes include: federalism, judicial power, separation of powers, foreign affairs, civil rights, and civil liberties.
- POL 105 The Presidency** (4) Prerequisites: POL 010 and POL 040. An analysis of the American presidency, including its powers, leadership styles, policy-making roles, and current trends.
- POL 106 Presidential Election Politics** (4) An analysis of how Americans choose their President, including the nomination process, the campaign, electoral behavior and outcomes, and an evaluation of how well the system works, including proposals for reform. (Offered only in presidential election years.)
- POL 107 Voting Behavior** (4) Prerequisites: POL 010 and POL 040. This course explores a range of topics related to political participation in the United States. While focusing on voting behavior, it examines voting in the context of political participation considered more broadly, examining a variety of relevant participatory factors. The majority of the course explores major patterns, explanations, changes and themes in how Americans participate in politics.
- POL 108 Congress** (4) The organization and processes of the United States Congress and its relationships with other actors in the political system and home constituencies.
- POL 109 Political Parties and Interest Groups** (4) Prerequisites: POL 10 and POL 040. This course examines political parties and interest groups as two conduits that link citizens to their governments. Students will assess the theoretical and empirical literature to determine how well parties and interest groups fulfill their roles as representative intermediaries. Although much of the course is focused on the American political system, students will also examine the influence of parties and interest groups in other democracies. This is a service learning course in which students are expected to volunteer with a political party or interest group of their choice.
- POL 110 American Public Opinion** (4) Prerequisites: POL 010 and POL 040. This course examines the beliefs, opinions, and ideology of the American public. Students explore such issues as the measurement of public opinion, the process by which individuals acquire their beliefs and identity, the influence of mass opinion on public policy, and the question of whether there is a unique American character. Although most of the course will focus on the United States, we will also look at public opinion in a comparative perspective. This service learning course offers students the opportunity to design, implement, and analyze their own survey.
- POL 111 American Foreign Policy** (4) Prerequisites: POL 010, POL 020, and POL 040. The United States in world politics. The policy process, its assumptions, objectives, and decision-making processes and strategies; the influence on American policy of changing trends in the international environment and the interaction between domestic and external policies.

- POL 112 International Organizations and Law** (4) Prerequisites: POL 020. Political Science majors and minors only. Fee required. Advanced study of international politics, law and organizations including a case study and simulation of the United Nations system at the National Model UN in New York City.
- POL 122 European Politics** (4) Prerequisite: POL 040 or HIS 099. The comparative analyses of political systems in Europe with a special emphasis on the role of the European Union in transforming the landscape of European politics at the local, regional, national, and global levels.
- POL 123 Comparative Foreign and Security Policies** (4) Prerequisites: POL 020 and POL 040. Part one of the course provides an in-depth exploration of comparative foreign policy (of great, middle and small state powers) using the three levels of foreign policy analysis – individual, state and systems. The second half of the course examines contemporary security issues through a study of human, state and international security approaches.
- POL 124 International Development** (4) Prerequisites: POL 020 and POL 040. An examination of international development and the North-South gap within a political economy and human development perspective, focusing on the main arguments about the two faces of development (national and international) and the contending theories and strategies in world development.
- POL 126 Sex, Gender and Power** (4) A comparative analysis of sex and gender identity to an understanding of political behavior. Other forms of identity are examined in light of their intersection with both sex and gender, including race, class, sexual orientation, and nationalism. The comparative method is used to analyze global gender issues, cross-national variations among women's movements, revolutionary struggles, and nationalist movements.
- POL 128 Culture and Conflict in the Modern Middle East** (4) This course will be offered on the Westmont in Istanbul off-campus program. It will introduce students to the complex geo-political alignments that shape the modern Middle East. In particular, Turkey and the Israeli-Palestinian conflict will provide case studies of how states engage with international actors and how in turn states conform to or resist international expectations.
- POL 130 Classical Political Theory** (4) Prerequisites: POL 030 and POL 040. An in-depth survey of ancient and medieval political philosophy, focusing on the relationship between politics and virtue. Centered in the Western philosophical tradition of Greek, Roman, and Christian thinkers (Plato, Aristotle, Augustine, Aquinas, etc.), this course also introduces elements of classical Jewish and Islamic political thought.
- POL 131 Modern Political Theory** (4) Prerequisites: POL 030 and POL 040. A study in the politics of freedom, particularly theories of limited government central to democracy. The course critically examines the departure from the classical emphasis on virtue (Machiavelli), social contract theories and liberalism (Hobbes, Locke, Rousseau), communism (Marx and Engels), and early contributions to feminist theory (Wollstonecraft, J.S. Mill).

**POL 132 American Political Thought** (4) Prerequisites: POL 010 and POL 030. An in-depth introduction to central features of American political theory. The course proceeds thematically, using a broad range of primary sources to explore the development of ideas and their relevance to contemporary thought and practice. Key areas of focus include rights, equality, religion, constitutionalism, federalism, and the separation of powers.

**POL 133 Contemporary Political Theory** (4) Prerequisites: POL 030 and POL 040. A survey of the political thought of the twentieth and twenty-first centuries, exploring the problematic relationship between post-modernity and political theory. Particular attention is given to contemporary theories of liberalism and democracy.

**POL 140 Christianity and Politics** (4) Prerequisite: junior standing. Examines the interrelation of Christian faith and politics, including scriptural foundations, historical political theology, distinctive features of various Christian traditions, and contemporary patterns of Christians' political behavior.

**POL/KNS 141 Politics of Sports** (4) This cross-listed course examines the intersection of politics and sports. Because sports occupy an important place in most cultures, it is of little surprise that they are also highly politicized. Governments not only regulate athletics, but have used sports both as a tool of political socialization and as a means to advance the national interest in international affairs.

**POL 142 Politics of Film** (4) This course examines American politics through the medium of film. Movies provide an interesting perspective on how we view political, economic, social, and cultural issues. This course will pair a "Film-of-the-Week" with readings that provide historical and theoretical context.

**POL 150 Seminar** (4) Prerequisite: junior standing. Advanced study of selected issues in political science.

**POL 190 Internship** (4-8) Prerequisite: consent of instructor. Supervised internship in government agencies, law offices, nonprofit organizations, and NGOs (nongovernmental organizations).

# Psychology

*Professors R. See, B. Smith*

*Associate Professors A. Gurney, S. Rogers (chair)*

*Assistant Professor C. Saad*

**Description of the Major.** Psychology is the science that deals with the behavioral and mental functioning of individuals. It includes both basic scientific and applied aspects, and it encompasses a wide variety of explanatory and descriptive levels ranging from neural-physiological to social. All three degree options in psychology at Westmont encourage students to not only sample broadly from across these aspects and levels, but to also focus in those areas of special interest.

All degree options incorporate (a) lower-division coursework in methodological and theoretical foundations, (b) lower-division coursework in allied disciplines, (c) core upper-division lecture and laboratory courses in specific areas of psychology, and (d) a senior capstone experience involving practicum, individual research, or both. Students who intend to pursue an applied field of psychology should take practicum. Those who expect to pursue graduate school are encouraged to take research and practicum, depending on their interests.

**Distinctive Features.** The department provides several types of training and opportunities to enrich students' academic and professional development, as well as help them achieve their career goals. Students may major in psychology by choosing one of three degree options: a Bachelor of Arts degree, allowing maximum flexibility to major or minor in other disciplines; a Bachelor of Science degree, broadly emphasizing the various research disciplines of psychology; and the Behavioral Neuroscience track, focusing particularly on the neural bases of behavior. Both of the latter options emphasize psychology's connections with biology and chemistry. Each of these three options is compatible with a wide variety of career choices, including clinical and counseling work, medical practice and biomedical research, basic and applied research in psychology and related fields, and many others.

There are several academic, professional, and financial opportunities available to students in the psychology major. The capstone experience, which is designed to integrate knowledge and skills gained throughout the curriculum, allows students to focus on areas of particular interest. Students, for example, can experience the kind of career work they may wish to pursue in the practicum. Psychology majors at Westmont can also engage in original research with professors. Summer research opportunities are usually available with some financial support. Part-time positions are available assisting professors or working in the department. Professionals from the psychological community present their research and insights at departmental and divisional colloquia. Students are encouraged to attend and present their research at psychological conferences. The G. Eugene Walker Award for Outstanding Achievement in Psychology provides financial support to students who attend a psychological convention, meeting, or training session. The Westmont College chapter of Psi Chi, the international honor society in psychology, sponsors speakers, professional activities, and service to the community. Finally, the department presents the Willard F. Harley Outstanding Student Award to a graduating senior.

## PSYCHOLOGY

The psychology department encourages its majors to participate in an off-campus program before the end of the junior year.

Off-campus experiences may include participation in a Westmont-sponsored program in which the student completes general education requirements, electives, and in some cases major requirements. Another option is to enroll for a semester in the Westmont in San Francisco Program, where psychology students can earn 4 units of internship credit (PSY 190). Westmont in San Francisco program internship opportunities include chaplaincy experiences at San Francisco General Hospital, and clinical involvement in several care-giving agencies responding to the needs of battered women, abused children, and rescue from human trafficking. A third option is to spend a semester at a university in another country, taking a combination of psychology, general education, and elective courses. Students should work closely with their academic advisors when planning for a semester away from the Westmont campus so they can complete their graduation and major requirements in a timely manner and in the proper sequence.

**Career Choices.** A bachelor's degree in psychology is desirable for anyone whose interests involve human behavior. The major provides the essential foundation for graduate work. Career opportunities at this level include clinical and counseling psychology, teaching, consulting, and research in areas like social, developmental, or cognitive psychology, the neurosciences, psychological testing, behavioral medicine, industrial/organizational, sports, or health psychology, just to name a few. Positions in teaching, ministry, law and law enforcement, social work, public relations, youth work, personnel management, communications, recreation, rehabilitation, emergency services, advertising, administration, and the health industries are also open to psychology majors.

### **Requirements for a B.A. Major: approx. 48 units**

#### **Required Lower-Division Courses: 3 courses**

(To be completed by the end of the sophomore year.)

PSY 001 General Psychology (4)

PSY 013/013L Experimental Psychology & Lab (4)

MA 005 Introduction to Statistics (4)

*Recommended:* Courses from related fields; biology, anatomy and physiology; sociology; additional statistics or mathematics; computer science.

#### **Required Upper-Division Courses: for a minimum of 36 units**

PSY 111 History and Systems of Psychology (4)

*Courses from the following:* for a minimum of 8 units

PSY 120/120L Cognitive Psychology & Lab (4)

PSY 121/121L Psychology of Learning & Lab (4)

PSY 123/123L Clinical Neuropsychology & Lab (4)

PSY 124/124L Sensation and Perception & Lab (4)

PSY 125/125L Behavioral Neuroscience & Lab (4)

*Courses from the following:* for a minimum of 8 units

PSY 115 Child Development: Infancy through Adolescence (4)\*

PSY 117 Lifespan Development (4)\*

PSY 122 Social Psychology (4)

PSY 131 Abnormal Psychology (4)

PSY 132 Cultural Psychology (4)

PSY 140 Personality (4)

PSY 141 Fundamentals of Clinical & Counseling Psychology (4)

*One of the following Capstone options:* for a minimum of 4 units

PSY 196 Capstone Senior Practicum in Psychology (4)

PSY 197, 198 Capstone Senior Research in Psychology I/II (4)

*Additional Upper-Division PSY Electives:* for a minimum of 12 units

\* Either PSY 115 or PSY 117 may be taken; both cannot be taken for credit in the major.

## Requirements for a B.S. Major: approx. 60 units

### Required Lower-Division Courses: 3 courses

(To be completed by the end of the sophomore year.)

PSY 001 General Psychology (4)

PSY 013/013L Experimental Psychology & Lab (4)

MA 005 Introduction to Statistics (4)

### Required Upper-Division PSY Courses: for a minimum of 32 units

PSY 111 History and Systems of Psychology (4)

PSY 197 Capstone Senior Research in Psychology I (2)

PSY 198 Capstone Senior Research in Psychology II (2)

*Courses from the following:* for a minimum of 8 units

PSY 120/120L Cognitive Psychology & Lab (4)

PSY 121/121L Psychology of Learning & Lab (4)

PSY 123/123L Clinical Neuropsychology & Lab (4)

PSY 124/124L Sensation and Perception & Lab (4)

PSY 125/125L Behavioral Neuroscience & Lab (4)

*Courses from the following:* for a minimum of 8 units

PSY 115 Child Development: Infancy through Adolescence (4)\*

PSY 117 Lifespan Development (4)\*

PSY 122 Social Psychology (4)

PSY 131 Abnormal Psychology (4)

PSY 132 Cultural Psychology (4)

PSY 140 Personality (4)

PSY 141 Fundamentals of Clinical & Counseling Psychology (4)

*Additional Upper-Division PSY Electives:* (for a minimum of 8 units)

### Required Courses from Other Disciplines: 4 courses

CS 010 Introduction to Computer Science I (4)

*One of the following courses:*

MA 007 Finite Mathematics (4)

MA 008 Functions and Models (4)

MA 015 Discrete Mathematics (4)

MA 009 Elementary Calculus I (4)

## PSYCHOLOGY

MA 010 Elementary Calculus II (4)

*Two of the following courses: for a minimum of 8 units*

BIO 005 General Biology I (4)

BIO 006 General Biology II (4)

BIO 011 Human Anatomy (4)

BIO 012 Human Physiology (4)

CHM 001 Introductory General Chemistry (4)

CHM 005 General Chemistry I (4)

CHM 006 General Chemistry II (4)

PHY 011 Physics for Life Sciences I (4)\*\*

PHY 013 Physics for Life Sciences II (4)\*\*

PHY 014 Physics for Life Sciences Laboratory (1)

PHY 021 General Physics I (4)\*\*\*

PHY 023 General Physics II (4)\*\*\*

PHY 024 General Physics Laboratory (1)

\* Either PSY 115 or PSY 117 may be taken; both cannot be taken for credit in the major.

\*\*If PHY 011 or PHY 013 is taken, PHY 014 must also be taken to complete the lab requirement.

\*\*\* If PHY 021 or PHY 023 is taken, PHY 024 must also be taken to complete the lab requirement

## Requirements for a B.S. Major, Behavioral Neuroscience Track: approx. 65 units

### Required Lower-Division Courses: 3 courses

(To be completed by the end of the sophomore year.)

PSY 001 General Psychology (4)

PSY 013/013L Experimental Psychology & Lab (4)

MA 005 Introduction to Statistics (4)

### Required Upper-Division PSY Courses: for a minimum of 33 units

PSY 111 History and Systems of Psychology (4)

PSY 125/125L Behavioral Neuroscience & Lab (4)

PSY 197 Capstone Senior Research in Psychology I (2)\*

PSY 198 Capstone Senior Research in Psychology II (2)\*

*Courses from the following: for a minimum of 4 units*

PSY 120/120L Cognitive Psychology & Lab (4)

PSY 121/121L Psychology of Learning & Lab (4)

PSY 123/123L Clinical Neuropsychology & Lab (4)

PSY 124/124L Sensation and Perception & Lab (4)

*Courses from the following: for a minimum of 8 units*

PSY 115 Child Development: Infancy through Adolescence (4)\*\*

PSY 117 Lifespan Development (4)\*\*

PSY 122 Social Psychology (4)

PSY 131 Abnormal Psychology (4)

PSY 132 Cultural Psychology (4)

PSY 140 Personality (4)

PSY 141 Fundamentals of Clinical & Counseling Psychology (4)  
*Additional Upper-Division PSY Electives:* (for a minimum of 8 units)

**Required Courses from Other Disciplines: 5 courses**

MA 009 Elementary Calculus I (4)  
 BIO 005 General Biology I (4)  
 BIO 006 General Biology II (4)  
 CHM 005 General Chemistry I (4)  
 CHM 006 General Chemistry II (4)

\*PSY 197/198 projects must be on approved topics in behavioral neuroscience.

\*\* Either PSY 115 or PSY 117 may be taken; both cannot be taken for credit in the major.

## Requirements for a Minor: approx. 24 units

**Required Lower-Division Courses: 3 courses**

PSY 001 General Psychology (4)  
 MA 005 Introduction to Statistics (4)  
 PSY 013/013L Experimental Psychology & Lab (4)

**Required Upper-Division Courses: for a minimum of 12 units**

*At least 3 upper-division courses, selected in consultation with the student's advisor, but not including any course numbered above PSY 189.*

## Lower-Division Course Descriptions

**PSY 001 General Psychology** (4) Survey of major areas of psychology with emphasis on basic concepts, theories, and facts of behavior.

**PSY 013 Experimental Psychology** (4) Prerequisites: PSY 001; MA 005. The logic of scientific investigation with an examination of research principles, designs, and reports; experimentation with human and animal subjects; and an original research project.

## Upper-Division Course Descriptions

**PSY 111 History and Systems of Psychology** (4) Prerequisites: PSY 013; PHI 006; senior standing or permission of instructor. Background of modern psychology, development of various schools, and appreciation of the complexity of the discipline today.

**PSY 115 Child Development: Infancy through Adolescence** (4) Prerequisite: PSY 001. (Not open to "01" class level students.) Human development from conception through adolescence. Considers social, psychological, cognitive, and biological processes.

**PSY 117 Lifespan Development** (4) Prerequisite: PSY 001. (Not open to "01" class level students.) Human development from conception through death. Considers social, psychological, cognitive, and biological processes.



## PSYCHOLOGY

- PSY 120 Cognitive Psychology** (4) Prerequisites: PSY 001; MA 005; PSY 013. Theory and research on the nature of memory, concept formation, language production and comprehension, and problem solving. Laboratory section required.
- PSY 121 Psychology of Learning** (4) Prerequisite: PSY 001; MA 005; PSY 013. Theories and research in classical and operant conditioning. Laboratory section required.
- PSY 122 Social Psychology** (4) Prerequisite: PSY 001. Theory and research on social bases of behavior. Topics of personal and social relevance: social cognition, attitudes, prejudice, aggression, group influence, conformity, authoritarianism, and obedience.
- PSY 123 Clinical Neuropsychology** (4) Prerequisite: PSY 001; MA 005; PSY 013. Neuropsychological syndromes, neuropsychological assessment, and principles of neuroanatomy and brain-behavior relationships. Laboratory section required.
- PSY 124 Sensation and Perception** (4) Prerequisite: PSY 001; MA 005; PSY 013. Research and theories of audition, vision, taste, smell, and somesthesia; speech, music, pain, time, color, space, and motion perception. Laboratory section required. Offered in alternate years.
- PSY 125 Behavioral Neuroscience** (4) Prerequisite: PSY 001; MA 005; PSY 013. Analysis of behavior as a function of neurological and physiological processes. Laboratory section required.
- PSY 131 Abnormal Psychology** (4) Prerequisites: PSY 001; majors and minors have first priority. Mental and emotional disorders, their symptomatology, etiology, classification, and methods of treatment.
- PSY 132 Cultural Psychology** (4) Prerequisite: PSY 001. Explores the influence of cultural norms on cognition, behavior, emotion, and health. Considers the nature and extent of cultural differences and similarities, how cultural norms are transmitted, and how to interpret and evaluate the generalizability of research findings across cultures.
- PSY 140 Personality** (4) Prerequisites: PSY 001; junior standing. Scientific definition and assessment of personality, major theories and current research areas.
- PSY 141 Fundamentals of Clinical and Counseling Psychology** (4) Prerequisites: PSY 001; PSY 131; junior standing or permission of instructor. Foundations and principles of individual and group helping processes.
- PSY 150 Topics in Psychology** (2-4) Prerequisites: PSY 001; additional, depending on the specifics of the course offered in a given semester. See individual course announcements for specific content and prerequisite information.
- PSY 190 Individual Internship in Psychology** (1-4) Prerequisites: PSY 001; consent of instructor. Psychology-related field work in local or San Francisco area placements (see IS 190 for description of San Francisco Urban Program internship opportunities). May not be taken concurrently with PSY 196; Urban Program placements must be pre-approved.
- PSY 192 Individual Research in Psychology** (1-4) Prerequisites: Consent of instructor. Laboratory or field research with a faculty member. Students may be involved in any or all of the following: conduct literature reviews, carry out research procedures, analyze data, or write up results.

**PSY 196 Capstone Senior Practicum in Psychology (4)** Prerequisites: PSY 001; PSY 131; PSY 141; senior standing. Field work in local-mental health facilities, schools, probation and social service agencies, or research facilities.

**PSY 197 Capstone Senior Research in Psychology I (2)** Prerequisites: PSY 001; PSY 013; upper division lab course; and senior standing. Development of a professional research proposal that likely includes preliminary data collection. In-depth training in doing literature searches and reviews, applying research ethics, selecting experimental designs, and thinking critically in research.

**PSY 198 Capstone Senior Research in Psychology II (2)** Prerequisites: PSY 001; PSY 013; PSY 197; and senior standing. Continuation of PSY 197 with a focus on carrying out the research project proposed in PSY 197, and writing and submitting a professional level report for presentation. (If required by his or her program, a student may petition to take PSY 198 for 4 units.)

# Religious Studies

*Robert H. Gundry Chair of Biblical Studies, Old Testament, Professor  
T. Longman, III*

*Professors C. Farhadian (chair), B. Fisk, W. Nelson, H. Rhee, T. Work*

*Associate Professors C. Reeder,*

*Assistant Professor S. Yadav*

*Scholar-in-Residence R. Gundry*

**Description of the Major.** The Religious Studies major at Westmont College offers the coursework and experiences students need to understand the Christian tradition in conversation with other traditions. The foundation of the program is knowledge of the Bible, to which the faculty are committed as inspired and authoritative. Religious studies majors develop biblical and theological literacy, cultivate skills in interpretation, grow in theological judgment, and learn to celebrate the rich heritage of the Church in all its cultural contexts. Electives allow for advanced work in biblical studies, Greek and Hebrew, theology, Christian history, world religions and mission. Opportunities for study abroad in support of the major abound.

**Distinctive Features.** The major combines a 28-unit core with 20 units of elective credit. Majors may choose to concentrate in biblical interpretation, theological and historical studies, or world religions and Christian mission. The department welcomes religious studies minors and double majors, and we encourage students to pursue off-campus programs in a range of settings including the Middle East, Asia and San Francisco. Internship credit is available for local church ministries and internships.

**Career Choices.** Some majors go on to graduate programs in religious studies; some are called into Christian ministry. Westmont religious studies majors are well prepared for the best seminary programs in the country. Our graduates also pursue careers in fields as diverse as education, publishing, business, linguistics, politics, law and social work. In each case a firm understanding of religious texts, traditions and values allows them to make a unique contribution to their field. Regardless of career path, religious studies majors are equipped to play strong leadership roles within the Christian community and beyond.

## Requirements for a Major: 48 units

### Required Core: 28 units

RS 119 Early and Medieval Christianity (4)

RS 120 Reformation and Modern Christianity (4)

RS 142 World Religions (4)

RS 159 Missiology (4)

RS 180 RS Senior Seminar (4)

Old Testament: *one of the following* (4)

RS 101 Pentateuch (4)

- RS 102 Poetic & Wisdom Literature of the Old Testament (4)
- RS 106 The Old Testament in Ancient Near Eastern Context (4)
- RS 108 Prophetic Literature of the Old Testament (4)
- RS 124 Old Testament Theology (4)
- RS 154 History of Israel (4)
- New Testament: *one of the following* (4)
  - RS 110 Jesus in the Gospels (4)
  - RS 111 Paul and His Legacy (4)
  - RS 113 The Church in the New Testament (4)
  - RS 114 The World of the New Testament (4)
  - RS 116 The Apocalypse (4)

### **Electives: 20 additional units**

Students are encouraged to concentrate elective coursework in one of the following three areas:

#### **A. Biblical Interpretation**

##### Old Testament

- RS 101 Pentateuch (4)
- RS 102 Poetic and Wisdom Literature of the Old Testament (4)
- RS 104 Topics in Old Testament Studies (4)
- RS 108 Prophetic Literature of the Old Testament (4)
- RS 124 Old Testament Theology (4)
- RS 154 History of Israel (4)

##### New Testament

- RS 107 Topics in New Testament Studies (4)
- RS 110 Jesus in the Gospels (4)
- RS 111 Paul and His Legacy (4)
- RS 113 The Church in the New Testament (4)
- RS 116 The Apocalypse (4)

##### Biblical Contexts

- RS 106 The Old Testament in Ancient Near Eastern Context (4)
- RS 114 The World of the New Testament (4)
- RS 155 Geography, History and Religions of the Holy Land (off-campus)

##### Biblical Languages

- HB 001 Elementary Hebrew I (4)
- HB 002 Elementary Hebrew II (4)
- GRK 001 Elementary Greek I (4)
- GRK 002 Elementary Greek II (4)
- GRK 101 Intermediate Greek I (4)
- GRK 102 Intermediate Greek II (4)
- GRK 151 Advanced Greek Reading (4)

- RS 190 Religious Studies Internship (4)

#### **B. Theology and History**

##### Systematic Theology

- RS 100 Foundations of Spiritual Formation (4)
- RS 126 Topical Theology (4)
- RS 127 Theological Formation (4)
- RS 129 Interdisciplinary Theology (4)

## RELIGIOUS STUDIES

- RS 131 Theology Seminar (4)
  - Philosophical Theology
    - RS 103 Christian Apologetics (4)
    - RS 130/PHI 130 Philosophical Theology (4)
  - Historical Theology and Christian History
    - RS 133/ART 133 Art, Theology and Worship (4)
    - RS 150 Theological History Seminar (4)
    - RS 150SS Wealth and Poverty in Christian History (4)
    - RS 151 History of World Christianity (4)
    - RS 157 History of Christian Mission (4)
  - RS 190 Religious Studies Internship (4)
  - C. World Religions and Christian Mission**
    - RS 137 Christ and the Asian Religions (4)
    - RS 138 Judaism (4)
    - RS 139 The World of Islam (4)
    - RS 157 History of Christian Mission (4)
    - RS 160 Mission and Globalization (4)
    - RS 163/PHI 163 Philosophy of Religion (4)
    - RS 165 Religions in Context (topic varies with location) (4)
  - RS 190 Religious Studies Internship (4)
  - IS 190 Urban Internship (4)
- Students may petition to have up to 8 units from the following list count as RS electives.*
- AN 150 Cross-Cultural Communications (4)
  - BIO 197 Biology and Faith (4) (senior standing)
  - HIS 134 Spirituality and Ritual in Medieval and Early Modern Europe
  - IS 190 Urban Internship (4, 8 by petition; Westmont in San Francisco)
  - IS 194 Independent Study (4; Westmont in San Francisco)
  - MU 122 Music in the Worshipping Church (4)
  - POL 140 Christianity and Politics (4)
  - PSY 175 Psychology of Religion (4)
  - SOC 120/AN 120 Religion and Society (4)
  - SOC 121 New Religious Movements (4)

### Requirements for a Minor: 20 units

*Choose one of the following (4)*

- RS 119 Early and Medieval Christianity (4)
- RS 120 Reformation and Modern Christianity (4)
- RS 151 History of World Christianity (4)
- Additional Hebrew, Greek or RS upper-division electives (16)

### Requirements for Biblical Languages Minor: 20 units

20 units of the following:

- GRK 001 Elementary Greek I (4)
- GRK 002 Elementary Greek II (4)
- GRK 101 Intermediate Greek I (4)
- GRK 102 Intermediate Greek II (4)

HB 001 Elementary Hebrew I (4)

HB 002 Elementary Hebrew II (4)

At least eight units in each language are recommended.

Four units can count toward a major in Religious Studies.

## Lower-Division Course Descriptions

**GRK 001, 002 Elementary Greek I, II** (4,4) Basic grammar and beginning reading in the Greek New Testament.

**HB 001, 002 Elementary Hebrew I, II** (4,4) Basic grammar and beginning reading in the Hebrew Old Testament. Offered odd years (e.g., 2009-10).

**RS 001 Introduction to Old Testament** (4) A survey of the Old Testament with special attention to ancient Near Eastern context, Israelite history, literary forms, and theological contents.

**RS 001H Introduction to Old Testament: Honors** (4) By invitation only. A survey of the Old Testament with special attention to ancient Near Eastern context, Israelite history, literary forms, and theological contents, with more advanced readings and more discussion, research, and writing than in RS 001.

**RS 010 Introduction to New Testament** (4) Survey of the New Testament in the historical and cultural context of early Judaism and the Graeco-Roman world. Attention to literary forms and theological contents.

**RS 020 Introduction to Christian Doctrine** (4) Thematic examination of biblical doctrines, including God, Christ, Holy Spirit, humanity, redemption, the Church, revelation, last things; consideration of their historical development and contemporary meaning.

## Upper-Division Course Descriptions

**GRK 101, 102 Intermediate Greek I, II** (4,4) Prerequisite: GRK 002. Review of grammar and focused study of syntax, textual criticism and exegetical method with extensive reading in the Greek New Testament.

**GRK 151 Advanced Greek Reading** (4) Selected reading from the New Testament and other literature of the period. Offered by petition.

**RS 100 Foundations of Spiritual Formation** (4) Recommended: RS 020. (GE Integrating the Major Discipline). An exploration of the disciplines of the Christian spiritual life. Readings in classical and contemporary literature on spirituality, especially spiritual autobiographies.

**RS 101 Pentateuch** (4) Prerequisite: RS 001. Recommended: RS 010. A study of the formation of Israel as a people under God's initiative: prehistory, patriarchs, exodus, wilderness, and Sinai. Emphasis on history, literature, and theology.

**RS 102 Poetic and Wisdom Literature of the Old Testament** (4) Prerequisite: RS 001. Recommended: RS 010. A study of Job, Psalms, Proverbs, Ecclesiastes, and Song of Songs focusing on comparative literature, literary forms, settings in Israelite society, and theological themes.

- RS 103 Christian Apologetics** (4) Prerequisites: RS 001 & RS 020. Recommended: RS 010. An exploration into the relation of Christian faith and reason, God's existence, the problem of evil, the possibility of miracles, the historicity of the Resurrection, and the intelligibility of the Trinity and the Incarnation.
- RS 104 Topics in Old Testament Studies** (4) Prerequisite: RS 001. Introduces students to advanced issues and research methods in Old Testament studies. The topic will be announced in advance.
- RS 106 The Old Testament in Ancient Near Eastern Context** (4) Prerequisite: RS 001. Recommended: RS 010. A study of the Old Testament in the light of the history and literature of the ancient Near East, with an emphasis on Egyptian, Sumerian, Babylonian, Assyrian, Hittite, and Ugaritic myths, epics, legends, historical texts, and wisdom literature in English translation. In addition, an examination of the methodological and theological issues raised by the similarities and dissimilarities between biblical and extra-biblical literature.
- RS 107 Topics in New Testament Studies** (4) Prerequisite: RS 010. Detailed exploration of critical issues and questions in New Testament studies. Topics announced in advance.
- RS 108 Prophetic Literature of the Old Testament** (4) Prerequisite: RS 001. Recommended: RS 010. A study of prophets and prophecy in ancient Israel concentrating on the prophet's role in society, forms of prophetic speech, historical background, and theological perspectives.
- RS 110 Jesus in the Gospels** (4) Prerequisite: RS 010. Recommended: RS 001. Careful study of Jesus in canonical, historical, and cultural contexts with attention to his aims and message.
- RS 111 Paul and His Legacy** (4) Prerequisite: RS 010. Recommended: RS 001. Survey of Paul's life and letters. Attention to historical context, theological themes, practical questions, and Paul's continuing impact on early and contemporary Christianity.
- RS 113 The Church in the New Testament** (4) Prerequisite: RS 010. Recommended: RS 001. Study of the developing theology and praxis of the early church as seen across the New Testament, with special attention to Acts and the epistles.
- RS 114 The World of the New Testament** (4) Prerequisites: RS 010. Recommended: RS 001. A study of the historical context of the New Testament with reference to the texts, cultures, and religions of the Mediterranean World.
- RS 116 The Apocalypse** (4) Prerequisite: RS 010. Recommended: RS 001. A study of the New Testament book of Revelation in the context of biblical and Second Temple apocalyptic literature with attention to literary conventions, symbolism, theology, historical context and contemporary relevance.
- RS 119 Early and Medieval Christianity—100-1450** (4) The historical and theological development of the church, with particular emphasis given to the doctrines of the Trinity, Christology, and ecclesiology.

- RS 120 Reformation and Modern Christianity** (4) This course examines the major theological and historical developments in Christianity during the period from the Protestant Reformation up to the present, exploring the various Christian beliefs, practices, and communities that were developed and matures over the last five centuries in constant interactions with their surrounding cultures and sociopolitical contexts.
- RS 124 Old Testament Theology** (4) Prerequisite: RS 001. Recommended: RS 010. Ancient Israel's faith: historical context and relevance for the church. Consideration of methodology, names and nature of God, covenants, and relation between the Testaments.
- RS 125 Theology** (4) Prerequisite: RS 020. Recommended: RS 001 & RS 010. A sustained exploration of the global enterprise of Christian theology as rooted in scripture and reflecting on the life of the church, conducted from an evangelical perspective and drawing on major theological methods, concerns, projects, thinkers, and contexts.
- RS 126 Topical Theology** (4) Prerequisite: RS 020. Recommended: RS 001 & RS 010. Explores a topic or locus of sustained Christian theological reflection, such as the doctrines of revelation, God, creation, humanity, sin, reconciliation, church, and eschatology.
- RS 127 Theological Formation** (4) Prerequisite: RS 020. Recommended: RS 001 & RS 010. Explores the Christian faith as articulated and passed on through one or more major texts of the Christian catechism, such as the Apostles' Creed and other confessions, the Lord's Prayer, the Ten Commandments, and the practices of the worshipping church.
- RS 129 Interdisciplinary Theology** (4) Prerequisite: RS 020. Recommended: RS 001 & RS 010. Explores one or more specific movements and issues at the intersection of theology and other disciplines of the humanities and sciences.
- RS 130/PHI 130 Philosophical Theology** (4) Prerequisites: PHI 006 and RS 020. Analysis of God's attributes (omniscience, immutability, eternity); the relation of time to eternity; the Trinity; God's foreknowledge and human freedom; morality and God's will; the logic of the Incarnation.
- RS 131 Theology Seminar** (4) Prerequisite: RS 020. Recommended: RS 001 & RS 010. Focused study of an issue, person, or movement not covered by other courses.
- RS 133/ART 133 Art, Theology and Worship** (4) Recommended: RS 020. A study of the arts in Christian worship with a particular emphasis on the visual arts. Within a broadly historical framework, this course invites students to consider the roles that the arts have played in worship, to understand the range of theological and doctrinal understandings that have been used to interpret and support their use, and to become sensitive to the social and economic circumstances that are also involved.
- RS 134 Gender in Theological Perspective** (4) Study of key issues and questions relating to gender in the context of and in interaction with sacred texts, theologies, or religious communities. Specific topics addressed will vary by semester. Course may be repeated for credit.



## RELIGIOUS STUDIES

- RS 137 Christ and the Asian Religions** (4) Recommended: RS 142. The ways Christians and the Christian message engage Asian religious traditions (e.g., Hinduism, Buddhism), highlighting cultural, social, theological, and theoretical topics.
- RS 138 Judaism** (4) This course introduces the history, texts, practices, and legacy of Judaism from the biblical period to the present, with special attention to issues at the intersection of Jewish and Christian faith.
- RS 139 The World of Islam** (4) Recommended: RS 142. Introduces the rise and expansion of Islam from the seventh century to the present, its central beliefs, institutions and practices, and its impact on the religious and cultural history of the world. Throughout the course students will compare important elements of Islam with those of Christianity.
- RS 142 World Religions** (4) This course surveys a variety of world religions, including Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, Shinto, Islam, and Mormonism. Topics include the history of each religion, its beliefs and practices. Throughout the course students will compare important elements of the world religions with those of Christianity.
- RS 150 Theological History Seminar** (4) Open only to RS majors and minors. Focus on a particular theologian or specific issues in religious history or theology.
- RS 150SS Wealth & Poverty in Christian History** (4) Historical examination of the ways Christians have interpreted, applied, communicated, and struggled with the Christian mandate regarding wealth and poverty. Attention to Jewish (OT) and Greco-Roman backgrounds, New Testament teachings on wealth and poverty and subsequent interpretations and applications of those teachings in a broad historical development.
- RS 151/HIS 151 History of World Christianity** (4) Surveys the history of Christianity from the New Testament to the present in Europe, Africa, Asia, and the Middle East, and from the colonial period to the present in North America and Latin America. Particular attention will be paid to intellectual, cultural, political, theological, and institutional developments in Roman Catholicism, Eastern Orthodoxy, and Protestantism.
- RS 154 History of Israel** (4) Prerequisite: RS 001. Recommended: RS 010. A survey of Israel's history in the Old Testament period, utilizing historiography, ancient Near Eastern sources, and archaeology in order to understand biblical events.
- RS 155 Geography, History and Religions of the Holy Land** (4) (Jerusalem University College) Important sites and events in Israel's history, including religious traditions of Judaism, Islam, and Eastern Christianity.
- RS 157 History of Christian Mission** (4) The past history and present conditions in Christian mission.
- RS 159 Missiology** (4) An introduction to contemporary biblical and theological understandings of the Christian mission, and theoretical models for implementation of that mission.

- RS 160 Mission and Globalization** (4) Prerequisite: RS 159 or permission of instructor. Examines the currents of modernity, late modernity, and globalization, as forces that are reshaping individual, corporate, and national identities, and explores what these social and structural refigurations mean to Christian mission.
- RS 163/PHI 163 Philosophy of Religion** (4) Prerequisite: PHI 006 or RS 020. Significance of religious phenomena and the veracity of religious beliefs.
- RS 165 Religions in Context** (4) Topic varies with off-campus location (e.g., India, Middle East). Focused study of a major religion, exploring theology, traditions and contextual expression.
- RS 180 Senior Seminar** (4) Prerequisite: RS major with senior standing. (Earlier only by department chair approval.) Review and integration of skills in exegesis, hermeneutics, theology and historical analysis, toward the goal of an enduring faith and a missional Christianity. Themes and format will vary from year to year.
- RS 190 Religious Studies Internship** (4) Prerequisites: RS 020 and sophomore standing. Field experience of 6-12 hours per week with local church, parachurch, or service organizations. Arrangement of site placement coordinated with field personnel and course instructor. Core competencies in ministry and theology by an experienced practitioner are provided in class meetings, and on-site supervision is provided by site staff.

# Social Science

**Description of the Major.** The social science major offers students an opportunity to study human beings by applying the methodology of science to the subject of our behavior as individuals and in groups. The social sciences share the search for general characteristics or patterns of human behavior rather than a concern for particular persons or institutions. Each of the four social sciences—history, political science, sociology, and economics—brings its own set of questions to the major and offers a different arena of human activity for observation and experiment. Social science majors will have a clearer understanding of how human beings function in community, how they organize to accomplish common goals, and how they seek to manage the production and exchange of goods and services. Students will also explore the normative questions of how individuals can live together and promote the work of the Kingdom of God.

**Distinctive Features.** Students may select certain emphases which will best serve them individually. The major provides a broader program than can be found in any single subject major. It may serve as preparation for seminary, as a teaching field, or in some cases, as preparation for graduate study in the field of greatest emphasis.

**Career Choices.** A degree in social science can lead to many interesting and challenging areas, including social work, law, health sciences, missions, ministry, business, government, and teaching.

## Requirements for a Major: 48 units

Must complete one full area A-D (20 units); twelve units each in two other areas A-D (24 units); plus four units in fourth area A-D (4 units). Must complete at least 20 units of the required 48 units at the upper-division level regardless of which area (A-D) is chosen as the principal (20 unit) concentration. May enroll in any courses in the three areas outside the principal concentration (not just those listed here), within the normal constraints of course prerequisites and the major's requirement to complete at least 20 upper-division units. However, HIS 010 Perspectives on World History may not be used toward any portion of the Social Science major.

### A. Economics and Business: 20 units

EB 011 Principles of Macroeconomics (4)

EB 012 Principles of Microeconomics (4)

*Two of the following:* (8)

EB 102 Intermediate Microeconomics (4)

EB 103 History of Economic Thought (4)

EB 135 Money, Banking and Financial Markets (4)

EB 137 Intermediate Macroeconomics (4)

*Upper-Division EB Elective:* (4)

**B. History: 20 units**

*Please note His 010 will not count toward the History requirements of this major.*

HIS 099 Foundations of History (4)

HIS 198 Historical Method, Bibliography and Research (4)

*Two upper division history courses, approved by the student's academic advisor, which study two different geographical regions and/or chronological periods (8)*

*Additional HIS Elective: (4)*

**C. Political Science: 20 units**

POL 010 American Government (4)

POL 020 International Politics (4)

POL 030 Political Theory and Ideology (4)

*Upper-Division POL Electives: (8)*

**D. Sociology: 20 units**

SOC 001 Introduction to Sociology (4)

SOC 171 Sociological Theory (4)

*Upper-Division SOC Electives: (12)*

# Sociology and Anthropology

*Professor T. Jayawardene*

*Associate Professor F. Song (chair)*

*Assistant Professors S. Jirek, S. Shani, M. Whitnah*

**Description of the Major.** Every society establishes relational patterns that determine how its members should behave. There are prescribed ways for members to conduct group life, carry on economic activities, and sanction those who deviate from its expectations. These and other patterns of social behavior constitute the subject matter of sociology, a branch of science whose practitioners endeavor to explain the origins and functions of these social patterns.

The basic objective of the sociology major at Westmont College is to help students develop a sociological and anthropological perspective within the context of a Christian world view. It is our hope that students will gain insight into the nature of society and culture through a disciplined examination of the social components of human activity.

**Distinctive Features.** The sociology and anthropology curriculum at Westmont offers students the unique opportunity to study sociology and anthropology from an evangelical Christian standpoint. Professors are concerned about the intellectual and spiritual development of each student. Students receive academic credit for supervised field experience in various public and private agencies and organizations in Santa Barbara. Sociology-Anthropology majors are encouraged to participate in an off-campus program. Many students take advantage of the learning opportunities available at Westmont's nationally recognized Westmont in San Francisco program. Westmont sponsors several other opportunities that students find enrich their study of sociology or anthropology, though we recommend that you plan to attend only one program and only a total of eight units from such programs will be accepted toward the major requirements.

**Career Choices.** The sociology major provides an excellent background for a career in any of the "human services" including social work, counseling, vocational rehabilitation, probation, corrections, law enforcement, youth services and human resources. It also provides pre-professional preparation for ministry, law, public administration, and community development. In addition, it offers excellent background for entering the health, non-profit, and media industries.

The sociology major also makes it possible for students to pursue further training at the graduate level and become professional sociologists or anthropologists. The anthropology component of the curriculum prepares students for careers in foreign service, cross-cultural health programs, international relief and development work, international business, and missionary outreaches in developing countries.

**Interest Tracks:** Recognizing that students may desire to study a particular aspect of sociology in depth to better prepare for a career, the sociology and anthropology department has established three formal tracks within the sociology curriculum.

## Requirements for a Major: 46 units

### Required Major Core: 18 units

#### Required Lower-Division Course: 4 units

SOC 001 Introduction to Sociology (4)

OR

AN 001 Introduction to Cultural Anthropology (4) (preferred for the Cross-Cultural Track)

#### Required Upper-Division Courses: 14 units

SOC 108 Quantitative Research Methods (4)

SOC 109 Qualitative Research Methods (4)

AN 195/SOC 195 Senior Seminar (2)

AN 197/SOC 197 Senior Research Capstone (4)

Highly Recommended:

MA 005 Introduction to Statistics (4)

Regardless of the number of off-campus programs attended, only 8 units will be accepted toward the major requirements and only 4 for the minor.

**In addition to the above core, all majors must complete one of the following tracks:**

### A. General Sociology Track: 28 units

This track is designed for students who are seeking a broad training in the sociological perspective. It prepares students with a critical understanding of society that is essential to many careers including those in the non-profit sector, education, business, governance, church ministry, and media. It is particularly suited for students who wish to pursue further work in academic sociology beyond the B.A.

#### Required Courses: 28 units

SOC 171 Sociological Theory (4)

*Select one course from four out of the following five categories: (16)*

1. Sociology of Religion

SOC 120/AN 120 Religion and Society (4)

2. Deviance and Social Control

SOC 177 Interpersonal Violence (4)

SOC 182 Sociology of Deviance (4)

3. Social Stratification

AN 135 Gender and Sex Roles in Cross-Cultural Perspective (4)

SOC 180 Human Services and Social Policy (4)

SOC 189 Sociology of Race and Ethnicity (4)

4. Comparative Sociology/Globalization

AN 140 Food Systems (4)

SOC 155/AN 155 Sociology of Global Inequality and Development (4)

5. Social Interaction

## SOCIOLOGY AND ANTHROPOLOGY

SOC 130 Sociology of the Family (4)

SOC 145 Social Psychology (4)

SOC 150/AN 150 Cross-Cultural Communication (4)

SOC 160 Internet and Society (4)

*\*Department-approved upper-divisional sociology or anthropology electives (8)*

### **B. Human Services Track: 28 units**

This track is designed for students who are interested in pursuing a career in the helping professions or in community organizations. It is appropriate for students interested in pursuing careers in social welfare and other human service areas as well as those drawn toward careers in counseling and the criminal justice system.

#### **Required Courses: 28 units**

SOC 171 Sociological Theory (4)

SOC 177 Interpersonal Violence (4)

SOC 180 Human Services and Social Policy (4)

SOC 190 Internship (4-8 hours). Eight units of internship (4 per semester) are strongly encouraged to provide continuity for both the student and the sponsoring agency. If only 4 units of internship are completed, students must take an additional upper-divisional department approved elective (4).

*\*Two of the following Department-approved Electives (8)*

SOC 110 Social Problems (4)

SOC 130 Sociology of the Family (4)

AN 135 Gender and Sex Roles in Cross-Cultural Perspective (4)

SOC 182 Sociology of Deviance (4)

SOC 189 Sociology of Race and Ethnicity (4)

Other department approved upper-divisional sociology or anthropology elective (4)

### **C. Cross-Cultural Studies Track: 28 units**

This track is designed for students who are interested in studying the diverse cultural groups of the United States and the developing world. It is especially recommended for those who are interested in missions and cross-cultural ministries as well as for those who desire to pursue inter-cultural affairs for other applications.

#### **Required Courses: 28 units**

AN 145 Culture Theory (4)

SOC 189 Sociology of Race and Ethnicity (4) or AN 115 Peoples and Cultures (4)

*Four of the following: (16)*

AN 130 Applied Anthropology (4)

AN 135 Gender and Sex Roles in Cross-Cultural Perspective (4)

AN 140 Food Systems (4)

AN 150/SOC 150 Cross-Cultural Communication (4)

AN 155/SOC 155 Sociology of Global Inequality and Development (4)

AN 196/SOC 196 Topical Seminar (2-4)

*Department-approved Upper-Division SOC/AN Elective (4)*

\*Not more than eight units of field experience, SOC 190 Internship or IS 190 Urban Program Internship (8), may be included in the upper-division units. Students who intend to be sociology majors are strongly encouraged to complete the required theory and methods courses as soon as possible after completion of the introductory course. Prospective majors are also encouraged to discuss the different tracks within the sociology curriculum with a sociology advisor. An anthropology minor is available for those students desiring a cross-cultural emphasis.

## Requirements for an Anthropology Minor: 24 units

AN 001 Introduction to Cultural Anthropology (4)

AN 145 Culture Theory (4)

*Three of the following:* (12)

AN 130 Applied Anthropology (4)

AN 135 Gender and Sex Roles in Cross-Cultural Perspective (4)

AN 140 Food Systems (4)

AN 150/SOC 150 Cross-Cultural Communication (4)

AN 155/SOC 155 Sociology of Global Inequality and Development (4)

AN 196/SOC 196 Topical Seminar (4)

*Upper-Division SOC/AN Elective* (4)

## Requirements for a Sociology Minor: 24 units

SOC 001 Introduction to Sociology (4)

SOC 171 Sociological Theory (4)

*Upper-Division SOC Electives:* (16)

## Lower-Division Course Descriptions

### Anthropology

**AN 001 Introduction to Cultural Anthropology** (4) The nature and dynamics of culture; a survey of the range of cultural phenomena, including material culture, social organization, religion and language, with emphasis on contemporary, non-literate societies. Emphasis is also given to the process of anthropological research, cross-cultural adaptation, and the applicability of anthropology to a range of social issues including healthcare, education, business, economic development, and missions.

### Sociology

**SOC 001 Introduction to Sociology** (4) The analysis of patterned social relationships in modern societies and a survey of the major concepts and methods of sociology. Prerequisite to most upper-division courses in sociology.

**SOC 050 Topical Seminar** (4) Seminar topics to be announced by department.



## Upper-Division Course Descriptions

### Anthropology

- AN 115 Peoples and Cultures** (4) A survey of the culture types in a particular geographical area and the anthropological frameworks and methods that have been used to describe them. Course may be repeated as geographical area changes. Areas offered: Latin America and Asia.
- AN 130 Applied Anthropology** (4) Emphasizes the application of anthropological concepts, methods, and theories to solution of human problems. Topics covered include education, public health, natural resource management, health care, and rural development among others.
- AN 135 Gender and Sex Roles in Cross-Cultural Perspective** (4) A survey of the diversity of male and female roles in a variety of cultures. A review of the anthropological theories that explain the similarities and differences in the ways in which cultures construct gender and determine sex roles.
- AN/KNS 140 Food Systems** (4) Surveys food production and consumption systems practiced in cultures around the world. Addresses issues of hunger, ethics of consumption and social and environmental justice.
- AN 145 Culture Theory** (4) Examination of the theories anthropologists, from the Evolutionists to post-Modernists, have used to understand human cultures and to explain similarities and differences among them.
- AN 150 Cross-Cultural Communication** (4) Prerequisite: SOC 001 or AN 001. The influence of culture on the communication process, including both verbal and non-verbal expression. Emphasizes problems of cross-cultural communication both overseas and within U.S. society with attention to acquiring skills to improve such communication.
- AN 155 Sociology of Global Inequality and Development** (4) Prerequisite: SOC 001 or AN 001. Anthropological and sociological approaches to economic development and sociocultural change in the context of the new nation-states created since colonialism ended in Africa, Asia, and Latin America.
- AN 195 Senior Seminar** (2) Prerequisites: Senior standing. See SOC 195.
- AN 196 Topical Seminar** (2-4) Prerequisite: Junior standing. Seminar topics to be announced by department. Enrollment limited.
- AN 197 Senior Research Capstone** (4) Prerequisite: SOC106, SOC107, SOC171 or AN145, and Senior standing. See SOC 197.
- AN 198 Independent Research** (4) Prerequisite: Junior standing; instructor consent required. Guided original research on appropriate issues in Sociology/Anthropology culminating in an advanced research report.

## Sociology

- SOC 108 Quantitative Research Methods (4)** Prerequisite: SOC 001 or AN 001. Introduces the key elements of social scientific research design as a foundation for collecting and analyzing quantitative data through methods of survey and content analysis. Attention will be given to the ethics of research, questionnaire construction, sampling, coding, statistical analysis and interpretation, and the presentation of quantitative data.
- SOC 109 Qualitative Research Methods (4)** Prerequisite: SOC 001 or AN 001. Introduces the key elements of social scientific research design as a foundation for collecting and analyzing qualitative data through methods such as observational methods, interviewing, and content analysis. Focuses upon the techniques employed in the collection, analysis, and presentation of qualitative data. Attention will be given to issues of validity, reliability, ethics, and the researcher's role.
- SOC 110 Social Problems (4)** Analysis of selected current social problems including poverty, crime, aging, race, gender, health care, and the family.
- SOC 120/AN 120 Religion and Society (4)** Prerequisite: SOC 001. Religion as a social phenomenon; patterns of religious behavior in American society; the church as a social institution.
- SOC 130 Sociology of the Family (4)** Prerequisite: SOC 001. A historical and cross-cultural study of the family as a social institution; including gender roles, social class, and family violence.
- SOC 138 Complex Organizations (4)** Prerequisite: SOC 001. An analysis of the formal and informal structure of modern, complex organizations and the role of bureaucracy in contemporary society.
- SOC 143 Urban Sociology (4)** Prerequisite: SOC 001. Dynamics and structure of the urban community; the growth of cities; problems and future prospects of modern city living.
- SOC 145 Social Psychology (4)** Prerequisite: SOC 001. A survey of the field of social psychology from a sociological orientation. Emphasis will be on basic theoretical concepts, with some consideration given to application.
- SOC 150 Cross-Cultural Communication (4)** See AN 150.
- SOC 155 Sociology of Global Inequality and Development (4)** See AN 155.
- SOC 160 Internet and Society (4)** A survey of how digital technologies influence the social institutions that frame contemporary relationships, community, and identity. Historical and theoretical foundations for understanding the interactions between technology, communication, and society are explored.
- SOC 171 Sociological Theory (4)** Prerequisite: SOC 001. A survey of classical and contemporary social theory from Comte to Giddens. Attention given to both substantive and metatheoretical ideas.

## SOCIOLOGY AND ANTHROPOLOGY

**SOC 177 Interpersonal Violence** (4) Prerequisite: SOC 001 or AN 001. An examination of the major theories, causes, and correlates of violence, including intimate partner violence, sexual assault, child abuse, elder abuse, robbery, hate crimes, and murder. Emphasizes how violence is interconnected with gender, race / ethnicity, social class, and social inequalities. Explores past and current violence prevention and intervention efforts.

**SOC 180 Human Services and Social Policy** (4) Prerequisite: SOC 001 or AN 001. An introduction to the breadth of the human services professions from a sociological perspective. Provides an overview of the history of social welfare programs and policies in the U.S. Explores the range of populations with which helping professionals work. Examines the ethics, common challenges, and professional responsibilities of human services professionals.

**SOC 182 Sociology of Deviance** (4) Prerequisite: SOC 001 or AN 001. An examination of deviance from both a sociological and a Christian perspective. Explores the major theories of deviance, as well as the social construction, political nature, and social control of deviance using various case examples. The development, management, and cessation of deviant roles, identities, and careers are also explored.

**SOC 183 Social Entrepreneurship and Collective Action** (4) This course explores different theories and practices of social change, entrepreneurship, and innovation. As such, the course considers a range of methods to resolve pressing social problems while situating social ventures into theoretical, historical, structural, and scriptural context. Throughout the course, students will examine locally specific, solutions-oriented social change efforts and then place those efforts in to global context.

**SOC 189 Sociology of Race and Ethnicity** (4) Provides an historical overview of racial and ethnic relations in the United States, with an emphasis on systemic racism in the cultural, economic, and political dimensions of social life. The course includes an analysis of contemporary race relations and of race-related issues and evaluates anti-racist strategies and solutions.

**SOC 190 Internship** (2-8) Prerequisite: Junior standing and consent of the instructor. Practical field experience chosen from a variety of possible social service agencies and community organizations. Supervision provided by qualified agency personnel and the instructor. Students must arrange their own transportation. Students are encouraged to take the internship on a 4-4 plan. Students may elect to apply eight units of IS 190 - toward the major in lieu of SOC 190.

**SOC 195 Senior Seminar** (2) Prerequisite: Senior Standing. This capstone course asks students to look back at their major studies at Westmont and to look forward to living out ideals and cultivating skills after graduation through the application of their knowledge in contemporary social or cultural issues. Themes and format may vary from year to year.

**SOC 196 Topical Seminar** (2-4) Prerequisite: Junior standing. Seminar topics to be announced by department. Enrollment limited.

**SOC 197 Senior Research Capstone** (4) Prerequisite: SOC 108, SOC 109, SOC 171 or AN 145, and Senior standing. This course is designed for the synthesis of students' knowledge gained during their major studies at Westmont and integration of sociological or anthropological thinking with a Christian faith and theology through the completion and presentation of a topical research project. Meets GE "Research" requirement.

**SOC 198 Independent Research** (4) Prerequisite: Junior standing; instructor consent required. Guided original research on appropriate issues in Sociology/Anthropology culminating in an advanced research report.

# Spanish

*Professors D. Cardoso (chair), M. Docter*  
*Associate Professor L. Elías*

**Description of the Major.** The Spanish major at Westmont develops advanced proficiency in Spanish and provides students with intercultural competencies to function comfortably and effectively in a Spanish-speaking environment. At the elementary, intermediate, and upper-division levels, professors teach Spanish communicatively (so that grammar is mastered but not at the expense of oral proficiency). The emphasis is on the culture, civilization, and literature of the people who speak this language.

**Distinctive Features.** The Spanish major produces globally-minded individuals uniquely equipped to work effectively in our increasingly diverse and interconnected world. The major combines the perspective of a liberal arts background, cross-cultural experience, and advanced competency in the language. Students achieve these goals through classroom instruction and residence in a culture where Spanish is the native language. Spanish majors complete one semester (15-16 units minimum) abroad at an approved university in Spain or Latin America. Students are eligible to study abroad after having completed at least four units of upper-division work in Spanish and SP 150 (Cross-Cultural Studies). The courses offered vary from year to year and from program to program, but always include language, literature, and civilization and culture classes. Students may choose from the following programs and locations in Spain and Latin America: Sevilla, Spain (Trinity Christian College), Quito, Ecuador (Brethren Colleges Abroad), or Querétaro, Mexico (Westmont in Mexico).

Students benefit from small class sizes, close student-faculty relationships, a flexible curriculum, and first-hand experience in a Spanish-speaking environment. The curriculum for the Spanish major develops an understanding of Spanish and provides the training which prepares students for professional pursuits or advanced study in Spanish at the graduate level.

As our society becomes more global, all graduates entering *any* field would benefit from fluency in Spanish and cross-cultural skills. The Spanish major lends itself particularly well to doubling with majors in education, economics and business, communications, anthropology and sociology, political science and, religious studies, among others.

**Career Choices.** Proficiency in another language and understanding of other peoples and cultures are essential tools in today's interconnected world. Our graduates successfully enter careers in primary, secondary and bilingual education; international business and law; foreign and home missions; medicine; social work; psychology; journalism and communications; foreign service; and translation and interpretation, among others.

## Requirements for a Major: 40-44 units

### A. Language and Literature Track: 40 units

In completing the requirements below, majors are required to take one semester of 15-16 units at an approved university in Spain or Latin America. Prior to the semester abroad—typically taken in the junior year—students must first have completed four semesters of college-level Spanish (or the equivalent), and SP 150 (Cross-Cultural Studies).

*Core Courses:* (8)

SP 100 Advanced Spanish (4)

SP 150 Cross-Cultural Studies (4)

*Two of the following:* (8)

SP 101 Survey of Spanish Literature to 1700 (4)

SP 102 Survey of Spanish Literature, 1700 to the Present (4)

SP 103 Survey of Latin American Literature to 1885 (4)

SP 104 Survey of Latin American Literature, 1885 to the Present (4)

*Two of the following advanced literature courses:* (8)

SP 172 Golden Age Literature (4)

SP 173 Cervantes's Don Quijote de la Mancha (4)

SP 176 Post-Civil War Spanish Literature (4)

SP 180 Latin American Women Writers (4)

SP 183 Twentieth-Century Latin American Poetry (4)

SP 184 Twentieth-Century Latin American Short Story (4)

SP 185 Twentieth-Century Latin American Novel (4)

SP 195 Seminar: Special Topics (2-4)

(or approved literature courses taken abroad)

*Four of the following elective courses:* (14-16)

SP 110 Hispanic Cultures: Spain (4)

SP 111 Hispanic Cultures: Latin America (4)

SP 130 Hispanic Film and Literature (4)

SP 190 Internship (2-4)

(or other courses not taken above, including approved courses taken abroad)

*The following courses are also recommended for the Spanish major:*

ENG 090 Literary Analysis (4)

ENG 106 Language Acquisition (4)

### B. Hispanic Studies Track: 44 units

Majors are required to take 44 upper-division units, including 20 units of upper-division Spanish courses taken at Westmont. Students must work very closely with their major advisor to ensure all related courses outside the Modern Languages Department satisfy the requirements for the Spanish major. Students will complete one semester (15-16 units) abroad in a Westmont-approved program.

## SPANISH

### **Core Courses: 12 units**

SP 100 Advanced Spanish (4)

SP 150 Cross-Cultural Studies (4)

*One of the following: (4)*

SP 110 Hispanic Cultures: Spain (4)

SP 111 Hispanic Cultures: Latin America (4)

*Note: these courses are typically taken in the semester abroad*

### **Literature: 12 units**

12 units in area of specialization, at least 4 of which must be at the advanced level (160 and above).

### **Related Courses: 12 units**

12 units in related social science fields or art history. Possible examples, pending departmental pre-approval (please submit syllabi for approval) include:

COM 138 International Rhetoric (4)

EB 104 World Poverty and Economic Development (4)

EB 161 International Marketing (4)

EB 187 Comparative Economic Systems (4)

EB 188 Global Capital Markets (4)

ED 105 Perspectives on Cultural Diversity and Education (4)

ENG 106 Language Acquisition (4)

HIS 179 California History and Literature (4)

HIS 161 Latin America to Independence (4)

HIS 162 Modern and Contemporary Latin America (4)

HIS/POL 178 California Experience (4)

POL 124 International Development (4)

RS 160 Mission and Globalization (4)

### **Electives: 8 units**

8 units in Spanish or related fields (not taken above)

## **Requirements for a Minor: 20 units**

20 units, 12 of which must be upper-division.

Spanish minors intending to study abroad must first complete a minimum of two semesters of college-level Spanish.

## **Lower-Division Course Descriptions**

**SP 001 Elementary Spanish I (4)** Introduction to the four basic language skills: reading, writing, listening, and speaking, with emphasis on oral communication. All skills reinforced through cultural readings. The course is taught almost exclusively in Spanish. Spanish 1 is for students with no prior Spanish experience or who have taken less than two years of high school Spanish.

**SP 002 Elementary Spanish II (4)** Continued introduction to the four basic language skills: reading, writing, listening, and speaking, with emphasis on oral communication. All skills reinforced through cultural readings. The course is taught

almost exclusively in Spanish. Pre-requisite: Placement test or Spanish 1 at the college level.

**SP 003 Intermediate Spanish I** (4) Further development of the four basic language skills: reading, writing, listening, and speaking, with emphasis on oral communication. All skills reinforced through cultural readings. Multiple short essays required. The course is taught exclusively in Spanish. Pre-requisite: Placement test or Spanish 2 at the college level.

**SP 004 Intermediate Spanish II** (4) Further development & refinement of the four basic language skills: reading, writing, listening. All skills reinforced through cultural readings. At this level, care and attention will be placed on students' ability to write coherently in Spanish. The course is taught exclusively in Spanish. Pre-requisite: Placement test or Spanish 3 at the college level.

## Upper-Division Course Descriptions

Unless otherwise noted, all upper-division courses are conducted in Spanish. Texts read and discussed in Spanish; all papers and examinations written in Spanish.

**SP 100 Advanced Spanish** (4) Prerequisite: SP 004 or Language Placement Test. An intensive course designed to reinforce students' reading, oral, and written skills in Spanish. Emphasis on skills such as composition and advanced reading comprehension to develop students' vocabulary and familiarity with the finer points of Spanish grammar and syntax.

**SP 101 Survey of Spanish Literature to 1700** (4) Prerequisite: SP 100. Historical overview of major authors, genres, and developments in Spain from the Middle Ages through the 17th century.

**SP 102 Survey of Spanish Literature, 1700 to the Present** (4) Prerequisite: SP 100. Historical overview of major authors, genres, and developments in Spain from the 18th through the 20th centuries.

**SP 103 Survey of Latin American Literature to 1885** (4) Prerequisite: SP 100. Historical overview of major authors, genres, and developments in Latin America from the Colonial era to the late 19th century.

**SP 104 Survey of Latin American Literature, 1885 to the Present** (4) Prerequisite: SP 100. Historical overview of major authors, genres, and developments in Latin America from *modernismo* (1885) through the present.

**SP 110 Hispanic Cultures: Spain** (4) Prerequisite: SP 004 or 100. A survey of the leading social, political, religious, and artistic issues in Spain from the Middle Ages to the present.

**SP 111 Hispanic Cultures: Latin America** (4) Prerequisite: SP 004 or 100. A survey of the leading social, political, religious, and artistic issues in Latin America, from pre-Columbian times to the present, with emphasis on the twentieth and twenty-first centuries.

**SP 130 Hispanic Film and Literature** (4) Prerequisite: SP 004 or SP 100. Study of Hispanic film as a narrative and visual medium, and introduction of basic concepts of film analysis. Through journals and papers, students will develop their "visual literacy" and their analytical abilities in "reading" a film.



- SP 150 Cross-Cultural Studies** (4) A course designed to help you get the most out of your study abroad experience by preparing you for it intellectually, culturally, emotionally, and spiritually. Taught each Spring for students planning to study abroad the following academic year. Note: This course is taught in English and does not count for the Spanish minor.
- SP 172 Golden Age Literature** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. Study of the historical context and literary movements that comprise Spanish Golden Age Literature (16th and 17th centuries) through readings and discussions of works of poetry, prose, and drama by major writers including Cervantes, Quevedo, Góngora, Lope de Vega, and Calderón de la Barca.
- SP 173 Cervantes's *Don Quijote de la Mancha*** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. This course explores Cervantes's *El ingenioso hidalgo don Quijote de la Mancha* and analyzes it within its historical and artistic context of Renaissance and Baroque Spain.
- SP 176 Post-Civil War Spanish Literature** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. Study of the history and literature of the Spanish Civil War and the dictatorship of Franco. Readings and discussions of works by major twentieth-century Spanish novelists and playwrights, including Cela, Delibes, Laforet, Buero-Vallejo and Sastre. In addition films by Camus, Cuerda, and Erice will be viewed and discussed.
- SP 180 Latin-American Women Writers** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. This course will explore women's experiences, literary contributions, in theoretical and/or historical perspectives. Issues of gender, culture, race, and class will be of particular interest. Regions, writers, and genres for this class may vary.
- SP 183 Latin American Poetry** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. Study of the historical context and literary movements that comprise Latin American poetry through readings and discussions of major poets, such as Sor Juana, César Vallejo, Pablo Neruda, as well as works by more recent poets.
- SP 184 Contemporary Latin American Short Story** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. Readings and discussions of 20<sup>th</sup> and 21<sup>st</sup> century works by such major 20<sup>th</sup> century writers as Quiroga, Borges, Rulfo, and García Márquez, as well as women writers and more recent Latin American authors.
- SP 185 Contemporary Latin American Novel** (4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. Readings and discussions of 20<sup>th</sup> and 21<sup>st</sup> century novels by such major writers as Rulfo, Fuentes, García Márquez, and Allende, as well as more recent writers.
- SP 190 Internship** (2,4) Prerequisite: Consent of instructor. Upper-division standing recommended. Supervised field work in the Santa Barbara area in which the student has the opportunity to use his or her Spanish. Field work may be in hospitals, clinics, schools, businesses, churches, social service agencies, etc. Weekly sessions held with supervisor and an ongoing personal log required.

**SP 195 Seminar: Special Topics** (2, 4) Prerequisites: One upper-division course and SP 101, SP 102, SP 103 or SP 104. Advanced study of a single author or topic in Spanish or Latin American literature. Course may be repeated as topics vary.

# Theatre Arts

*Professors J. Blondell (chair), M. Thomas*  
*Technical Director, J. Hicks*

**Description of the Major.** The study of Theatre Arts at Westmont blends traditional and contemporary approaches to the art of the stage, engaging students in a dynamic and lively exploration of theatre. Majors participate in the interdisciplinary nature of the field through an integrated study of acting and directing, design and technology, dramatic literature and theory, theatre history, and extensive elective options. The department's many courses and projects provide a deep and broad understanding of the field, and create opportunities for the development of personal creativity and critical thinking skills.

**Distinctive Features.** The department's offerings are infused with global perspectives and methods, and are augmented by an international residency series. Entitled The Globe Series, residencies provide students with classroom, workshop, and performance opportunities, led by artists and scholars from other cultures and countries. Students are also encouraged to take advantage of the many theatre-oriented Off-Campus programs that Westmont offers, including programs in England, Ireland, San Francisco and Los Angeles. The department has an active and robust production season with myriad opportunities for students. Directed by faculty artists, students create compelling productions of scripted plays, adaptations of literature, and original performance pieces and choreography. The annual Fringe Festival provides students a platform for the development of original work in theatre, dance, film, and performance art. The wide array of courses allows students to fashion a portion of their major according to their particular interests and talents. The department's holistic approach illuminates the aesthetic, social, and spiritual ramifications of the discipline, and develops wide-ranging perspectives of human experience, taught from a Christian perspective.

**Career Choices.** The field of theatre arts includes many opportunities for graduate training and professional work, including acting, directing, design, playwriting, research and scholarship, stage management, and business management. In addition, the major develops skills that extend far beyond those connected with theatrical production. These include skills that are vital to a wide variety of careers: the confident presentation of self in the public area, self-knowledge, artistic creativity, sensitivity, and collaborative group dynamics.

## Requirements for a Major in Theatre Arts: 54 units

### Required Lower-Division Core Courses: 12 units

- TA 001 Great Literature of the Stage (4)
- TA 010 Acting I (4)
- TA 036 Design for Theatre (4)

**Upper-Division Breadth Requirements: 14 units**

- TA 120 Theatre History I (4)
- TA 121 Theatre History II (4)
- TA 125 Directing for the Theatre (4)
- TA 193 Senior Project (2)

**Required Applied Theatre Arts: 12 units**

***Take 6 units of the following:***

- TA 031/131 Dance Performance (6)
- TA 050/150 Rehearsal and Performance (6)

***Take 3 of the following:***

- TA 015 Stagecraft: Lighting and Sound (2)
- TA 016 Stagecraft: Scenery and Props (2)
- TA 017 Stagecraft: Costume and Makeup (2)
- TA 060/160 Technical Production (2)

**Theatre Arts Electives: 16 units**

(A MAXIMUM of 8 units from an approved department outside of TA)

- ART 010 Design I (4)
- ART 015 Drawing I (4)
- ART 131 Theory and Criticism in the Arts (4)
- ENG 101 Film Studies (4)
- ENG 111, 112, Screenwriting I, II, (4,4)
- ENG 117 Shakespeare (4)
- ENG 183 Twentieth-Century Drama (4)
- ENG 186 British and Irish Theatre I (4)
- ENG 187 British and Irish Theatre II (4)
- TA 009W Voice and Speech (4)
- TA 011, 111 Acting II, III (4,4)
- TA 071, 171 Intermediate Ballet, Advanced Ballet (2,2)
- TA 072, 073, 173 Creative and Modern Dance, Intermediate Modern, Advanced Modern (2,2,2)
- TA 075, 175 Intermediate Jazz, Advanced Jazz (2,2)
- TA 124 Survey of Dramatic Theory and Criticism (4)
- TA 126 Choreography and Composition (2)
- TA 127 Directing II (4)
- TA 031, 131 Dance Performance (1,2)
- TA 137 Design for Performance (4)
- TA 140 Ethnicity and Gender on the American Stage (4)
- TA 186 World Theatre I (4)
- TA 187 World Theatre II (4)
- TA 190 Internship (1-8)
- TA 195 Seminar: Special Topics (2,4)

## Minor in Theatre Arts: 24 units

### Theatre Emphasis

#### Required Courses

- TA 001 Great Literature of the Stage (4)
- TA 010 Acting I (4)
- TA 015, TA 016, or TA 017 Stagecraft (2)
- TA 031/131 or TA 050/150 Rehearsal and Performance (2)
- TA 120 or TA 121 History of Theatre I, II (4)
- TA 125 Directing for the Theatre (4) or TA 036 Design for the Theatre (4)
- Choose any of the following electives: (4)*
  - TA 009 Voice and Speech (4)
  - TA 011, 111 Acting II, III (4,4)
  - TA 036 Design for the Theatre (4)
  - TA 120 Theatre History I (4)
  - TA 121 Theatre History II (4)
  - TA 124 Survey of Dramatic Theory and Criticism (4)
  - TA 125 Directing for the Theatre (4)
  - TA 127 Directing II (4)
  - TA 137 Design for Performance (4)
  - TA 140 Ethnicity and Gender on the American Stage (4)
  - TA 186 World Theatre I (4)
  - TA 187 World Theatre II (4)
  - TA 190 Internship (1-8)
  - TA 195 Seminar: Special Topics (2,4)

### Lower-Division Course Descriptions

- TA 001 Great Literature of the Stage** (4) An introductory course that studies some of the masterpieces of the Western dramatic tradition, from the ancient Greeks to today.
- TA 009 Voice and Speech Through Performance** (4) An introductory voice and speech class through performance of classical, modern, dramatic, and non-dramatic materials.
- TA 010 Acting I: Foundations** (4) An introduction to the craft of the actor in preparing for performance. The process challenges students to begin developing technique in observation, sensory awareness, applied imagination, ensemble work, improvisation, and scene work.
- TA 011 Acting II: The Body and Devised Theatre** (4) Prerequisite: TA 010. Further investigation and exploration of the craft of acting. Focuses on developing the physical presence and creative spirit of the performer.
- TA 015 Stagecraft: Lighting and Sound** (2) Course in the technology of the stage, centering on the collaborative process involved in realizing live theatrical production.

- TA 016 Stagecraft: Scenry and Props** (2) Course in the technology of the stage, centering on the collaborative process involved in realizing live theatrical production.
- TA 017 Stagecraft: Costume and Makeup** (2) Course in the technology of the stage, centering on the collaborative process involved in realizing live theatrical production.
- TA 036 Design for the Theatre** (4) This course is an examination of the creative process of traditional theatrical design. It covers theatrical theory, analysis, interpretation, and decision-making involving basic design elements and principles. The content includes some design history, along with projects in design, and script analysis from a design perspective.
- TA 071 Intermediate Ballet** (2) Intermediate level Barre, Adagio, Petit, and Grand Allegro. The class is geared toward students who have had previous training in ballet.
- TA 072 Creative and Modern Dance** (2) Creative (Laban-based) and technical basics of Modern Dance will be explored with an emphasis on Graham or Cunningham at the beginning level.
- TA 073 Intermediate Modern Dance** (2) Intermediate level modern dance based on Cunningham or Graham techniques. This class is geared toward students with previous modern training.
- TA 075 Intermediate Jazz** (2) The intermediate level is based on the fast-paced styles of Giordano, Fosse, and Tremaine. This class is geared toward students with previous jazz training.

## Upper-Division Course Descriptions

- TA 111 Acting III: Acting Shakespeare** (4) Prerequisite: TA 010. Advanced training in the acting craft. Focuses on the demands of heightened text, as well as the artistic and practical development of the performer.
- TA 120 History of the Theatre I** (4) A study of the history of theatre from the Greeks to the 17th century.
- TA 121 History of the Theatre II** (4) A study of theatre history from the 17th century to the present.
- TA 124 Survey of Dramatic Theory and Criticism** (4) A survey of significant theoretical and critical writing, from Aristotle to the present.
- TA 125 Directing for the Theatre** (4) Prerequisite: TA 001, 010. Introduction to directing, focusing on conceptual and methodological approaches to staging works for the stage.
- TA 126 Choreography and Composition** (2) Prerequisite: TA 131. A study of the basic and advanced elements of creating dances based on compositional forms, improvisation, technique, dynamics of stage space, a basic understanding of costume, lighting and stage design and an exploration of alternative dance spaces. May be repeated.

## THEATRE ARTS

- TA 127 Directing II** (4) Prerequisite: TA 125. Advanced conceptual and methodological approaches to directing, including scenes staged from the realistic playwriting tradition and Shakespeare.
- TA 137 Design for Performance** (4) Prerequisite: TA 136. A hands-on course in the practice of four-dimensional design including the processes of designing and making installations for performance events; the fundamentals and creative processes of 4D design; and a study of key practitioners in the field.
- TA 140 Ethnicity and Gender on American Stage** (4) Study, exploration and creation of plays that examine issues related to American notions of ethnicity and gender.
- TA 171 Advanced Ballet** (2) Advanced level Barre, Adagio, Petit, and Grand Allegro. The class is geared toward students who have had extensive training in ballet.
- TA 173 Advanced Modern Dance** (2) Advanced level modern dance based on Cunningham technique. This class is geared toward students with extensive modern training.
- TA 175 Advanced Jazz** (2) Advanced level jazz based on the fast-paced styles of Giordano, Fosse, and Tremaine. This class is geared toward students with extensive jazz training.
- TA 186 World Theatre I** (4) Study of plays available in live production during an off campus program, with an emphasis on the literary, political, social and historical nature of the theatre.
- TA 187 World Theatre II** (4) Study of plays available in live production during an off campus program, with an emphasis on the performative and interpretative nature of the theatre.
- TA 190 Internship** (1-8) Internships related to Theatre at a variety of employers. Supervised by a professional in the field and the department.
- TA 193 Senior Project** (2) Research and preparation of an in-depth paper on a selected topic in theatre and drama generated from a major course taken during the senior year or a final culminating project in acting, directing, creative writing, or design.
- TA 195 Seminar: Special Topics** (2,4) Seminar topics to be announced by department. Repeatable.

## Applied Theatre Arts

- TA 031/131 Dance Performance** (1-2) Prerequisite: permission of instructor. (Repeatable.) Original choreography will be set on students in preparation for fall and spring dance performance opportunities (may include Christmas concert, fringe festival, chapel, or fall concert) as well as off-campus venues.
- TA 050/150 Rehearsal and Performance I, II** (1-2) Prerequisite: permission of instructor. (Repeatable.) Active participation in a major dramatic production of Westmont theatre arts.

**TA 060/160 Technical Production I, II** (1-2) Prerequisite: permission of instructor.  
(Repeatable.) Active participation in technical support of a major dramatic production of Westmont theatre arts.



# Off-Campus Programs

Westmont yearns for its students to become globally-engaged citizens able to participate well in the world-wide Christian church, enjoy the rich diversity of God's creation, develop skills to relate to other cultures and people, and contribute to peace and justice that contributes to the common good.

Westmont students' participation in off-campus programs should facilitate their becoming globally-engaged Christians through:

1. Enlarging their vision of the breadth and depth of God's work in the world, past and present
2. Enriching their capacity to articulate and incarnate the gospel of Jesus Christ in both familiar and foreign contexts
3. Enhancing their appreciation for the variety and richness of human cultures, both locally and globally
4. Developing their self-awareness of their own culture
5. Increasing their abilities to communicate cross-culturally and to adapt effectively to new cultural environments
6. Increasing their capacities for building relationships of mutual respect across cultures
7. Enhancing their understanding of others' histories, religions, and cultural identities
8. Enlarging their understanding of contemporary global geo-political and socio-economic realities
9. Deepening their appreciation for and knowledge of the languages of others
10. Deepening their understanding of the geographical and environmental features of other places

For additional information and applications for the programs listed below, please visit our website at [www.westmont.edu/ocp](http://www.westmont.edu/ocp). A minimum 2.3 GPA is required unless otherwise noted. Westmont financial aid (institutional grants, scholarship and loans) may be used for any semester-long Westmont operated off-campus program. However, Westmont financial aid may be used for one program only at a Westmont approved (versus Westmont operated) off-campus program.

Tuition for Westmont operated and Westmont approved off-campus programs is the same as tuition on campus (except in a few cases where tuition is even higher than Westmont's tuition, in which case students are charged the higher amount). Other charges vary by program and are available through the Off-Campus Programs Office. Students who participate in these programs through Westmont are considered to be Westmont students. Therefore, they retain their standing and class priority for returning enrollment and class selection. Although students are allowed to attend more than one program, they may not enroll in off-campus programs in consecutive semesters.

Students who choose to access programs directly are not considered Westmont students during the period, do not have the support of the Financial Aid Office in obtaining financial aid from the program, do not receive any Westmont aid, including grants, scholarships or loans, are allowed to re-enroll at Westmont only as space is available during a subsequent semester, and must obtain their own transcripts from the programs when applying for graduate school or employment.

## **Westmont Operated Off-Campus Programs**

### **England Semester**

The England Semester program takes place during the fall semester of even years only. It is directed by English Department faculty and combines travel to literary and cultural centers with residential study in the British Isles. Students study English literature in the land of its origin, witnessing firsthand the birthplaces of major writers and the settings of their works. They attend theatre performances in Edinburgh, London, Stratford-upon-Avon, and Dublin and visit sites throughout the UK and Ireland including Oxford, Cambridge, the Lake District of the Romantic poets, and Hardy's country in southern England. Upper division English and Theatre credit is offered.

### **Europe Semester**

The Europe Semester program, a travel/study program led by Westmont faculty, takes place in the fall semester. The Europe Semester varies in its model and length depending on the faculty leader. Please see the Off-Campus Programs Office for updated details.

Three general education courses will be offered which studies various aspects of European history, thought, arts, society, culture, science, economy and politics while resident in Europe. Special effort is made to understand Europe's heritage and contemporary society in relation to larger world contexts.

This program emphasizes thoughtful consideration of Christian and cultural concerns through preparatory readings, lectures, extensive discussion, and essay writing. The courses offered will fulfill three of the following four Common Inquiries GE requirements:

- Thinking Globally
- Understanding Society
- Working Artistically
- Thinking Historically

Although not guaranteed, some years a qualified course may satisfy two of these Common Inquiries GE requirements, making it possible to satisfy all four of these GE requirements.

In addition, one or two elective courses may be offered.

## **Westmont Global Health Partnership Program in Uganda**

The Global Health Partnership Program in Uganda provides undergraduate students in any major the opportunity to complete an international field placement in medical and public health at a local organization in Uganda. The program is embedded in the Uganda Studies Program, operated by the Council for Christian Colleges and Universities, and is based on understanding, learning and growth within a different culture. Within this framework, Global Health students will conduct an internship at one of USP's various partner organizations, supervised by both a Ugandan supervisor on site, and USP's Global Health Emphasis Coordinator. Learning and observing Ugandan professionals working in various health-related fields is a unique experience through which students will grow in their understanding of the field as well as engage broader issues of international aid, development, public health etc. Students will gain valuable insight into the growing field of global health and gain cross-cultural awareness and skills to help them work effectively with diverse populations. Additionally, a Westmont Faculty member will travel with the group to offer a modular course in August. The Global Learning Cycle will employ community based learning strategies aimed at highlighting the local public health context within Santa Barbara for comparative learning objectives and global perspectives with a 2-unit Orientation course (Introduction to Global Health in Ugandan Context) and a re-entry capstone course.

## **Westmont in Northern Europe Semester**

Living in three extended-stay locations of Berlin (Germany), Birmingham (England) and Rostrevor (Northern Ireland) you will experience learning like you've never known exploring issues of conflict and peacemaking through three courses: Studies in World Literature, Philosophical Reflections on Conflict and Peacemaking in Modern Europe, and Encountering the Cultures of England, Ireland and Germany. Students will deepen their encounters with the places and cultures we visit with a course in German language and a PE course in urban and rural fitness walking. All participants are required to take these five courses. Together these courses will fulfill six General Education requirements: Thinking Globally; Reading Imaginative Literature; Philosophical Reflections on Reality, Knowledge and Value; Foreign Language; Communicating Cross-Culturally; Physical Education (one semester).

## **Westmont in San Francisco Program**

Faculty: K. Andrews, B. Berky (Director)

The world-class city of San Francisco is the setting for Westmont in San Francisco, a semester-long program offered in both the fall and spring semester featuring the integration of faith and vocation in the context of enriched community living. Students may enroll either in the fall or spring semester. The program offers all majors the opportunity to focus on a significant pre-professional internship experience of no less than 24 hours per week in the unique urban setting of the Westmont-owned "Clunie House," an 1898 Victorian mansion, and former Bed and Breakfast, located on The Panhandle of Golden Gate Park.

Students enhance their experiences with service projects, neighborhood studies, field trips and courses designed to introduce them to engaging and diverse community leaders; putting a “face” on issues which challenge all twenty-first century Christians. In most cases, Westmont in SF provides from 12-16 credits, some of which may stand for major credit, and fulfillment of the Compassionate Action GE requirement.

Westmont in SF is served by two faculty members and one staff assistant, providing guidance and mentoring opportunities for those who reside in the San Francisco Bay Area. Students may also take additional elective courses offered each semester, or arrange an Independent Study on a number of topics applicable to their major and unique to the City and/or urban environment.

### **Westmont in Istanbul**

This spring semester GE based program is centered in Istanbul, aka Constantinople, both Eastern and Western, a modern megalopolis of 15 million people and one of the most beautiful cities in the world. It is both cultural capital of a developing Asian country and Europe’s “city of culture” in 2010. Students will be encouraged to experience another culture from the inside, learning enough Turkish to navigate around the city and interact with Turks on a daily basis, develop relationships with neighbors and Turkish university students. Courses explore the historical and cultural roots of Christianity, faith and state in modern Turkey, community, culture and conflict in the modern Middle East, and engaging the Muslim world.

### **Westmont in Jerusalem**

This spring semester program studies and explores the culture, traditions and history of the Middle East region, with a home base in the ancient and conflicted city of Jerusalem. In addition to field trips in the Jerusalem area, substantial time is spent exploring Israel and the West Bank (Palestine), as well as neighboring countries: Such as Jordan, depending on the current geo-political situation.. Off-campus learning will include classroom lectures, field trips and site visits. Students will benefit from the expertise of local guides, and enjoy official briefings, small-group discussions, field work, readings and always conversations—conversations with host families, professors, locals, in the street, in the marketplace. Whether in class, traveling, worshiping, playing, eating, students will *always* be learning. The program will also include a number of service learning opportunities in cooperation with local agencies and organizations.

### **Westmont in Mexico**

Westmont in Mexico, a program offered each fall semester, is led by Westmont faculty and located in the beautiful colonial city of Querétaro. Students gain skills for effective cross-cultural living, experience incarnational ministry, and improve their Spanish language abilities. WIM offers students the unique opportunity to immerse themselves in Mexican culture through home stays, coursework, and field trips within the context of a supportive Christian community. Another distinctive feature is its integrated pre-departure, in-country, and re-entry training.

## OFF-CAMPUS PROGRAMS

WIM is designed to be a part of the general education curriculum, and fulfills several GE requirements. Students from all majors are encouraged to apply. Students must have completed the equivalent of one semester of college Spanish prior to enrolling in WIM.

### **Course Offerings**

Courses in WIM are taught by Mexican university professors and the Westmont faculty director. While in Mexico students earn up to 16 semester units. The courses are:

### **Spanish Language: beginning, intermediate, and advanced levels (GE, Modern Language)**

SP 005M Intermediate Spanish (4 units) Prerequisite: SP 2

SP 006M Intermediate Spanish Conversation (2 units) Prerequisite: SP 2

SP 100M Advanced Spanish (3 units) Prerequisite: SP 4

SP 105M Language in Context (3 units) Prerequisite: SP 4

(The following courses are open to advanced Spanish students who have completed SP 100)

SP 120M Advanced Composition (3 units)

SP 121M Advanced Oral Skills (3 units)

### **Mexican History and Civilization (GE, Thinking Historically)**

HIS 160M Mexican History and Civilization (3 units) (Required of all WIM students.)

### **Principles of Art: Mexico (GE, Working Artistically)**

ART 121M Mexican Art (3 units)

### **Integrative Seminar: Engaging Culture (GE, Thinking Globally)**

IS 193M Seminar: Engaging Culture (3 units) (Required of all WIM students.) This seminar is a continuation of the spring orientation course and is designed to deepen understanding of Mexican culture and to maximize your experience abroad. This course complements the activities of other WIM classes and provides a framework for examining the issues and questions they present. Students will participate in several field trips and projects outside of the classroom designed to help them “engage culture.” A cultural journal, reflective essays, and oral presentations will be regular parts of this course.

### **Latin-American Literature (GE, Reading Imaginative Literature)**

SP 104M Survey of Latin American Literature (3 units)

SP 160M Survey of Mexican Literature (3 units)

SP 165M Introduction to Literary Translation (3 units)

### **Latin Dance (GE, PEA)**

PEA 025M Latin Dance (1 unit)

**In addition to these courses, WIM has a pre-departure orientation seminar during the spring semester preceding the fall semester in Mexico.**

IS 192 Orientation: Westmont in Mexico (2 units)

## Westmont Downtown

Westmont Downtown, located in the heart of Santa Barbara's business district, trains you to ***learn for life***. Through tailored mentoring and empathetic collaboration, you will be liberated to creatively disrupt your comfort zone and faithfully love your neighbors. Our curriculum focuses on teaching social innovation and entrepreneurship across the disciplines.

What can you expect at Westmont Downtown?

- To ***launch and flourish*** post-graduation
- To develop creative confidence
- To build on your passions, interests, and major
- To connect cross-culturally
- To be equipped for life-long discipleship

How will you do it?

- A ***project-based internship*** in any sector
- A core seminar in social change and action
- A strong faith focus through Bible study and prayer
- A curated selection of community experiences

This program is tailored toward seniors and juniors from every major. As a highly collaborative and project-based program, we seek representation from every division in the college. We believe that every student can be a changemaker.

## Inoculum

This 12-day backpack trip in August to the northeastern wilderness area of Yosemite National Park is a special extension of the first-year student orientation program. Readings, discussions, and papers focus the course content on the uniqueness of a Westmont liberal arts education.

Participants must take the following courses:

APP 090 The Inoculum: Wilderness/Orientation (1)

PEA 095 The Inoculum: Wilderness/Orientation (1)

The PEA 095 course will meet one of the four PEA requirements.

## Off-Campus Mayterm

Westmont Mayterm and Summer Programs are short-term study excursions that often include both on-campus study and travel. Programs offering general education courses as well as programs offering major-specific curricula are available. A number of options are available in any given year; in the past, such programs have included offering in Europe, England, Egypt, Israel, China, Hong Kong, Singapore, Belize, Costa Rica, Honduras, Ireland, Thailand, Syria, Jordan and Turkey.

## **Westmont Approved Programs**

### **Christian College Consortium Programs:**

The Christian College Consortium promotes the development and articulation of the unique contributions that Christian higher education can make to contemporary society. The Visitor Program allows students to take advantage of different course offerings and to experience the culture of different regions of the country at the following Christian Colleges while maintaining regular standing at their home campuses. The other members of the Consortium are: Asbury College, KY; Malone College, OH; Bethel University, MN; Messiah College, PA; George Fox University, OR; Taylor University, IN; Gordon College, MA; Trinity International University, IL; Greenville College, IL; Seattle Pacific University, WA; Houghton College, NY; Wheaton College, IL. Westmont students may enroll for one semester at a consortium college, or at many of the off-campus programs sponsored by the consortium institution.

### **Council of Christian Colleges and Universities (CCCU) Programs:**

The Council for Christian College and Universities (CCCU) is a higher education association of more than 150 intentionally Christ-centered institutions around the world. There are 112 member campuses in North America and all are fully-accredited, comprehensive colleges and universities with curricula rooted in the arts and sciences. In addition, 71 affiliate campuses from 22 countries are part of the CCCU. The Council's mission is to advance the cause of Christ-centered higher education and to help its institutions transform lives by faithfully relating scholarship and service to biblical truth.

Westmont students may enroll for one semester in one of the study programs sponsored by the CCCU. Programs currently available are in Australia, China, Costa Rica, Israel, England, Uganda and the United States.

## **Other Approved Programs:**

Westmont students may choose to enroll for one semester from a wide range of other national and international programs. Many of these programs are open to all students for general study, regardless of the student's major (ex. Lithuania Christian College or Spring Semester in Thailand). In addition, Westmont has approved some programs that feature advanced study in a particular subject area, which are open only to students with a particular academic major or minor (ex. SACI program in Florence for art majors or USAC programs in Spain, Central and South America for Spanish majors). A complete list and description of programs available to Westmont students can be found on the Westmont homepage at <http://www.westmont.edu/ocp>.

# Special Programs

**W**hile Westmont is unapologetically an undergraduate institution of liberal arts and sciences and not a professional school or university, we recognize that many students will come to Westmont for a short time and transfer to other institutions for professional training. Such students will find that we offer a full selection of pre-professional programs to guide their work at Westmont.

## Pre-Engineering Program

In connection with work taken at other colleges and universities, Westmont offers a full engineering program. Graduates of this program have completed their B.S. degrees in engineering at Stanford University, Washington University, the University of Southern California, UCSB, California Poly SLO, as well as other schools.

Students complete three years of work at Westmont and usually two years at an accredited school of engineering. The program leads to the concurrent awarding of the B.S. degree (or in some cases the M.S. degree) from the chosen university and the B.A. degree from Westmont. The dual-degree major is flexible, and students may construct their own programs. Faculty recommend that students pursue a course of study in one of the sciences or mathematics while at Westmont, especially if they intend to work toward an M.S. degree. Those who plan to enter the engineering program should declare their intention no later than the beginning of the sophomore year.

Westmont general education requirements (reduced by one *Common Inquiries* area of the student's choice and by both *Competent and Compassionate Action* areas) must be fulfilled during the three years of enrollment at Westmont. There may be additional liberal arts courses required by the second institution.

Specific course requirements are listed in the Chemistry (Chemical Engineering 3-2 Program) and Engineering Physics (Engineering Physics 3-2 Program) sections of the catalog.

## Pre-Law Program

Students gain admission to law schools largely on the basis of their scores on the Law School Admission Test (LSAT) administered by the Educational Testing Service as well as their overall grade point averages as undergraduates. While there is no single prescribed undergraduate program for students contemplating a career in law, they should develop analytical skills and writing proficiency to improve their test scores and prospects for admission to law schools. The study of law requires the ability to analyze issues for effective presentation in logical sequence, training in clarity of thinking, in depth understanding of writing, and a familiarity with the legal system. Students may acquire all these skills by pre-law preparation at Westmont. Students interested in pre-legal and law-related studies should consult the pre-law adviser who will work with individuals in planning schedules.



## SPECIAL PROGRAMS

### **Pre-Medical and Pre-Dental Program**

Pre-medical and pre-dental students should indicate their professional interest and consult the pre-health professions advisor when they enter Westmont. Most students interested in pursuing medicine or dentistry find that biology, chemistry, kinesiology or psychology (neuropsychology) majors are excellent preparation. However, the American Medical Association points out that students should also have “a broad cultural background in the arts, humanities, and social sciences as well as in the biological and physical sciences.” With careful planning, almost any major can be chosen and the student will still be able to complete the medical and dental pre-requisite courses.

### **First-Year and Sophomore Student Transportation to Westmont-sponsored special R.O.T.C programs**

Because the R.O.T.C. Army program through UCSB and R.O.T.C. Air Force program through USC, UCLA, and Loyola Marymount University are Westmont-sponsored special programs, the college will ensure that first-year and sophomore students have transportation to their respective program locations. This provision is made because of restrictions in the issuance of parking permits to first-year and sophomore students. Westmont accomplishes this by the following means:

1. If a junior/senior is attending the program at the same time and has a vehicle, the college will connect the underclassmen with those with transportation.
2. If no juniors or seniors in the R.O.T.C. programs have their own transportation, Westmont will loan a college vehicle for the student to drive to the program site. The student will pay for the gas used, but vehicle rental charges will be covered by the college.

Please contact the Housing Office for more information.

### **R.O.T.C.: Army**

The military science curriculum is part of the Army Reserve Officer's Training Corps (ROTC) program at the University of California at Santa Barbara. The program leads to a commission as a second lieutenant in either the Regular Army, the National Guard or the U.S. Army Reserves. Enrollment is open to qualified male and female students at Westmont College. Students must arrange for their own transportation to attend ROTC classes at UCSB.

The ROTC program is divided into two parts: (1) two years of lower-division subjects, the basic course; and (2) two years of upper-division work, the advanced course, which is for selected students. The basic course classes are open to all interested students. No military obligation is incurred by taking these courses. Students must complete six lower-division military science courses before they can be considered for the Advanced Course. Westmont College only grants credit for the upper-division, advanced courses and the grades for these courses are included in the Westmont GPA calculation.

Students selected for the Advanced Course attend a six-week camp between their first and second year of Advanced ROTC, normally between the junior and senior years of college. Each student is given a travel allowance, and is paid for their time attending Advanced Camp. Upon obtaining a baccalaureate degree, students may be commissioned as second lieutenants in the U.S. Army. Graduates are eligible for either

active duty (full time) or part time duty with the National Guard or the U.S. Army Reserves. National Guard or Reserve duty begins following a three to six month active duty commitment to attend their Officer's Basic Course.

All ROTC instructors can advise students on academic matters, the ROTC program, and financial aid. In addition, the ROTC enrollment counselor is available for discussion of special options such as the two-year program and the scholarship program. There are two- and three-year scholarships available. Several publications, including brochures and fact sheets, are available in the department office located in Building 451 on the UCSB campus. These brochures explain the scholarship application process and the various deadlines. The Department of Military Science telephone number is (805) 893-ARMY. Their website may be found at <http://www.milsci.ucsb.edu/>

Military Science courses at UCSB for Westmont credit are:

- MS 131 Tactical Leadership (1.33)
- MS 132 Tactical Leadership II (1.33)
- MS 133 Applied Leadership (1.33)
- MS 141 Developmental Leadership I (1.33)
- MS 142 Developmental Leadership II (1.33)
- MS 143 Adaptive Leadership (1.33)
- MS 190 Advanced Military Science Field Study (2.67)

It is highly recommended that the ROTC student complete PHI 113 Contemporary Moral Problems or COM 133 Conflict and Reconciliation at Westmont to complement the courses taken in the ROTC program.

### **R.O.T.C.: Air Force**

Through arrangements with Loyola Marymount University (LMU) in west Los Angeles, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. Aerospace Studies classes and Leadership Laboratories are conducted on Fridays at the LMU main campus.

AFROTC offers a variety of two, three and four year scholarships, many of which pay the full cost of tuition, books, and fees. Successful completion of as little as four semesters of AFROTC academic classes and leadership laboratories can lead to a commission as a second lieutenant in the United States Air Force.

Classes consist of one hour of academics and two hours of laboratory for freshman and sophomores; three hours of academics and two hours of laboratory for juniors and seniors. AFROTC cadets under scholarship and all juniors and seniors receive a monthly tax-free stipend and a textbook allowance. No military commitment is incurred until entering the last two years of the program (Professional Officer Course) or accepting an AFROTC scholarship.

For more information, contact the Loyola Marymount University Department of Aerospace Studies at (310) 338-2770.

# Student Life

## **Community Life Statement. *Living in Community.*** When

When Jesus Christ summed up the way His followers were to treat each other, He said, “love one another as I have loved you” and “love your neighbor as yourself.” On a college campus, this kind of love must take into consideration the relationship between learning and community.

Affirming the qualities of this relationship is vital. As students, staff, and professors learn to live together, we recognize the dual manifestations of love in justice and mercy. We attempt to work out what it means to live justly and mercifully in common agreements such as this one. We understand that life in a college will give priority and honor to the wise development of the mind.

Given this focus, our social and intellectual growth needs freedom for exploration complemented by a commitment to good will and graciousness. Personal discipline is also required. For example, civility is basic to all types of community, while academic honesty and respect for education are fundamental to an instructional environment.

Learning depends on truth-centered attitudes. It thrives in an atmosphere of discriminating openness to ideas, a condition that is characterized by a measure of modesty toward one’s own views, the desire to affirm the true, and the courage to examine the unfamiliar. As convictions are expressed, one enters into the “great conversation” of collegiate life, a task best approached with a willingness to confront and be confronted with sound thinking.

Community is built upon other-centered practices. It flourishes in a place where love for God and neighbor is cultivated and nurtured. It grows strong when members practice integrity, confession, and forgiveness, attempt to live in reconciled relationships, accept responsibility for their actions and words, and submit to biblical instructions for communal life.

Scripture supports these attitudes and principles. It recognizes that all humans are created in the image of God and that God is the giver and taker of life, from the beginning of life to its end. It teaches us to value human presence, celebrate human creativity, and promote relationships based on the ideals of trust, compassion, and forbearance, and praises actions that manifest sacrificial giving and sincere faith. Scripture also forbids attitudes such as pride and jealousy, and prohibits such actions as drunkenness, sexual promiscuity, and dishonesty. In keeping with these standards, the Westmont community has agreed to certain guidelines in the Student, Staff, and Faculty Handbooks.

Desiring to implement the teachings of Christ, Westmont encourages true fellowship, in the whole body of Christ, including the local church, for when we love each other we imitate Christ’s love for us. As we seek to follow God in truth, certain choices make for greater peace: a respect for others as they make decisions contrary to ours, a readiness to listen carefully to those who represent situations or cultures unfamiliar to us, and a concern for how our preferences affect the lives of those around us.

We are committed to inquiry as well as pronouncement, rigorous study as well as kindred friendship, challenging teaching as well as reflective learning. Sometimes these tensions will lead to conflict. To live in unity, we must set ourselves to the practical task

of discerning daily how to love well, how to inflesh the biblical call to justice and mercy. As we do so, our life together at Westmont will begin to resemble the community God has envisioned for us.

***Behavioral Expectations.*** The Westmont community chooses, freely and willingly, to impose upon itself rules for behavior which serve both the long-range interests of the institution and the immediate good of its individual members. While we do not view these expectations as an index to maturity in Christ, we do regard violations as a serious breach of integrity within the community because each member has voluntarily chosen to associate with it and to accept its standards.

Consistent with scripture, the College establishes the following specific expectations for the trustees, administration, faculty, staff, and students of the Westmont community:

1. The College does not condone practices that Scripture forbids. Such activities include but are not limited to occult practices, drunkenness, theft, profanity, dishonesty, and sexual relations outside of marriage. Westmont further recognizes that Scripture condemns “sins of the spirit” such as covetousness, jealousy, pride, and lust. By their very nature, these sins are more difficult to discern. Because they lie at the heart of the relationship between the individual and God they are of central concern to the Westmont community.
2. The College upholds integrity as a core value of the community. Members are expected to take responsibility for their own violations of all behavioral guidelines and demonstrate commitment to the value of integrity in word and deed.
3. The College is committed to providing a learning and work environment free of harassment.
4. The College expects our members who choose to marry to abide by the commitment to lifelong heterosexual marriage, and whether single or married, to strive to maintain healthy family relationships.
5. The college upholds the laws of the local community, the nation, and the state of California that prohibit the possession or use of illegal drugs or drug paraphernalia, against purchasing or consuming alcoholic beverages by persons under the age of 21, drunkenness, and driving under the influence of alcohol.
6. The College recognizes that the use of tobacco products and alcoholic beverages presents a danger to personal health. It condemns their abuse, and raises questions about the use of tobacco and alcohol. Under no circumstances shall any member of the community use or possess these products on campus or when attending a college-related student activity.

Westmont will establish other rules and regulations necessary for orderly community life and will list them in appropriate handbooks. You will find information which further explains the specifics of the Behavioral Expectations above in the section of the Student Handbook on Westmont policies.

***Campus Pastor’s Office.*** Believing that the worship of God is at the heart of all that we are and all that we do, the Campus Pastor’s Office leads Chapel services to bring the Westmont community together to love and glorify God through prayer, music, and teaching from the Word of God. The Campus Pastor’s Office schedules outstanding speakers throughout the year to expose Westmont to

## STUDENT LIFE

outstanding orators who represent the worldwide Church. Westmont College views Chapel as an integral part of the liberal arts educational experience; therefore, Chapel attendance is mandatory. Only seniors in their final semester of attendance at Westmont are not required to attend. Chapel is held three times a week on Monday, Wednesday, and Friday from 10:30-11:20 a.m.

The Campus Pastor's Office seeks to provide spiritual nurturing and pastoral presence to the college. We offer spiritual guidance in both formal and informal settings to the entire Westmont community, as well as overseeing the Chapel program.

***The Campus Life Office.*** The Campus Life Office seeks to cultivate life long Christian leaders by providing students with relevant co-curricular programs, services and engagement opportunities that strengthen their integrity, faith and commitment to thoughtfully serve others. The CLO is responsible for Student Organization Advising, Leadership Development, Orientation and the First Year Experience, Campus Activities and Programs, and student Mission and Outreach.

Those involved with the CLO are responsible to advise, mentor, empower and support many of our student leaders. The groups they represent include the Westmont College Student Association (WCSA), the Westmont Activities Council (WAC), Spring Sing, the Orientation Team leaders (O-Team), the Potter's Clay spring break service trip to Mexico (PC), Urban Initiative (UI) and the international summer missions teams (Emmaus Road). All student leaders involved in these organizations participate in an introductory leadership training program and bi-monthly leadership lunches on relevant leadership topics.

The CLO helps students navigate their beginnings at Westmont through the Orientation program, a first-year retreat and other new student programs. Orientation welcomes new students to campus and transitions them to their new environment. In the Orientation process, students learn about the expectations and distinctives of a Westmont liberal arts education.

Finally, the CLO initiates creative programming in complement to the college mission through bi-annual focus week programs, and programs throughout the year on topics that impact the Westmont student experience.

***Intercultural Programs (ICP).*** Our office is committed to engaging the Westmont community through dialogue and initiatives around multicultural identity. We specifically focus on the exploration of racial, ethnic, and cultural identity. Believing that the call to be a redemptive and diverse community is rooted in scripture and evident in God's creation, we provide resources and support to encourage open dialogue and to develop multicultural awareness and intercultural competence. We are committed to educating our campus on the historical and current realities and benefits that come with diversity, to supporting students of color for their social and academic success, and to celebrating our different heritages and cultures for all to enjoy and appreciate. In addition to celebration, we also look to engage in educational and developmental learning around racial and ethnic identity within our society.

There are a variety of ways to get involved such as joining an Intercultural Organization (ICO), e.g. Asian Student Association, Black Student Union, Global & International Student Association, Hawaii Students Association, the Latino Cultural Organization, Multi-Ethnic Student Association, and Racial Equality and Justice. In the Fall our office

has an overnight retreat called “Connect”. Our Fall retreat allows our faculty, staff, and students involved with ICP to meet and connect. Each Spring Semester our office hosts a one-day workshop over the MLK weekend called The Next Step. This workshop looks to engage the campus community with a deeper look at racial identity and involves each of our seven Intercultural Organizations.

***Residence Life.*** As a residential college, students have many opportunities to reflect on decision-making and issues that result in growth in Christ. The residence experience also contributes to an appreciation for differing points of view and an understanding of one’s contribution to the immediate community and society at large.

The residence life staff at Westmont is committed to fostering an environment that helps students continue maturing as adults. This is an important time for students to increase their knowledge and understanding of themselves and to learn how to cope with stress and the demands of academic life in a healthy way. It is also important that students learn to develop and sustain fulfilling interpersonal relationships.

Residence halls at Westmont are designed to be challenging, fun, and healthy places to live. Students are encouraged to participate actively in their living group and to engage fully in creating an environment that is conducive to personal, spiritual, and academic growth.

***Housing.*** Every Westmont student must have an approved housing assignment, including off-campus, in order to attend the college. Only a limited number of students are granted permission to live off-campus.

The Housing Office provides services related to both on and off-campus housing, meal plans, and student parking permits. Incoming students are matched personally and prayerfully by Residence Life staff and in consideration of stated preferences on the housing application. Returning students choose their room and roommates during housing sign-ups.

The Housing Office is responsible for all residence hall furnishings and works closely with Residence Life and the Physical Plant to insure a comfortable and secure living environment. Lounge settings and study tables, kitchen appliances, laundry machines and recreational equipment are provided in each hall.

***Career Development and Calling.*** To assist our students and graduates in navigating the path from college to career with competence and confidence, The Career Development & Calling Office educates students about exploring career options and making decisions in the context of Christian worldview.

Graduates with a liberal arts and sciences degree have many choices and opportunities and, therefore, benefit by taking advantage of career services throughout their education. The Career Development & Calling Office equips students by helping them understand their own strengths, make wise decisions about majors, and begin to explore vocational alternatives. As juniors and seniors, students can participate in senior workshops (job search strategies, resume writing, and interviewing skills), graduate school investigation and personalized consultation.

Students may meet individually with a counselor at any time to assess their values, interests, personality style, and skills relative to vocational choice.

## STUDENT LIFE

The Career Development & Calling Office maintains an active job posting system for full-time, part-time, off-campus, work-study, and summer employment opportunities.

College officials encourage students to use career planning services even if they feel certain about the vocation they wish to pursue. The program helps students gain the most from their education, make informed choices that integrate their goals for life and work, and develop a vision for contributing to society.

**Student Health Center.** A mandatory health fee allows students access to services provided by the health care team which consists of a full time physician as well as a nurse practitioner and a physician's assistant. We are a full service primary care clinic, providing care to students who are ill. We also make referrals should a medical specialist be needed. The Health Center staff all have a special interest and training to work with college age students. We strive to teach students to partner with health care professionals in taking responsibility for their own health care needs. The Health Center is open weekdays during Fall and Spring semesters and during Mayterm for limited hours.

**Counseling Center.** The mission of the Counseling Center is to come alongside students in their process of becoming healthy adults, offering them a place to receive both nurture and challenge. A mandatory health fee provides short-term counseling services to students. The therapists are professionally trained, licensed, and caring individuals who have a deep commitment to their Christian faith. They treat each student with respect and dignity, upholding the professional ethic regarding confidentiality.

A variety of student concerns may be addressed in counseling, including the following: identity and self-worth, family issues, separation/transition issues, spiritual concerns, interpersonal relationships, loneliness, loss and grief, stress, anxiety, depression, suicidal thoughts, substance abuse, addictions (sex, pornography, alcohol, drugs), sexual assault, eating issues, pregnancy, sexual identity issues, communication skills, decision making, and other mental health concerns.

Counselors provide individual, couple, and group therapy approaches. For students facing more significant difficulties that are not well addressed through the short-term model of treatment, we assist students in connections with local providers for specialized / longer-term treatment options who accept their insurance plan or who provide low cost services. The Counseling Center also has a self-help library with books and pamphlets. More information and resources can be found on the Westmont Counseling Center website.

**Student Activities.** *Student Government.* The Westmont College Student Association (WCSA) is made up of the elected student representatives for the college community. WCSA is the student body voice to the Westmont community as a whole and actively pursues change in response to the expressed interests of our students. WCSA supports and provides financial accountability for campus organizations and offers supplemental funding for campus events and projects. WCSA seeks to utilize a responsible leadership structure with an emphasis on academic, communal and spiritual growth. The Campus Life Office advises WCSA.

*Student Programs.* The Westmont Activities Council (WAC) works closely with the Campus Life Office to plan social, cultural and educational events for students. WAC sponsors dances, concerts, speakers, focus weeks and many other exciting campus-wide events.

*Student Ministry and Outreach.* Emmaus Road (ER), Potter's Clay (PC) and Urban Initiative (UI) organizations encourage and facilitate student ministry and outreach opportunities in Santa Barbara, LA, San Francisco, and around the globe. The Campus Life Office advises these organizations.

**Athletics.** The Warrior athletic program is a vital component in fulfilling Westmont's commitment to a strong liberal arts and sciences education. The College provides intercollegiate competition that combines a national level of excellence with a perspective that reflects and interacts with the person and precepts of Jesus Christ. This provides a unique experience for the athlete. Westmont is a charter member of the Golden State Athletic Conference which includes the strongest athletic programs in the N.A.I.A. (National Association of Intercollegiate Athletics). Outstanding programs exist for both men and women in cross-country, track and field, soccer, tennis, and basketball. In addition, the College offers baseball for men and volleyball for women.

In all programs, determined student-athletes and dedicated coaches have worked together to achieve an outstanding record of success—measured not merely by win-loss records, but chiefly by the positive impact on the lives of the participants. Over the years, several teams have experienced the pride of being nationally ranked or the excitement of winning a championship. Yet it is often the overall personal growth of a Westmont athlete which is most dramatic.

Westmont athletics provide other opportunities for growth. Many athletes use their competitive experience to participate in international tours and short-term ministries such as Athletes in Action and Sports Ambassadors. In some instances, Westmont athletes have had the opportunity to enter professional athletics after graduating.

Westmont athletic teams have a long history and tradition of success. Warrior Sports will always be a strong part of the College's educational program.

**Westmont Intramural Program.** The intramural department offers a well-rounded program of wholesome recreational services. The wide variety of activities range from frisbee golf to basketball. Intramurals promote social interaction among students and provides an opportunity for physical activity in an organized setting. An average of 650 entries per year demonstrates the wide popularity of the Westmont intramural program.

**Commencement Participation Policy.** Participation in graduation ceremonies is a celebration of work accomplished and is reserved for those students who will complete all degree requirements by the end of the spring semester or Mayterm. A student completing degree requirements in Mayterm must be registered in the appropriate Mayterm classes by March 15.

**In extenuating circumstances only,** a student may petition the Academic Senate for an exception to this policy. The petition must be submitted to the Student Records Office by March 15 and will be reviewed according to the following guidelines:



## STUDENT LIFE

The petition must explain the extenuating circumstances that prevent the student from completing degree requirements at the end of spring semester or Mayterm.

The petition must include a written plan demonstrating how the requirements will be met during the summer immediately following the graduation ceremony.

The plan may include a maximum of eight (8) pre-approved units to be completed after commencement.

Students who exit Westmont at the conclusion of fall semester (December) will be allowed to complete a maximum of eight (8) pre-approved units during the following spring semester away from Westmont to complete remaining degree requirements and to be eligible to participate in commencement. A student completing degree requirements in Mayterm must be registered in the appropriate Mayterm classes by March 15.

Degrees for Mayterm candidates are conferred as of August; degrees will not be awarded until work is completed and grades are recorded and computed.

**Name Change.** It is the practice of the college that diplomas are always issued in the legal last, first and middle name the student uses at the time the degree is awarded. Should a student legally change his/her name while enrolled at the college and prior to graduation, the diploma will be issued in the student's legal last, first and middle name at that time. Individuals who wish to have a new legal name reflected in their educational record (transcripts, alumni records, etc.) must submit a copy of current government issued photo identification bearing their new legal name and either of the following documents: 1) a copy of his or her social security card; or 2) copy of a court order granting the name change. Official transcripts issued by the college will always be issued in the student's legal name on file with the college at the time the transcript is requested. Subsequent to leaving Westmont, if the student has notified the college of a legal name change it will be displayed as the primary name on the official transcript and the legal last, first and middle name at the time the student left Westmont (the name that appears on the student's diploma) will be displayed as the Other Name. These practices assist the college in keeping accurate, complete and responsible educational records.

# Applying to Westmont

**W**estmont selects candidates for admission from students who produce evidence they are prepared for the academic stimulation and spiritual vitality that are central to the character of Westmont. Applicants should place a high priority on undergraduate education. Living and learning in a classic liberal arts environment should be valued. Applicants should embrace a desire to connect multiethnic education and intercultural competence in their academic program; have a clear understanding of the Christian mission of the college and an explicit desire to benefit from being in and contributing to this community. Applicants should possess the strong moral character, values, personal integrity and social concern that would be in accord with the Westmont community. Recognizing the importance of peers in shaping a learning environment, Westmont gives attention in the admission process to the emerging character of each class as a whole.

The following elements will be taken into consideration when reviewing each applicant:

1. The strength of the high school academic record as reflected in the academic/honors grade point average.\*
2. Academic aptitude as reflected in SAT/ACT scores.\*\*
3. The strength of one's academic program (Honors, AP, or IB), and rank in class.
4. An explicit desire to be in a Christian college.
5. Core values such as exemplary character, honesty, respect, compassion and service should be evident.
6. A clear sense of goals for one's education as reflected in the essays.
7. Special skills in the creative and performing arts, athletics, science, journalism or other academic areas.
8. Diversity in one's background and interests.

\*The Office of Admission recalculates the grade point average of each applicant and considers the overall average, the average in academic courses and the average that includes honors, advanced placement or high level international baccalaureate courses.

\*\*Students taking only the ACT will be required to take and submit the ACT Writing Component. Westmont utilizes only the Critical Reasoning (CR) & Math (M) scores of the SAT for admission and scholarship purposes. The Writing (WR) score is used for class placement purposes.

Final decisions for admission are based on an evaluation of the entire application. It is crucial, therefore, that an admission file be an accurate and complete reflection of a candidate. Students with any suspension history regarding academics, discipline, or citizenship must present proof of clearance before an application for admission will be considered.

***I*nterviews and Campus Visits.** A visit to the campus, which can include an interview with an admission counselor, class visitations, chapel, meetings with professors and coaches and spending a night in a residence hall, is an excellent way to enhance your knowledge of Westmont. Additionally, it will aid in making the proper

college choice. Appointments for campus visits can be arranged through the Office of Admission. A one week notice is appreciated.

## How to Apply for Admission

### First-Year Students

***EARLY ACTION.*** If you are a high school senior and Westmont is one of your top choices, you may want to select the *EARLY ACTION* application plan (a non-restrictive/non-binding process). Applicants with strong records and accomplishments may find this an attractive choice. This may allow you to resolve your college choice early in your senior year and avoid the necessity of filing multiple applications. The *EARLY ACTION* plan should not be confused with early decision, a process that requires students to enroll if admitted. Under the Westmont *EARLY ACTION* plan, admitted students are not required to commit to their offer of admission until May 1, the National Candidates Reply date. Candidates not accepted for *EARLY ACTION* may be notified they will be reconsidered for admission under *REGULAR DECISION*. This will allow time for additional materials to be submitted which will strengthen the application (i.e., fall semester grades, additional SAT/ACT results, and/or interviews may be requested).

***Augustinian Honors Program.*** First-year students interested in competing for the Augustinian Scholarship must apply under the *EARLY ACTION* plans.

***Regular Decision.*** Candidates who did not apply for *EARLY ACTION* have ample time to apply for admission under the *PRIORITY DECISION* plan. All academic merit scholarships, with the exception of the Augustinian Scholarship, are available to *PRIORITY DECISION* applicants meeting the qualifications.

***Academic Requirements.*** All first year applicants are required to have a minimum of sixteen (16) academic units of credit to include:

English	4 years
Science	3 years (two years of laboratory science)
Mathematics	3 years (including at least second-year algebra)* (Algebra I taken in the 8th grade may be considered)
Foreign language	2 years of one language (Year one taken in 8th grade is accepted) (3 years recommended) (American Sign Language will be accepted for admission. However, it will not satisfy Westmont's general education language requirements.)
Social Science	2 years (history, government, sociology, political science, economics, psychology, civilization, geography)
Strong Academic Electives	(2 minimum)

Exceptional applicants not meeting one of these standards may be granted conditional admittance with the understanding that the deficient course(s) will be made up at a community college or similar institution.

All students are required to take three writing-intensive or speech-intensive courses at Westmont. One of these courses must meet the Writing for the Liberal Arts general education requirement. Many students will fulfill this portion of the requirement by:

1. taking ENG 002, Composition at Westmont
2. completing an equivalent course to ENG 002 at another college or university
3. submit a score of 4 or 5 on the AP test for Language and Composition
4. submit a score of 4 or 5 on the AP test for Literature and Composition
5. submit a score of 5, 6 or 7 on the Higher Level IB examination for English A1

## **Transfer Students**

Westmont welcomes transfer students and invites them to begin their Westmont experience for either the fall or spring semesters. Students may begin the transfer process with fewer than 24 academic transferable semester units. However, if the transfer applicant has fewer than 24 academic transferable semester units, official high school transcripts and results of either the SAT or ACT will be required.

Applicants transferring from an accredited college or university will be given credit for transferable courses for which they received a grade of C- or better. Courses with “P” grades will be accepted for elective credit only and only if the transcript indicates that a “P” grade is equivalent to a “C-” grade or higher. Courses with “P” grades will not be applied to general education or major/minor degree requirements. Exception: physical education/activity courses with a “P” grade will be applied to Westmont’s Physical Education Activity (PEA) general education requirement providing the “P” grade is equivalent to a “C-” grade or higher. The coursework must be submitted on an official transcript. Receiving credit for a course does not necessarily mean that an academic department will apply that course to the fulfillment of a major requirement or the Student Records Office will apply the course to the fulfillment of a G.E. requirement.

Following the offer of admission, the Westmont Student Records Office will make a thorough evaluation of completed coursework as it applies to the general education requirements and the overall graduation requirements. Evaluations will be completed only after receipt of an official transcript. The Student Records Office will mail the evaluation to the applicant. Typically, a minimum of three to four semesters at Westmont is required to complete all graduation requirements.

Westmont may restrict credit from a non-accredited institution and may, at the discretion of the registrar, require validation through enrolling in a related course at Westmont and receiving a minimum grade of C, or through an examination. Students must validate courses during their first year of residence at Westmont.

The College does not award credit for courses taken more than 25 years ago. Westmont limits transfer units from a community college to 64 semester units.

## Steps Required for All First-Year and Transfer Applicants

1. Complete the Common Application (commonapplication.org or the Westmont online application found at Westmont.edu/apply) and submit the \$50 online application fee as instructed. 2. Request that *official high school transcripts* for first-year applicants in all courses from ninth grade to the present, and all *official college transcripts* for transfers, be sent to the Office of Admission. Admission decisions will only be made with an official transcript. Admission decisions may be rescinded in the summer, or registration for classes may not be allowed, if an official final high school transcript is not on file. If any high school or college work is in progress at the time of application, an additional, final transcript must be sent when the work is complete.
3. Applicants must submit recommendations as instructed through the application process.

The letter must be from a teacher or professor in a core course. The letter may also come from an advisor or counselor.

Westmont also requires submission of the Common Application Supplement which describes our Christian Community and Community Life Statement.

Character references are recommended from pastors, youth leaders, employers or friends. However, they will not be used as a substitute for an academic recommendation.
4. Request that the results of either the SAT or the ACT be sent to the Office of Admission. Transfer applicants who have completed 24 or more units of transferable, semester college credit are not required to submit test scores. Transfer applicants, however, are required to submit final high school transcripts.

## Application Deadline and Notification Dates

### ***FIRST-YEAR STUDENTS FALL ENROLLMENT DEADLINES***

#### **EARLY ACTION** (*Fall Only*)

*Required for Augustinian Scholarship Consideration*

*Early Action I*

*Early Action II*

OCTOBER 15 APPLICATION DEADLINE      NOV. 15 APPLICATION DEADLINE

DECEMBER 1 NOTIFICATIONS MAILED      JAN. 1 NOTIFICATIONS MAILED

### **PRIORITY DECISION**

FEB. 15      PRIORITY APPLICATION FILING DEADLINE

MAR. 15      NOTIFICATIONS BEGIN AND CONTINUE ON A ROLLING BASIS

### ***TRANSFERS, Consortium Visitors, Reapplicants***

MAR. 15      PREFERENTIAL APPLICATION FILING DEADLINE

MAR. 30      NOTIFICATIONS BEGIN AND CONTINUE ON A ROLLING BASIS

### ***SPRING SEMESTER for TRANSFERS, Consortium Visitors, Reapplicants***

(Limited space availability - adherence to deadlines essential)

NOV. 1      APPLICATION DEADLINE

NOV. 15      NOTIFICATIONS BEGIN

**Note:** All dates are submission/postmark dates. Applications for Regular Decision may be submitted after the deadline dates. However, Westmont cannot guarantee that they will be given the same consideration as those submitted on time. After these dates, the Office of Admission will process applications on a space available basis.

Mail all application materials to:

**Office of Admissions**

**Westmont College**

**Santa Barbara, CA 93108-1089**

## Academic Merit Scholarships

**Augustinian Scholars Program** – (A \$35,000-Full-Tuition Scholarships) The Augustinian Scholarship is a four-year scholarship offered to 30 exceptionally high-achieving first-year students who qualified as President's Scholars under the Early Action plans. Furthermore, students are selected as Augustinian Scholars because they embody the personal and spiritual qualities that Westmont upholds and demonstrate a clear commitment to the Christian liberal arts. It is the highest academic honor an incoming student may receive.

**Students interested in the Augustinian Scholars program MUST apply under the EARLY ACTION I or EARLY ACTION II application plans.** Candidates are selected following the EARLY ACTION process and invitations to participate in the competition program which takes place in early February.

The Augustinian Scholarship is awarded for eight consecutive semesters at Westmont or at Westmont sponsored off-campus programs. Augustinian Scholars are required to maintain a 3.25 GPA (or 3.0 if enrolled in two or more honors classes per year).

**Academic Merit Scholarships.** These scholarships are awarded to entering first-year students and transfers who meet the specified criteria. Academic merit scholarships are based on a combination of the high school academic or honors GPA and SAT or ACT scores for first-year students and the college academic GPA for transfers. **IMPORTANT: Awards are based on the academic information submitted to the Office of Admission at the time of application completion and cannot be changed once an award is made, even if subsequent grades or test scores are higher than those previously submitted.** Awards are renewable each year provided the student maintains the required Westmont cumulative grade point average. Grades are reviewed for continued eligibility at the end of the Spring/Mayterm semester. In the event a student must leave Westmont for one semester, he/she may have the merit scholarship reinstated upon return to Westmont, if he/she has not taken college coursework elsewhere.

These scholarships are awarded upon admission and students are notified in the Offer of Admission. **These awards are available to all students meeting the requirements under both the Early Action and Regular Decision application plans.**

## First-Year Scholarships\*

(always check the Westmont website for any changes or updates)

**Augustinian Scholarship**– \$35,000 - Full Tuition for four consecutive years (competitive)

Maintenance GPA requirement at Westmont: 3.25 or higher; 3.0 if enrolled in two or more honor classes per year

**President's Scholarship**–\$20,000 per year\*\*

Maintenance GPA requirement at Westmont: 3.25 or higher; 3.0 if enrolled in two or more honor classes per year

**Provost's Scholarship**—\$16,000 per year\*\*

Maintenance GPA requirement at Westmont: 3.0 (Provost's Scholars are eligible for honors classes with permission from the Office of the Provost. If taken, the maintenance GPA is 3.00.

**Dean's Scholarship**—\$12,000 per year\*\*

Maintenance GPA requirement at Westmont: 2.75

\*Listed amounts are Fall 2015-Spring 2016 figures and are subject to change in future years for new students.

\*\*All academic scholarships are fixed amounts at the time of admission.

## **Transfer Merit Scholarships\***

**Transfer President's Scholarship**—\$13,000 per year\*\*

Maintenance GPA requirement at Westmont: 3.25 or higher; 3.0 if enrolled in two or more honor classes per year

**Transfer Provost's Scholarship**—\$11,000 per year\*\*

Maintenance GPA requirement at Westmont: 3.0 (Provost's Scholars are eligible for honors classes with permission from the Office of the Provost. If taken, the maintenance GPA is 3.00.

**Transfer Dean's Scholarship**—\$9,000 per year\*\*

Maintenance GPA requirement at Westmont: 2.75

\*Listed amounts are Fall 2015-Spring 2016 figures and are subject to change in future years for new students.

\*\*All academic scholarships are fixed amounts at the time of admission. .

**National Merit Scholarships.** Westmont is a sponsor of the National Merit Foundation and awards up to \$2,000 to National Merit Finalists. Students who are selected as National Merit Finalists may receive the Westmont Merit Scholarship if they notify National Merit that Westmont College is their first-choice school. The Westmont merit scholarship may be applied toward tuition as well as on-campus room and board.

**Cultural Diversity Awards.** In order to encourage a community of learners rich in cultural diversity, Westmont offers new first-year and transfer students (current and returning students not eligible) an opportunity to qualify for scholarships who would bring to our community the benefit of intercultural experiences and a desire to incorporate this experience into the Westmont learning environment.



## APPLYING TO WESTMONT

Cultural Diversity Awards are \$1,000 and are renewable each year as long as the recipient remains in good academic standing. These awards are competitive and students will be asked to complete an application containing two essay questions. Candidates must also demonstrate financial need to qualify. Essays are read for depth of insight into the applicant's cultural heritage and/or cross-cultural experiences. The application for the Cultural Diversity Award may be found online, check the website for deadlines and further information.

**Additional Scholarship Opportunities.** Scholarships are also available in athletics, art, dance, drama and music. Applicants interested in these programs must contact the respective office and follow the instructions for application process and deadlines.

## Additional Admission Opportunities

**Home-Schooled Students.** Westmont encourages applications from home-schooled students. Home-schooled students are recognized for the individual and unique talents and qualities they bring to the Westmont community. Home-schooled applicants are evaluated on their individual merit and specialized programs. Westmont does request a Certificate of Completion of the home-study program and proof that the program is recognized by the state where the student resides. Because the curriculum of home-schooled students varies depending on the particular program, the Office of Admission may place greater emphasis on standardized test scores, (the SAT or ACT). If the home-schooled student has enrolled concurrently in a college or university for additional classes prior to the completion of their home-study program, Westmont must have an official transcript from the institution(s) in order to apply appropriate credit. Home-schooled students may qualify for the same merit-based scholarships as do traditional high school graduates.

If the home-schooled student is applying for Federal financial aid, the State Department of Education requires them to satisfy the *Ability to Benefit* requirement in order to qualify for aid. Please visit our website for a complete list of tests that will satisfy this requirement:

([http://www.westmont.edu/\\_offices/financial\\_aid/home-school-information.html](http://www.westmont.edu/_offices/financial_aid/home-school-information.html))

**Non High School Graduates.** Applicants who have not officially graduated from high school or graduate early may still be considered for admission. However, Westmont will require these applicants to submit the results of the General Education Development (G.E.D.) Test or the High School Proficiency Examination for the state in which the student resides. Greater emphasis may be given to the SAT or ACT in these specific circumstances.

**Consortium Visitor Program Application Process.** Students enrolled at a Consortium institution who want to take advantage of The Consortium Visitor Program apply by a special application process. To be considered, begin by contacting your current institution's Registrar's Office to obtain the consortium application. Your proposed coursework for the required semester needs to

be approved by your Registrar. Following this approval, submit the Consortium Visitor application to the Westmont's Office of Admission, along with transcripts of all completed college work. In the event you have not completed 24 semester units in college, submission of an official high school transcript will be necessary. The consortium application and all supporting documents must be received in the Office of Admission by March 1 (postmarked) for fall admission, and by November 1 for spring admission. Should the application be submitted after these deadlines, the applicant will be considered on a space available basis only. Should an offer of admission be made and the applicant confirms after the deadline stated in the acceptance letter, the confirmation will be accepted on a space available basis only.

**Reapplicants.** Reapplicants are students who previously attended Westmont and have withdrawn or exited from Westmont for a semester or more and now desire to return. All reapplicants must submit an Application for Readmission to the Office of Admission. The Application for Readmission may be obtained by contacting the Office of Admission. The Application for Readmission and all supporting documents must be received in the Office of Admission by March 1 (postmarked) for fall admission, and by November 1 for spring admission. Should the reapplication be submitted after these deadlines, the reapplicant will be considered on a space available basis only. Should an offer of admission be made and the reapplicant confirms after the deadline stated in the acceptance letter, the reapplicant's confirmation will be accepted on a space available basis only. Students must submit the application and transcripts from all colleges and universities attended during the absence from Westmont. If reapplicants have attended other colleges since leaving Westmont, they must have maintained a cumulative grade point average of at least 2.0. Students will be considered for readmission only if the following additional criteria have been satisfied; all educational loans and student accounts are current and the student left Westmont in good academic and student life standing. The Office of Admission requests clearances from the Business Office, Office of Student Life and the Office of Student Records.

If a reapplicant initially left Westmont for medical reasons, they must include a statement from a doctor indicating that any health issues have been sufficiently resolved to allow a return to school.

Note: Reapplicants lose their registration priority. Registration for reapplicants will be processed after the processing of continuing students has been completed.

Note: Reapplicants will not be required to submit the \$300 confirmation deposit if the deposit remains in their student account.

**Applicants from Foreign Countries.** International students may apply using Westmont online options. The office of Admissions evaluates applicants on their academic background as shown on transcripts and through the results of the SAT or ACT and the Test of English as a Foreign Language (if the native language is other than English) with a minimum TOEFL score of 83 internet based; 220 computer based; or 560 paper based. In addition to the application form, the College requires an academic recommendation and a confidential financial statement. Financial documentation must show evidence of available funding to provide for the entire first year which includes tuition, fees, room and board. It is the applicant's responsibility to provide Westmont with certified English translations of all transcripts.

## APPLYING TO WESTMONT

In addition, the applicant will be asked to have the transcripts evaluated by a professional foreign academic credentials service at the applicant's expense.

**Non-Matriculants.** Non-matriculants are persons qualified for admission to Westmont who do not intend to work toward a degree. To be admitted as a non-matriculant, an applicant must file an application for non-matriculated status in the Student Records Office. Westmont grants admission as a non-matriculant only as its enrollment limitation, conditional use permit and facilities permit.

The College expects students who are granted admission to respect and live within Westmont's Christian Life Expectations and maintain at least a 2.0 grade point average in order to continue enrollment. Special students who later wish to apply credits toward a Westmont degree must apply for regular admission. If they are granted admission, they must get approval from the Academic Senate to apply previous credit to the degree program. They should file the petition for approval with the registrar.

**Education Program.** College graduates holding a bachelor's degree and wishing to earn a standard elementary or secondary teaching credential are welcome to apply to the Education Program. Limited enrollment is available. Students must have a grade point average of 2.75 and schedule an interview with a member of the faculty in the Education Department.

## College Credit Programs

**Advanced Placement and International Baccalaureate.** Westmont grants advanced placement and/or credit to students who present scores of 4 or 5 on the Advanced Placement Tests of the College Entrance Examination Board and for scores of 5, 6, or 7 on Higher-Level subject examinations of the International Baccalaureate Program. The College limits credit to a maximum of 32 advanced placement/IB units. Up to three Westmont-approved advanced placement exams may be applied to the general education Common Inquiries curriculum requirements. Students may petition to apply AP credit in additional Common Inquiries areas upon completing an advanced course in the area at Westmont.

**College Level Examination Program.** Westmont will give CLEP credit for scores of 500 or above for general tests and 50 or above for subject matter tests, provided students have not completed introductory college courses in those areas. Essays are required when they are available (that is, offered with the examination). CLEP credit may be applied to elective credit only.

**Community College – Courses concurrent with high school.** Students may transfer college credit earned while in high school to Westmont. They must ask the college they attended to send an official transcript to Westmont so the course work may be evaluated. The maximum transferable units accepted from a community college are 64 semester units.

**DSST (DANTES Subject Standardized Test).** Westmont will give DSST credit for scores of 400 or above for tests taken since 2008. Test taken prior to 2008 will receive credit for scores of 50 or above. DSST credit may be applied to elective credit only, provided students have not completed introductory college courses in those areas.

## Accepting Westmont Offer of Admission

**W**estmont adheres to the National Candidates Reply Date of May 1. Therefore, admitted students must submit a deposit of \$300 and a Westmont Housing Application by May 1 to reserve their space with the class. International students who require an I-20 form to obtain a student visa must confirm with a \$300 deposit and demonstrate ability to pay balance after any scholarship. The \$300 confirmation deposit is refundable with a written request up until April 30<sup>th</sup> at 5pm. **Due to Westmont's limited enrollment, deposits postmarked after May 1 could be held due to space limitations.** Deposits may be accepted after the May 1 postmark only if space is available. Deposits are not additional fees, but are credited to the student's account. After confirming, students will also receive a health questionnaire which does not require a doctor's appointment. College health insurance regulations make it necessary for every student to complete and return the health questionnaire.

Note: Reapplicants will be required to submit the \$300 confirmation deposit if their previous deposit no longer remains in their student account.

# Charges

**Community of Support.** Westmont is a non-profit corporation and receives gifts and contributions to help keep costs at a minimum. Student charges do not cover the entire cost of education at Westmont. Donations from individuals, churches, and businesses and support from Westmont's endowment make up the balance and allow the College to offer many types of financial aid (See Financial Aid section).

**Student Charges.** The charges listed below and throughout this section apply to the 2016-2017 academic year. Charges and financial policies are subject to change without notice.

	Semester	Year
Tuition	\$20,925	\$41,850
Health Fee	265	530
Technology Fee	100	200
Student Activities Fee	160	320
College Housing	4,200	8,400
Standard Meal Plan	2,555	5,110

## College Housing and Meal Plan Charges

The room rental contract allows students to occupy their rooms for the entire semester, except during the Christmas vacation period. Students may stay for any portion (or all) of spring recess, but must register in advance with their Resident Director. Students who occupy a triple room and live with two other roommates for the entire semester will receive a refund of \$220 at the end of the semester. All students residing in campus residence halls must be on a meal plan. The dining commons is open every day during each semester, except during Christmas vacation, spring recess and on Thanksgiving Day.

Only students who have registered and paid the \$300 confirmation deposit can request parking permits.

## Off-Campus Programs

Off-campus study programs are listed in the Special Programs section of this catalog. Tuition for Westmont approved off-campus programs is the same as tuition on campus (except in a few cases where tuition is higher than Westmont's tuition, in which case students are charged the higher amount). Other charges for off-campus programs vary by program and are available through the Off-Campus Programs Office or from the hosting institution. Students who participate in these programs through Westmont are considered to be Westmont students. Therefore, they are billed by Westmont and are eligible to receive financial aid through Westmont, including Westmont grants, scholarships and loans and they retain their standing and class priority for returning enrollment and class selection.

**Accessory Fees**

(This list is for information purposes only and is not intended to be all-inclusive.)

Application Fee	\$50
Art Course Fee	25-230
Audit Fee (per unit - assessed on part-time students only)	50
Class Music Instruction (weekly)	
Piano (preparatory level), 13 half-hour lessons	220
Credit by Examination Fee (per unit)	50
Late Course Add, Withdraw,	
Change Grading Option Fee (per course)	40
Minimum Initial Payment Late Fee	150
Payment Plan fee	45
Non-matriculated Student Tuition (per unit)	2,065
Parking/Semester Unrestricted Fee	150-200
Physical Education Course Fees (per semester)	80-450
Private Music Instruction	
13 45-minute lessons	675
13 one-hour lessons	830
Science Laboratory Fee (per semester)	125
Only students who have registered and paid the \$300 confirmation deposit can request parking permits.	

**Confirmation Deposit.** The \$300 confirmation deposit that is paid at the time students confirm their intent to attend Westmont is retained by the College until the last semester of attendance, when it is credited to their student accounts. The deposit is forfeited if students register for a semester and cancel before the first day of class. In such cases, a new deposit will be required in order to reenroll for a future semester.

**Billing Procedures.** The college will send you a link to your billing information via email. Each student will receive these emails at their Westmont email address, and, at other email addresses as authorized by the student. Please follow this link to activate additional email addresses:  
<http://www.westmont.edu/offices/business/>

Beginning on June 15<sup>th</sup>, fall semester billing information and financial aid will be posted to the above website. Spring charges and financial aid will be posted by December 1<sup>st</sup>. The information will be updated daily, and will reflect the status of each student's enrollment and financial aid documents at the time of inquiry. Financial aid and student charges may change subject to additional documents or actions by the student.

## CHARGES

### Financial Dates and Deadlines

Fall Semester/ Spring Semester	June 1	June 15	July 1	Aug 1	Aug 15/ Dec 15	Sept 15/ Jan 15	Oct 15/ Feb 15	Oct 31/ Mar 31
All financial aid documents are received by the Office of Financial Aid	X							
Monthly E-mail bill reminders		X	X	X				
Minimum initial payment is received by the Business Office					X			
Student Account Master Payment Agreement for new students signed by all parties is received by the Business Office					X			
2 <sup>nd</sup> Payment plan installment						X		
3 <sup>rd</sup> Payment plan installment							X	
Account balance is paid in full to qualify to register for the next semester								X

***F*inancial Aid Documents.** It is strongly recommended that all financial aid forms and documents be submitted to the Office of Financial Aid by June 1. Pending financial aid will not be accepted as a payment to meet payment deadlines. Westmont cannot accept loan proceeds as payments until students have endorsed the promissory notes or checks.

***P*ayment Schedule.** Students are required to pay at least one-third of the amount they owe for a semester (i.e., semester charges less financial aid) no later than August 15 for the fall semester and December 15 for the spring semester. Students must either pay for the semester in full or they may participate in the Payment Plan with a \$45 fee. It consists of three monthly installments due August 15, September

15, and October 15 for the fall semester and December 15, January 15, and February 15 for the spring semester. All charges must be paid in full by October 31 for the fall semester and by March 31 for the spring semester in order for students to register for the next semester. The College assesses finance charges on the unpaid portion of the beginning balance as of the end of the month at a rate equal to the amount allowed by law.

All unpaid student account balances will constitute a student loan for which students and parents are responsible according to the terms and conditions of the Student Account Master Payment Agreement. Students may not obtain grade reports, transcripts, diplomas, or participate in commencement exercises as long as they owe money or loan payments to Westmont.

***I*nternational Student Payment.** Westmont adheres to the National Candidates Reply Date of May 1. International students who have been admitted to Westmont must submit a deposit of \$300 and a Housing Application by May 1 to confirm their admission. Each International student will receive an International Student Payment Schedule for their year at Westmont College with their letter of admission confirmation. Payments should be made according to this payment schedule with additional charges paid by the end of each month. **Due to Westmont's limited enrollment, deposits postmarked after May 1 may be held on a waitlist due to space limitations.** Deposits are not additional fees but are credited to the student's account after their last semester of enrollment. Confirmation deposits held on waitlist students will be refunded if no space becomes available.

***M*inimum Initial Payment Late Fee and Cancellation of Registration.** A late payment fee of \$150 will be assessed if the Minimum Initial Payment is received by the Business Office after August 15, 2016, for the fall semester or December 15, 2016 for the spring semester. Westmont may cancel the registration of a student who does not make the Minimum Initial Payment on schedule. These students will be dropped from their classes so that students on waiting lists may fill their places. Only registered students will be allowed to occupy College housing.

***S*tudents who enroll late.** After making their Minimum Initial Payment and submitting a completed Master Payment Agreement, students who wish to initially register or re-register at or near the beginning of the semester, may register through the 5th day of the semester. After this time, they may register or add classes by petition only, and, if the College grants their petitions, they must pay a late registration fee or a late course add fee. However, if Westmont reaches its County-imposed limit on enrollment, registration will close at that time, and the College will not be able to enroll any more students.

***S*tudent Account Master Payment Agreement.** Each student and his or her guarantors must complete the Student Account Master Payment Agreement prior to their first semester at the college. This is a credit agreement that clearly defines the financial terms of paying for the services extended to the student by the college. This agreement is mandatory. Westmont may cancel the registration of a student who does not submit the Student Account Master Payment Agreement.



## CHARGES

**Appeals.** Students may ask to have their student account issues reviewed by a supervisor in the Business Office. In the event students feel their individual circumstances warrant an exception to the published policy and merit further consideration, they may appeal in writing to the Vice President for Finance.

### **Withdrawing from School/Charges and Refunds.**

Westmont makes refunds under certain conditions. Students never receive refunds of their deposits. Refunds for tuition, fees, board, and housing depend on the time the student officially exits. Students must submit an exit form to the Registrar's Office before exiting in order to receive a refund of any student charges. The exit date is set as the day the student notifies the Student Records Office that the student is leaving school.

A schedule of refunds for first-semester students is available at the Business Office, but will be no less than the schedule of refunds for continuing students which follows. A variation of the refund policy may apply for students who are federal financial aid recipients.

#### **Tuition**

<b>Time of Exit</b>	<b>Refund</b>
Prior to first day of the semester:	100%
End of week: 1	90%
2	80%
3	70%
4	60%
5	50%
6	40%
After the sixth week:	0%

#### **Fees**

Music lesson fees are not refundable after the first lesson or after the Friday of the second week of classes. All other fees per the schedule listed below.

<b>Time of Exit</b>	<b>Refund</b>
Prior to first day of the semester	100%
After first day of the semester	0%

#### **Room**

After college housing has been reserved, room cancellation will result in a \$150 fee even if the student has not yet occupied the campus housing.

An additional \$100 late fee is charged for cancellations after August 1 (for fall semester) or December 15 (for spring semester).

Furthermore, once a student occupies a campus room and then cancels it after the start of the semester, only a percentage of the entire semester room charge will be refunded less the applicable preceding cancellation fees according to the schedule below. To cancel, complete an official check out with your Resident Director.

#### **Time of Exit**

End of Week	Refund	End of Week	Refund
1	90%	8	47%
2	87%	9	40%
3	80%	10	33%
4	73%	11	27%
5	67%	12	20%
6	60%	13	13%
7	53%	14	7%

### **Meal Plan**

When a student withdraws or checks-out from a campus residence prior to the start of the meal plan—and does not use any portion of that meal plan—a 100% refund of the semester board charge is made. Otherwise, a refund is based upon the week of the withdrawal or check-out (whichever is later), detailed in the schedule above.

### **Auditing Courses - Current Students**

Westmont Students: During the first week of classes (not before) pick up an Add/Drop form from the Student Records Office in Kerrwood Hall. Obtain the signature of the instructor on the Add/Drop form and return both forms to the Student Records Office by the add/drop deadline specified in the academic calendar.

### **Members of the Public Auditing Westmont Courses**

There is currently no limit and no age or residence restriction for members of the public who wish to audit a Westmont course. During the first week of classes (not before) pick up a Non-Matriculate Application form and an Add/Drop form from the Student Records Office in Kerrwood Hall. Obtain the signature of the instructor on the Add/Drop form and return both forms to the Student Records Office by the add/drop deadline specified in the academic calendar. The current rate is \$50.00 per unit.

### **Members of the Public Registering for Fall or Spring Semester Courses for Credit**

Per the Westmont Conditional Use Permit up to five (5) part-time students who are over 25 years old and are residents of Santa Barbara County may take courses for credit in fall or spring semester. They will be billed non-matriculated student tuition at the current rate of \$2,065 per unit. See the following for more information:

<http://www.westmont.edu/offices/registrar/documents/EmployeesandPublicTakingWestmontCourses.pdf>

# Financial Aid

**Financial Aid.** Approximately eighty-five percent of Westmont students receive some form of financial aid. All students admitted to Westmont are eligible to apply for financial assistance. Students receive financial aid funds in the form of scholarships, grants, loans, and student employment.

Some forms of financial aid require a demonstration of need, although some students receive scholarships solely on the basis of merit. To determine financial need and estimate a fair family contribution, Westmont uses the nationally accepted standards and procedures of the federal government. Factors involved in evaluating family contributions include income and assets of students and parents as well as the size of the family and the number of siblings in college. The Free Application for Federal Student Aid (FAFSA) provides the necessary information and serves as the foundation of the financial aid application process. “Need” is defined as the difference between your expected family contribution (as determined by the federal formula) and the allowable educational expenses of attending Westmont (the “cost of attendance”). Students and families are advised not to rule out the possibility of financial aid because of a high income. Reapplication for financial aid is required for each year that a student attends Westmont. The typical priority application deadline is March 1 of each year. Financial aid information is subject to change. Go to [www.westmont.edu/finaid](http://www.westmont.edu/finaid) for more information.

**Scholarships.** Scholarships are based on academic performance and/or financial need. They do not require repayment. For information on Westmont’s Academic Merit Scholarships and Cultural Diversity Awards, please refer to the section: Admission to Westmont.

*Athletic Scholarships*—These are available to men and women. Student athletes should contact the Athletic Department.

*Creative and Performing Arts Scholarships*—Westmont gives awards each year in art, music, and theatre arts. Students should contact the particular department directly for more information.

*The David K. Winter Character through Servant Leadership Awards*—Details are available through the Westmont Student Life Office.

*National Merit*—Students who are selected as National Merit Finalists may receive a Westmont Merit Scholarship if they notify National Merit that Westmont College is their first-choice school by the National Merit Corporation’s deadline.

Finalists will not be eligible to receive these college-sponsored National Merit scholarships if: (1) they change their college choice from Westmont to another school; or (2) they have been chosen to receive another type of National Merit Scholarship award such as the National Merit \$2500 Scholarship, or a Corporate-sponsored Merit Scholarship.

**Grants.** Students receive grants on the basis of financial need and do not need to repay them.

*Westmont College Grants*—These grants assist students in meeting tuition costs, depending on financial need and satisfactory academic performance.

*Cal Grant A*—This state grant for California residents is based on financial need and academic performance, and new awards for 2016-2017 are scheduled to be \$9,084. Students may renew this grant if they demonstrate satisfactory academic progress, continue to demonstrate financial need, and meet income and asset guidelines as determined by the State of California.

*Cal Grant B*—This state grant for California residents ranges from \$1,656 to \$10,740. The award is intended to assist economically disadvantaged families.

*Federal Pell Grants*—These federal grants are available to eligible students who demonstrate the greatest financial need. They range from \$598 to \$5,815 for the 2016-2017 academic year.

*Federal Supplemental Educational Opportunity Grant*—This federal grant ranges from \$500 to \$1,500 per year. Pell Grant recipients are given priority for these awards.

*TEACH Grant Program* – This non-need based program provides up to \$4,000 per year (up to an aggregate amount of \$16,000) to students enrolled in an eligible program. Recipients agree to teach as a highly-qualified teacher in a high-need field. Failure to complete the required teaching service results in conversion of the TEACH Grant to a Federal Direct Unsubsidized Loan with interest accruing from the date the grant was awarded. This award will be made available only to students who have achieved junior class standing or beyond.

**Loans.** Loans are low-interest and no-interest awards that must be repaid.

*Westmont College Interest-Free Loans*—These loans are available to dependent students who are graduates of California high schools, U.S. citizens, and have established financial need. Students repay them in equal monthly installments over 10 years, beginning six months after they leave Westmont or their scheduled graduation, whichever is earlier. The minimum monthly payment is \$50.

*Federal Perkins Loan*—These loans are designed for students who demonstrate financial need. Perkins Loans are charged a five percent fixed interest rate during the repayment period, which begins nine months after students graduate, leave school, or drop below half-time enrollment. Loans range from \$2,000 to \$5,000 per year under this program, depending on the student's class standing. The minimum monthly payment is \$40.

*Federal Subsidized Direct Loan*—Applicants must show financial need. Repayment begins six months after graduating, leaving school, or dropping below half-time enrollment. The interest rate is fixed. The Subsidized Direct Loan interest rate for 2015-2016 was fixed at 4.29%. The loan proceeds are reduced by fees of less than 2%. Students who have questions concerning their loans should contact the Westmont College Office of Financial Aid. The minimum monthly payment is \$50.

*Federal Unsubsidized Direct Loan*—This non-need-based loan program has terms and conditions similar to Federal Subsidized Direct Loans, except that the borrower is responsible for interest that accrues while he/she is in school. The unsubsidized Direct Loan interest rate was fixed at 4.29% for the 2015-2016 academic year. The combination of Subsidized and Unsubsidized Federal Direct Loans for a borrower may not exceed the annual and aggregate limits for loans under the Federal Direct Loan program. The loan proceeds are reduced by fees of less than 2%.

*Federal Parent Loans for Undergraduate Students (PLUS)*—This loan program allows creditworthy parents to take out loans to help pay for the educational costs of their

## FINANCIAL AID

dependent students. The interest rate for the 2015-2016 year was fixed at 6.84%. Repayment is scheduled to begin 30 days after the second disbursement of each loan, though parents may choose to postpone repayment while their student is enrolled (interest continues to accrue). Borrowers are required to pay just over 4.25% in fees which will be deducted proportionately from each disbursement of the loan.

**Work.** *Federal Work-Study* is a federally funded work program. Students will work 7-8 hours per week during the academic year to earn the typical Work-Study award. Eligibility for Federal Work-Study is based on financial need as determined by the FAFSA. Funds earned are paid directly to students; these funds do not apply directly to the student account. There are also other campus jobs paid with Westmont funds, rather than federal funds, which are not based on need.

**Off-Campus Programs.** Off-campus programs are listed in the Special Programs section of this catalog. For financial aid purposes, tuition for off-campus programs approved by Westmont is the same as tuition charged for Westmont's on-campus students. For those programs whose tuition is higher than at Westmont, the higher amount will be charged. Other charges for off-campus programs vary by program and are available through the Off-Campus Programs office. Students who participate in these programs are considered to be Westmont students. Therefore, they are eligible to receive aid through Westmont. Students who have Westmont College grants, merit scholarships, awards and loans may use them for ONE PROGRAM ONLY at a Westmont-approved off-campus program, (i.e. approved by Westmont, but not taught by Westmont faculty). All financial aid including Westmont institutional grants, merit scholarships, etc., will be available for any Westmont taught programs (e.g.: Europe, England, Mexico and San Francisco).

Students who choose to access off-campus programs directly and do not go through Westmont will not be eligible for financial aid through Westmont. They will need to apply for re-admission to Westmont upon their return.

## How to Apply for Aid

**Complete and submit a FAFSA form by March 1 to receive priority consideration.** The Westmont College code number is 001341. The FAFSA is available on the FAFSA website ([www.fafsa.gov](http://www.fafsa.gov)). Student and parent will each need a Federal Student Aid ID (FSA ID) and password to sign electronically. Apply for the FSA ID at <http://fsaid.ed.gov>.

California residents who have *not* previously been awarded a Cal Grant A or B must carefully review the instructions before completing the FAFSA and completely answer the state residency questions. New Cal Grant applicants must submit a Grade Point Average Verification Form which must be submitted to the California Student Aid Commission. The deadline for submitting both this form and the FAFSA is March 2. Information about this application process is available at your high school, college, or at Westmont College.

**Rights and Responsibilities.** Westmont will not make an offer of financial aid until the College has made a decision about admission. If students receive aid, they are expected to enroll full-time, complete a minimum of 75% of the

units attempted (66.7% for students with freshman standing), and maintain a grade-point average at Westmont of 2.0 (“C”) or better.

A student is eligible for a maximum of eight semesters of Westmont aid or until degree requirements are completed, whichever comes first. Transfer students receive aid on a prorated basis, based on the number of units transferred at the time of admission to Westmont. Most forms of aid are not available to students pursuing a second B.A. and/or B.S. degree.

Westmont graduates entering the 5th year education program in the fall semester may be eligible for the same Westmont institutional aid package that they were eligible for prior to graduating. This aid would be for fall only and applies to both merit-based and need-based (according to the FAFSA) aid. Students may lose some eligibility for Federal and State aid.

Students entering the 5th year education program with a bachelor’s degree from another institution will be considered for aid in the same way as a transfer student.

The College applies aid to students’ accounts once each semester. Students who drop below the minimum academic load or withdraw from school may be required to repay a prorated amount of the semester’s aid. Any decision of the Financial Aid Office, including the amount of aid or denial of aid, may be appealed.

**Renewal of Aid.** Westmont offers need-based financial aid for one year at a time. Renewal is subject to continued financial need and satisfactory academic progress. Eligibility for need-based aid may change from year to year based on changes in a family’s financial situation, as determined by the results of the FAFSA. Students who desire aid (other than merit scholarships) must complete the FAFSA annually.

Federal and state regulations require that eligibility for financial aid (e.g., Pell Grants, Federal Student Loans, Work-Study, Cal Grant, etc.) be determined based only on courses that are required to complete one’s degree program. Students are strongly encouraged to check with the Financial Aid Office to determine the effect of enrollment in courses beyond those required for one’s degree. To be considered full-time, a student must be enrolled in at least 12 units of coursework that are required for completion of the academic program.

A veteran or eligible V.A. benefit recipient who remains on probation for grade point deficiency below a 2.0 cumulative GPA beyond two semesters, will have his/her veteran’s benefits discontinued and any further certification of benefits terminated.

**Refund Policy.** Students who withdraw from Westmont must notify the Student Records Office to start the process. Those with Federal Student Aid funds will be notified if any of those funds need to be returned.

The Institutional Refund policy is different than the Federal Title IV Refund policy. See the “Charges” section in this catalog for information on the institutional refund.

The refund policy for Cal Grants is the same as the Westmont Institutional Refund policy.

**Scholarships.** The scholarship funds listed below have been made available through generous contributions from alumni, parents, and friends of the college. These scholarships represent a portion of the total financial aid budget each year. Many of these scholarships help fund Westmont College Academic Merit

## FINANCIAL AID

Scholarships, Westmont College grants, and talent awards. The Financial Aid Office can provide information about scholarship applications, though most scholarships do not require one.

Abernethy Endowed Scholarship  
Bruce and Janet Adams Scholarship Endowment  
Denise Adams Art Scholarship  
Ahmanson Foundation Collegiate Scholarship Program  
Steven and Linda Allen Scholarship  
Don Anderson Endowed Scholarship  
Esther Anderson Memorial Scholarship  
Anodos Scholarship Endowment  
Richard Archer Memorial Scholarship  
Richard Reed Armstrong Scholarship in Art  
Augustinian Scholars Program  
George Bate Physics Scholarship  
W.F. & Marie A. Batton Foundation Scholarship Endowment  
Carl and Mary Bauer Scholarship  
Cliff Benton Freshman Chemistry Scholarship  
Kathryne Beynon Foundation Scholarship  
David and Barbara Biehl Heritage Club Scholarship  
Blenders History Leadership Award  
George Blount Scholarship  
Brightstar Scholarship  
Bert and Mona Brown Endowment Scholarship  
Burns Endowed Athletic Scholarship  
Carl Byers Family Scholarship  
Cain & True Family Scholarship Endowment  
Keith & Debra Cantrell Scholarship Endowment  
The Russ and Sue Carr Family Endowed Scholarship  
Gordon M. and June M. Caswell Endowed Scholarship Fund  
Cobb Foundation Scholarship  
Joe and Alice Cox Endowed Scholarship  
Hugh and Hazel Darling Foundation Scholarship  
Davenport Family Scholarship  
Nick Davis Memorial Scholarship Endowment.  
Deming Endowed Music Fund  
Downing Street Foundation Women's Scholarship  
Eldred Scholarship  
Emelco Foundation Scholarship  
Dr. Stewart Ensign Biology Scholarship Endowment  
Leonhard Euler Award  
Paula Fenner Scholarship Fund  
Morris S. and Barbara Ludwig Ferguson Scholarship  
William and Marcia Fochler Scholarship  
John R. and Wandalee Fullerton Scholarship Endowment  
Franklin Science and Mathematics Scholarship  
Judkins-Mooty Family Scholarship

Judy Lynn Gaede Scholarship Endowment  
Khoren A. Gagosian Memorial Scholarship Endowment  
Gebert Christian Athlete Scholarship  
Goble Family Scholarship Endowment  
Bev Goehner Memorial Scholarship Endowment  
Regina Gor Memorial Scholarship  
David and Anna Grotenhuis Scholarship  
Grotenhuis Diversity Restricted Scholarship  
The Hahner Scholarship  
Vernon L. Hall Endowed Fund  
Gary F. and Frank L. Hieronymus Scholarship Fund  
Helen Hieronymus Scholarship  
Ardis O. Higgins Music Endowed Scholarship  
Clarence Hinkle Art Scholarship Fund  
Claire Brossoit Hoffner French Scholarship  
Claire Brossoit Hoffner Math Scholarship  
Grace Hopper Award  
Chet Kammerer Men's Basketball Scholarship Endowment  
Hattie Kauffman Grant Scholarship Endowment  
Bill Kerr Memorial Trustee Scholarship Fund  
Ruth Kerr Memorial Scholarship  
Kim Kihlstrom Computer Science Scholarship Endowment  
Tim and Becky Kimmel Baseball Scholarship  
Louis and Thressa Kuipers Scholarship Endowment  
Robert W Kummer Jr Scholarship Fund  
Vincent and Frances LaBarbera Scholarship  
Landmark Global Scholarship  
Brian Lightner Memorial Scholarship  
Dr. John Lundberg Music Scholarship Endowment  
Lundberg Endowed Soccer Scholarship  
Arthur Lynip Award  
Donna Dillon Manning and Larry Horner Study Abroad Scholarship Endowment  
Phyllis Martin Fine Arts Scholarship  
Noel Matthews Memorial Scholarship  
David and Jane Maynard Scholarship  
George H. Mayr Endowed Scholarship  
Mays Family Scholarship Endowment  
McIntyre Family Art Scholarship  
Emma K. McKee Endowed Scholarship  
Ruth McKee Scholarship  
Reese Marie McRaven Memorial Scholarship Endowment  
Melin Family Scholarship Fund  
Paul Raymond Miller Scholarship Fund  
Geraldene Morey Scholarship Endowment  
Monroe Scholarship  
Shirley A. Mullen Scholarship Endowment  
John and Grace Naftel Scholarship  
Kenon R. Neal Memorial Scholarship Endowment



## FINANCIAL AID

Newcomb Family Scholarship Endowment  
Wes Nishimura Memorial Art Scholarship  
Orfalea Family Scholarship  
Dr. John Padilla Memorial Scholarship Endowment  
John and Isabella Parks Memorial Fund  
Bert A. and Virginia A. Perle Endowed Scholarship  
Valerie Lynn Pfeiffer Memorial Scholarship Endowment  
Bretten Drake Pickering Scholarship  
Roger R. Post Memorial Scholarship Endowment  
Edwin J. Potts Diversity Scholarship  
Gladys L. Quackenbush Scholarship  
Robert and Mary Quackenbush Scholarship  
Sheila Richards Scholarship Endowment  
Lord and Lady Ridley-Tree Scholarship  
Ridley-Tree Endowed Scholarship  
Sue Savage Art Scholarship  
Schuele Family Scholarship  
Senior Challenge Scholarship  
Perry and Margaret Shirley Endowed Scholarship  
Dorothy M. Shoemaker Memorial Scholarship Fund  
Harold & Annette Simmons Scholarship Endowment  
Jon W. Simons Current Scholarship  
Dwight Hervey Small Scholarship  
Alyssa Smelley Memorial Scholarship Endowment  
Ron Smith Memorial Scholarship  
Carol K.S. Chung Song Scholarship  
Southern California Edison STEM Scholarship  
David and Carolyn Spainhour Scholarship Endowment  
Rose Marie Springer Award  
David Stadsklev Scholarship Endowment  
James L. Stamps Foundation Scholarship  
John Stauffer Memorial Scholarship  
Thorrington Men's Soccer Scholarship Endowment  
Track & Field and Cross-Country Scholarship Fund  
Gayle and Ruth Tucker Scholarship Endowment  
Alice Tweed Tuohy Foundation Scholarship  
Tuohy Foundation Ambassadors Scholarship  
William Visick Scholarship Fund  
Myatt and Mary Genevieve Volentine Endowed Scholarship  
Kim Wainwright Scholarship Fund  
C. Eugene Walker Award  
Warrior Sports Endowed Scholarship  
John G. Watts Scholarship  
Robert N. Wennberg Philosophy Scholarship Endowment  
John E. and Barbara L. Wertin Scholarship  
Westmont Carpinteria High School Scholarship Fund  
Westmont Foundation Scholarship  
Dorothy Westra Scholarship

William Jae Wiersma Memorial Scholarship Endowment  
Paul and Doris Wilt History Research Award Fund  
David K. Winter Servant Leadership Scholarship

# Personnel

## Board of Trustees

### **Peter Thorrington (Chair)**

B.S., University of Natal  
M.B.A., University of Cape Town  
*Director*  
*Opportunity International*  
Palos Verdes Estates, CA

### **Mike Allen**

B.B.A., University of Oklahoma  
*President*  
*Providence Energy Corp.*  
Dallas, TX

### **Gayle Beebe**

B.A., George Fox University  
M.Div., Princeton Theological  
Seminary  
M.B.A., Claremont Graduate  
University  
M.A., Claremont Graduate University  
Ph.D., Claremont Graduate  
University  
*President*  
*Westmont College*  
Santa Barbara, CA

### **Bruce Bickel**

B.A., University of Redlands  
J.D., University of California  
*Attorney/Private Fiduciary*  
Fresno, CA

### **Edward Birch**

B.A., New York University  
M.A., Ohio University  
M.B.A., Ohio University  
Ph.D., Michigan State University  
*CFO, Union Bank*  
Santa Barbara, CA

### **Richard Fogg**

B.A., Westmont College  
J.D., University of Washington  
*Chairman/Partner, Chronicle Family*  
*Offices, LLC*  
Santa Barbara, CA

### **Dave Gehring**

B.A., Westmont College  
*Vice President Partnerships, Advisor*  
*Guardian News & Media*  
Palo Alto, CA

### **Roy Goble**

B.A., Westmont College  
*Owner/General Partner*  
*Goble Properties*  
Livermore, CA

### **Don D. Goehner**

B.A., Westmont College  
M.B.A., Pepperdine University  
*President*  
*The Goehner Group*  
San Jose, CA

### **G. Walter Hansen**

B.A., Wheaton College  
M.Div., Trinity Evangelical Divinity  
School  
Th.D., University of Toronto  
*Professor Emeritus of New Testament*  
*Interpretation*  
*Fuller Theological Seminary*  
Chicago, IL

### **Allen Hopkins**

B.A., Westmont College  
M.A., San Diego State University  
*Consulting Advisor/Real Estate*  
West Hills, CA

**Carol A. Houston**

B.A., University of Denver  
*Senior Pastor*  
*Bethel Unspeakable Joy Church*  
 Los Angeles, CA

**Helga Houston**

B.A., Westmont College  
 M.B.A., University of Southern  
 California  
*Chief Risk Officer*  
*Huntington Bancshares Inc.*  
 Columbus, OH

**Denise Jackson**

B.A., Westmont College  
 M.B.A., American University  
*Employee Relations Director*  
*Career Education Corp*  
 Pasadena, CA

**Robert E. Kates**

Pharm.D., University of California,  
 San Francisco  
 Ph.D., University of California, San  
 Francisco  
*Investor/Consultant*  
*Biomedical Research*  
 Santa Barbara, CA

**Timothy B. Keith**

B.A., Westmont College  
*Texas Central Partners*  
 Dallas, TX

**Patricia Martin**

B.A., San Jose State University  
 M.A.Ed., Notre Dame de Namur  
 University  
 M.A.C.P., Notre Dame de Namur  
 University  
*Community Volunteer*  
 Woodside, CA

**Thomas L. Nelson**

B.A., Azusa Pacific University  
 M.A., Point Loma Nazarene College  
*Certified Financial Planner*  
 Ventura, CA

**Vincent Nelson**

B.A., Westmont College  
 M.B.A., Columbia University  
*Investor*  
 Alamo, CA

**Tom Nguyen**

B.S., Pepperdine University  
 M.B.A., Kellogg Graduate School  
*Managing Director, Head of US Sales*  
*CICC*  
 Rye, NY

**Robert Nicholson**

B.A. Stanford University  
*Senior Financial Advisor*  
*Ameriprise*  
 Stockton, CA

**Roxanne Packham**

B.A., University of Southern  
 California  
*Interior Designer*  
*Sunset and Magnolia*  
 Camarillo, CA

**Jim Richardson**

B.A., Claremont McKenna College  
*Investor/Consultant*  
*Alexandria Real Estate Equities, Inc.*  
 Belmont, CA

**Sharon Rose**

B.A., Westmont College  
 M.B.A., Claremont Graduate  
 University  
 J.D., University of California, Davis,  
 School of Law  
*Attorney at Law*  
*Sidley Austin LLP*  
 Washington, D.C.

**Jack Sinclair**

B.A., University of Strathclyde  
*Chief Merchandising Officer, 99*  
*Cents Only Stores*  
 Los Angeles, CA

**Verne Sharma**

B.S., University of the West Indies  
 M.B.A., University of Pennsylvania  
*Retired*  
 Miami, FL

## PERSONNEL

### **Steve Stong**

B.A., Westmont College  
M.B.A., Harvard University  
*President*  
*Steven Label Corporation*  
Santa Fe Springs, CA

### **Lynne M. Tahmisian**

B.A., Westmont College  
*President*  
*La Arcada Investment Corporation*  
Santa Barbara, CA

### **Mitchell Vance**

B.S., University of Oregon  
*General Partner*  
*TGV Partners*  
Newport Beach, CA

### **Celeste Keith White**

B.S., Westmont College  
*President*  
Lux ForumNapa, CA

### **Steve Yamaguchi**

B.A., Westmont College  
M.Div., Princeton University  
D.Min., Claremont School of  
Theology  
*Dean of Students*  
*Fuller Theological Seminary*  
Long Beach, CA

### **Mark Zoradi**

B.A., Westmont College  
M.B.A., University of California,  
Los Angeles  
*CEO*  
*Cinemark Holdings Inc.*  
Burbank, CA

## Trustees Emeriti

**Merlin Call**

Pasadena, CA

**Dennis Cope**

Simi Valley, CA

**Renée Curtis**

Santa Barbara, CA

**Maggie Dorsey**

Mercer Island, WA

**David Eaton**

Phoenix, AZ

**David Eldred**

Santa Barbara, CA

**Gary Harris**

Santa Barbara, CA

**Edward Hayes**

Santa Barbara, CA

**Dean Hirsch**

Monrovia, CA

**John H. Jenks**

Palo Alto, CA

**Phyllis Marble**

Santa Barbara, CA

**Ed Miller**

Whittier, CA

**Marjorie Petersen**

Santa Barbara, CA

**Gil Sheffield**

Chester, CA

**Jim John Slevcove**

Laguna Woods, CA

**David W. Spainhour**

Santa Barbara, CA

## Executive Team

**Gayle D. Beebe, Ph.D.**

*President*

**Christopher D. Call, J.D.**

*Vice President for Administration and for  
Research, Planning and Implementation*

**Douglas W. Jones, C.P.A., M.B.A.**

*Vice President of Finance*

**Mark L. Sargent, Ph.D.**

*Provost*

**Edee Schulze, Ph.D.**

*Vice President of Student Life and  
Dean of Students*

**Reed L. Sheard, Ed.D.**

*Vice President for College Advancement and  
Chief Information Officer*

## Faculty

**Gregg H. Afman (1999)** *Professor of Kinesiology*

B.A., Calvin College  
M.A., Central Michigan University  
Ed.D., Brigham Young University

**Scott Anderson (2006)** *Professor of Art*

B.A., Willamette University  
M.A., Syracuse University  
M.F.A., University of Hartford

**Karen M. Andrews (1994)** *Associate Professor of Urban Studies and English*

B.A., Westmont College  
M.A., Ph.D., Claremont Graduate University

**Martin A. Asher (2016)** *Professor of Economics and Business*

B.A., Stanford University  
M.A., Ph.D., University of Pennsylvania

**Gayle D. Beebe (2007)** *President and Professor of Philosophy of Religion and Theology*

B.A., George Fox University  
M.Div., Princeton Theological Seminary  
M.B.A., M.A., Ph.D., Claremont Graduate University

**Holly Beers (2012)** *Assistant Professor of Religious Studies*

B.A., North Central University  
M.A.T.S., Bethel Seminary  
Ph.D., London School of Theology

**Bradford S. Berky (1990)** *Director of the Westmont in San Francisco Program and Assistant Professor of Urban Studies*

B.A., Gordon College  
M.Div., Fuller Theological Seminary

**John D. Blondell (1989)** *Professor of Theatre Arts*

B.A., Winona State University  
M.A., Ph.D., University of California, Santa Barbara

**M. Grey Brothers (1994)** *Professor of Music*

B.S., University of California, Davis  
M.A., Ph.D., University of California, Santa Barbara

**L. Steve Butler (1995)** *Professor of Music*

B.A., College of Charleston  
M.M., D.M.A., University of South Carolina

**Kristi Lazar Cantrell (2011)** *Assistant Professor of Chemistry*

B.S., Westmont College  
M.S. Princeton University  
Ph.D. University of Chicago

**Dinora C. Cardoso (2008)** *Professor of Spanish*

B.A., Calvin College  
M.A., University of South Florida  
Ph.D., University of Texas



## PERSONNEL

**Alister C. S. Chapman (2004)** *Professor of History*

B.A., M.A., M. Phil., Ph.D., University of Cambridge

**Mary B. Collier (1981)** *Professor of French*

B.A., M.A., University of California, Santa Barbara

Ph.D., Université de Paris-Sorbonne

**Stephen M. Contakes (2007)** *Associate Professor of Chemistry*

B.S., Lehigh University

Ph.D., University of Illinois, Urbana-Champaign

**Jesse D. Covington (2007)** *Associate Professor of Political Science*

B.A., Pepperdine University

M.A., Westminster Theological Seminary

M.A., Ph.D., University of Notre Dame

**Lisa J. De Boer (1999)** *Professor of Art History*

B.A., Calvin College

M.A., Ph.D., University of Michigan

**Paul W. Delaney (1972)** *Professor of English*

B.A., Asbury College

M.A., Ph.D., Emory University

**Mary K. Docter (1992)** *Professor of Spanish*

B.A., M.A., Ph.D., University of California, Los Angeles

**Deborah S. Dunn (1997)** *Professor of Communication Studies*

B.A., California State University, San Francisco

M.A., Ph.D., University of Southern California

**Leonor A. Elías (1999)** *Associate Professor of Spanish*

B.A., Middlebury College, Vermont

M.A., Middlebury College, Madrid

Ph.D., University of Texas, Austin

**Michael Everest (2011)** *Professor of Chemistry*

B.S., Wheaton College, Illinois

Ph.D., Stanford University

**Charles E. Farhadian (2004)** *Professor of World Religions and Christian Mission*

B.A., Seattle Pacific University

M.Div., Yale University

Ph.D., Boston University

**Bruce N. Fisk (1999)** *Professor of New Testament*

B.S., Philadelphia College of Bible

M.A., M.Div., Trinity Evangelical Divinity School

Ph.D., Duke University

**Elizabeth Gardner (2016)** *Assistant Professor of Communication Studies*

B.A., Houghton College

M.A., Ph.D., University of Maryland, College Park

**Robert H. Gundry (1962)** *Scholar-in-Residence, Religious Studies*

B.A., B.D., Los Angeles Baptist College & Seminary

Ph.D., University of Manchester

**Andrea G. Gurney (2005)** *Associate Professor of Psychology*

B.A., Wheaton College

M.S., University of Pennsylvania

Ph.D., Northeastern University

**Michelle Hardley (2000)** *Registrar*

B.S., Westmont College

M.S., California Lutheran University

**Elizabeth Hess (2002)** *Adjunct Assistant Professor of English*

B.A., Westmont College

M.A., University of California, Santa Barbara

**Carrie Stein Hill (2008)** *Instructor of Chemistry*

B.S., Westmont College

M.S., University of California, Irvine

**Steven R. Hodson (1996)** *Professor of Music*

B.Mus.Ed., Lewis and Clark College

M.Mus.Ed., University of Oregon

D.Mus.A., University of Colorado

**Christian W. Hoeckley (1997)** *Director of the Gaede Institute for the Liberal Arts*

B.A., Biola University

Ph.D., Claremont Graduate University

**Elizabeth A. Horvath (1990)** *Associate Professor of Biology*

B.A., Westmont College

M.S., California State University, Long Beach

**Russell W. Howell (1978)** *Kathleen Smith Chair of the Natural & Behavioral Sciences,  
Professor of Mathematics*

B.S., Wheaton College

M.Sc., University of Edinburgh

Ph.D., The Ohio State University

**Nathan Huff (2013)** *Assistant Professor of Art*

B.A., Azusa Pacific University

M.F.A., California State University, Long Beach

**Michelle C. Hughes (2009)** *Associate Professor of Education*

B.A., Westmont College

M.A., California State University, Northridge

Ph.D., George Fox University

**David J. Hunter (2000)** *Professor of Mathematics*

B.S., University of Illinois

M.S., Ph.D., University of Virginia

**Patti Wilger Hunter (2000)** *Vice Provost and Professor of Mathematics*

B.S., Westmont College

M.S., Ph.D., University of Virginia

**Wayne F. Iba (2003)** *Professor of Computer Science*

B.A., University of California, Santa Cruz

M.S., Ph.D., University of California, Irvine

## PERSONNEL

**Rick Ifland (2012)** *Associate Professor of Economics and Business and Director of the Eaton Program for Entrepreneurship and Innovation*

B.A., Westmont College

M.B.A., University of Kentucky

MSt., Oxford University

**Thomas D. Jayawardene (1988)** *Professor of Sociology*

B.A., M.A., Pontifical Urbaniana University

M.Phil., National Seminary of Sri Lanka

Ph.D., University of Surrey

Ph.D., International University

**Sarah L. Jirek (2014)** *Assistant Professor of Sociology*

B.A., Westmont College

M.S.W., Ph.D., University of Michigan

**Steven M. Julio (2006)** *Associate Professor of Biology*

B.S., Westmont College

Ph.D., University of California, Santa Barbara

**Heather Keaney (2011)** *Associate Professor of History*

B.A., Westmont College

M.A., Ph.D., University of California, Santa Barbara

**Lauren Kelley (2014)** *Outreach and Instruction Librarian*

A.A., Ventura College

B.A., California State University, Channel Islands

M.L.I.S., San José State University

**Kenneth E. Kihlstrom (1984)** *Professor of Physics*

B.S., M.S., Ph.D., Stanford University

**Han Soo Kim (2013)** *Assistant Professor of Music*

B.M., M.M., The Julliard School

D.M.A., Stony Brook University

**Thomas B. Knecht (2009)** *Associate Professor of Political Science*

B.A., Stanford University

M.A., Ph.D., University of California, Santa Barbara

**Cheri Larsen Hoeckley (1997)** *Professor of English*

B.A., University of California, Riverside

M.A., University of Texas, Austin

Ph.D., University of California, Berkeley

**Judy L. Larson (2008)** *R. Anthony Askew Chair of Art History; Director of the Westmont Museum of Art*

B.A., M.A., University of California, Los Angeles

Ph.D., Emory University

**Mary Logue (2000)** *Interim Director of Vosknyl Library*

B.A., Westmont College

M.L.I.S., San José State University

**Tremper Longman, III (1998)** *Robert H. Gundry Chair of Biblical Studies, Professor of Old Testament*

B.A., Ohio Wesleyan University  
M.Div., Westminster Theological Seminary  
M.Phil., Ph.D., Yale University

**Chandra S. Mallampalli (2001)** *Professor of History*

B.A., Gustavus Adolphus College  
M.Div., Fuller Theological Seminary  
M.A., Ph.D., University of Wisconsin, Madison

**R. Enrico Manlapig (2014)** *Associate Professor of Economics and Business*

B.A., University of Queensland  
M.A., M.Phil., Ph.D., Columbia University

**Carmen McCain (2016)** *Assistant Professor of English*

B.A., Messiah College  
M.A., Ph.D., University of Wisconsin-Madison

**Eileen McMahon McQuade (2004)** *Associate Dean of the Faculty and Professor of Biology*

B.S., Eckerd College  
Ph.D., University of North Carolina

**Christine C. Milner (1978)** *Associate Professor of Kinesiology*

B.A., Biola University  
M.S., University of Oregon

**Jonathan Mitchell (2016)** *Associate Professor of Physics*

B.S., Westmont College  
M.S., Ph.D., The University of Chicago

**Gary Moon (2011)** *Director of the Martin Institute for Christianity and Culture and the Dallas Willard Center*

B.A., M.A., University of Georgia  
M.Div., Ph.D., Fuller Theological Seminary

**John G. Moore (1993)** *Associate Professor of Kinesiology; Head Coach, Men's Basketball*

B.A., Westmont College  
M.A., Azusa Pacific University

**Jana Mayfield Mullen (2001)** *Digitization and Instruction Librarian*

B.A., Morris Harvey College  
M.Div., Southeastern Baptist Theological Seminary  
Ph.D., Southern Baptist Theological Seminary  
M.L.I.S., University of Kentucky

**Andrew D. Mullen (2001)** *Professor of Education*

B.A., Houghton College  
M.A.T., Colorado College  
Ph.D., Columbia University

**Tatiana Nazarenko (2010)** *Dean of Curriculum and Educational Effectiveness*

M.A., Ph.D., Kiev National University  
M.Ed., University of Washington  
Ph.D., University of Alberta

## PERSONNEL

**Mark T. Nelson (2006)** *Kenneth and Peggy Monroe Chair of Philosophy, Professor of Philosophy*

B.A. Wheaton College

M.A., Ph.D., University of Notre Dame

**William B. Nelson, Jr. (1986)** *Professor of Old Testament*

B.A., Westmont College

M.A., Institute of Holy Land Studies, Jerusalem

M.Div., Princeton Theological Seminary

M.A., Ph.D., Harvard University

**Edd S. Noell (1986)** *Professor of Economics & Business*

B.A., Texas Tech University

M.B.A., University of Texas, Austin

Ph.D., Louisiana State University

**Ogechi Nwaokemeleh (2015)** *Assistant Professor of Kinesiology*

B.S., University of Texas

M.S., Howard University

Ph.D., University of Massachusetts

**Ruben “Tito” Paredes (2012)** *Professor of Anthropology*

B.A., University of California, Berkeley

M.A., University of California, Los Angeles

M.Div., Fuller Theological Seminary

Ph.D., University of California, Los Angeles

**Donald J. Patterson (2015)** *Associate Professor of Computer Science*

B.S., M.Eng., Cornell University

Ph.D., University of Washington

**Susan E. Penksa (1997)** *Professor of Political Science*

B.A., Gordon College

M.A., Ph.D., Miami University

**Richard W. Pointer (1994)** *Fletcher Jones Foundation Chair in the Social Sciences, Professor of History*

B.A., Houghton College

M.A., Ph.D., Johns Hopkins University

**Bridget Quanstrom (2014)** *Instructor of Biology*

B.S., Westmont College

M.P.H., University of South Florida

**Caryn A. Reeder (2007)** *Associate Professor of Religious Studies*

B.A., Augustana College

M.A., Wheaton College

M.Phil., Ph.D., University of Cambridge

**Helen Rhee (2004)** *Professor of Religious Studies*

B.A., University of California, Berkeley

M.Div., Fuller Theological Seminary

Ph.D., Fuller Theological Seminary

**Marianne A. Robins (1996)** *Professor of History*

B.A., M.A., Ph.D., University of Paris I–La Sorbonne

**Steven A. Rogers (2006)** *Associate Professor of Psychology*

B.S., Eastern Nazarene College

M.A., Ph.D., Fuller Theological Seminary

**Warren F. Rogers (1994)** *Professor of Physics*

B.S., Harvey Mudd College

M.A., Ph.D., University of Rochester

**C. Ray Rosentrater (1980)** *Professor of Mathematics*

B.A., Messiah College

M.Sc., University of Toronto

M.A., Ph.D., Indiana University

**Carmel S. Saad (2012)** *Assistant Professor of Psychology*

B.A., University of California, Santa Barbara

M.A., Ph.D., University of California, Davis

**Mark L. Sargent (2011)** *Provost and Professor of English*

B.A., University of California, Santa Barbara

M.A., Ph.D., Claremont Graduate University

**Jeffrey P. Schloss (1981)** *T.B. Walker Chair in the Natural & Behavioral Sciences,*

*Distinguished Professor of Biology*

B.S., Wheaton College

Ph.D., Washington University

**Austin Scirratt (2016)** *Assistant Professor of Mathematics*

B.S., Baylor University

M.S., Ph.D., Louisiana State University

**Ronald E. See (2015)** *Professor of Psychology*

B.A., University of California, Berkely

M.A., Ph.D., University of California, Los Angeles

**Serah Shani (2016)** *Assistant Professor of Anthropology*

B.A., Daystar University, Nairobi, Kenya

M.A., Indiana University of Pennsylvania

M.Phil., Ph.D., Columbia University

**Michael D. Shasberger (2005)** *Adams Chair of Music and Worship, Professor of Music*

B.A., St. Olaf College

M.A., University of Redlands

D.M.A., University of Southern California

**Amanda L. Silberstein (2015)** *Assistant Professor of Chemistry*

B.S., California Institute of Technology

Ph.D., University of California, Los Angeles

**Sarah L. Skripsky (2008)** *Associate Professor of English*

B.A., Northwestern College

Ph.D., Texas Christian University

**Russell C. Smelley (1979)** *Professor of Kinesiology; Head Coach, Track and Field, and Cross Country*

B.A., M.Ed., University of Richmond

## PERSONNEL

**Brenda S. Smith (1989)** *Professor of Psychology*

B.A., Calvin College

M.A., Ph.D., Wayne State University

**H. Michael Sommermann (1985)** *Professor of Physics*

V.D., Universität Würzburg

M.S., Ph.D., State University of New York, Albany

**Felicia W. Song (2013)** *Associate Professor of Sociology*

B.A., Yale University

M.A., Northwestern University

Ph.D., University of Virginia

**Amanda Sparkman (2011)** *Assistant Professor of Biology*

B.A., Westmont College

Ph.D., Iowa State University

**Gregory H. Spencer (1987)** *Professor of Communication Studies*

B.S., California Polytechnic State University, San Luis Obispo

M.S., Ph.D., University of Oregon

**Les A. Stern (2007)** *Professor of Communication Studies*

B.A., University of California, Los Angeles

M.A., Ph.D., University of Arizona

**Meagan J. Stirling (2014)** *Assistant Professor of Art*

B.A., Whitworth University

M.A., M.F.A., University of Wisconsin

**James E. Taylor (1994)** *Professor of Philosophy*

B.A., Westmont College

M.A., Fuller Theological Seminary

M.A., Ph.D., University of Arizona

**Mitchell M. Thomas (2004)** *Professor of Theatre Arts*

B.A., Whitworth College

M.F.A., University of Washington

**Cynthia D. Toms (2013)** *Associate Professor of Kinesiology and Global Studies*

B.S., Messiah College

M.S. Boston University

Ph.D. Azusa Pacific University

**Nivaldo J. Tro (1990)** *Professor of Chemistry*

B.A., Westmont College

Ph.D., Stanford University

**David A. Vander Laan (2000)** *Professor of Philosophy*

B.A., Calvin College

Ph.D., University of Notre Dame

**Timothy A. VanHaitsma (2014)** *Assistant Professor of Kinesiology*

B.A., Calvin College

M.S., Indiana University

Ph.D., University of Utah

**Randall J. VanderMey (1991)** *Professor of English*

B.A., Calvin College  
M.A., University of Pennsylvania  
M.F.A., Ph.D., University of Iowa

**Thomas Walters (2012)** *Assistant Professor of Kinesiology*

B.S., Montana State University  
D.P.T., Chapman University

**Meredith C. Whitnah (2014)** *Assistant Professor of Sociology*

B.A., Gordon College  
M.A., Ph.D., University of Notre Dame

**Thomas E. Whittemore (2007)** *Instructor of Physics*

B.S., Purdue University  
M.S., Ph.D., University of Arizona

**Paul J. Willis (1988)** *Professor of English*

B.A., Wheaton College  
M.A., Ph.D., Washington State University

**Jane T. Wilson (2009)** *Associate Professor of Education*

B.A., University of Washington  
M.A., Ph.D., University of California, Santa Barbara

**Rachel Winslow (2013)** *Director of the Center for Social Entrepreneurship and Assistant Professor of History*

B.A., University of Rochester  
M.A., California State University, Sacramento  
Ph.D., University of California, Santa Barbara

**David G. Wolf (1991)** *Associate Professor of Kinesiology; Head Coach, Men's*

B.A., Wheaton College  
M.A., Azusa Pacific University

**Telford C. Work (2003)** *Professor of Theology*

B.A., Stanford University  
M.A., Fuller Theological Seminary  
Ph.D., Duke University

**Sameer Yadav (2015)** *Assistant Professor of Religious Studies*

B.A., Boise State University  
M.Div., Masters College and Seminary  
S.T.M., Yale Divinity School  
Th.D., Duke University, Divinity School

**Diane G. Ziliotto (1993)** *Reference & Instruction Librarian; College Archivist*

B.A., Santa Clara University  
M.L.S., San Jose State University



## Faculty Emeriti

**Crystal W. Jorden Ainsworth, M.A.,** *Emerita Associate Professor of Kinesiology*

**L. Dwight Anderson, M.S.,** *Emeritus Director of Freshman Year*

**Stanley E. Anderson, Ph.D.,** *Emeritus Professor of Chemistry*

**Leland F. Asa, Ph.D.,** *Emeritus Professor of Psychology*

**R. Anthony Askew, M.A.,** *Emeritus Distinguished Professor of Art*

**George L. Bate, Ph.D.,** *Emeritus Professor of Natural Science*

**William J. Beasley, Ph.D.,** *Emeritus Professor of Music*

**George V. Blankenbaker, Ph.D.,** *Dean Emeritus*

**John R. Carlander, Ph.D.,** *Emeritus Professor of Art*

**Stephen H. Cook, Ph.D.,** *Emeritus Professor of English*

**Eleanor L. Courtney, Ph.D.,** *Emerita Professor of English*

**John E. Divelbiss, B.D.,** *Emeritus Associate Librarian*

**Ron M. Enroth, Ph.D.,** *Emeritus Professor of Sociology*

**Brendan F. J. Furnish, Ph.D.,** *Emeritus Professor of Sociology*

**Robert H. Gundry, Ph.D.,** *Emeritus Professor of Religious Studies*

**David G. Lawrence, Ph.D.,** *Emeritus Professor of Political Science*

**David F. Marten, Ph.D.,** *Emeritus Professor of Chemistry*

**Bruce F. McKeown, Ph.D.,** *Emeritus Professor of Political Science*

**Ronald T. Mulder, Ed.D.,** *Emeritus Professor of Kinesiology*

**John D. Murray, M.A., M.A.L.S.,** *Emeritus Director of the Library*

**David F. Neu, Ph.D.,** *Emeritus Professor of Mathematics*

**Allan M. Nishimura, Ph.D.,** *Emeritus Distinguished Professor of Chemistry*

**Stanley R. Obitts, Ph.D.,** *Emeritus Professor of Philosophy*

**Raymond F. Paloutzian, Ph.D.,** *Emeritus Professor of Psychology*

**Susan D. Savage, M.F.A.,** *Emerita Professor of Art*

**John W. Sider, Ph.D.,** *Emeritus Distinguished Professor of English*

**Rose Marie Springer, M.A.,** *Emerita Associate Professor of Urban Studies*

**Bruce C. Stockin, Ph.D.,** *Emeritus Professor of Psychology*

**Glenn P. Town, Ph.D.,** *Emeritus Professor of Kinesiology*

**Gayle H. Tucker, Ed.D.,** *Emeritus Professor of Education*

**Ruth E. Tucker, Ed.D.,** *Emerita Professor of Education*

**Curtis W. Whiteman, Ph.D.,** *Emeritus Professor of Historical Theology*

**Erlyne F. Whiteman, Ph.D.,** *Emerita Associate Professor of Theatre Arts*

**Paul C. Wilt, Ph.D.,** *Emeritus Professor of History*

## Administrative Staff

**Jeffrey A. Aquilon, B.S.**

*Director of Academic & Institutional  
Technology*

**Jeffrey L. Azain, B.S.**

*Assistant Coach, Men's Basketball  
Associate Director of Warrior Sports  
Associates*

**Philip R. Baker, B.A.**

*Manager of Grounds*

**Steve Baker, B.A.**

*Associate VP for Advancement*

**Shannon M. Balram, M.A.**

*Assistant Director of Residence Life*

**Joel A. Bañez, B.S.**

*Director of College Software*

**Mark C. Basham, B.S.**

*Head Coach Men's Tennis*

**Thomas G. Bauer, B.A.**

*Chief of Public Safety*

**Thomas G. Beveridge, B.A.**

*Director of Physical Plant*

**Jordan J. Bentley, B.A.**

*Assistant Director of Financial Aid*

**Teri L. Bradford Rouse, M.A.**

*Senior Director of Alumni and Parent  
Relations*

**Matt R. Browne, B.A.**

*Admissions Counselor*

**Greta L. Bruneel, M.B.A.**

*Associate Director of Human Resources*

**James L. Byron, M.A.**

*Administrative Programmer/Analyst*

**Kati Z. Buehler, M.A., C.F.P.**

*Senior Director of Gift Planning*

**E. Kirsten Burdick, M.Div**

*Executive Assistant to the Provost*

**Richard C. Burnweit, A.B.D.**

*Interlibrary Loan Manager*

**Alexander J. Cameron, MLD.**

*Event Services Manager*

**Chantel T. Cappuccilli, M.Sc.**

*Head Coach, Women's Soccer*

**Beth I. Cauwels, B.A.**

*Director of Human Resources*

**Jason J. Cha, M.Ed.**

*Director of Intercultural Programs*

**Daniel T. Clapp, M.A.**

*Assistant Director of Campus Life*

**Stuart D. Cleek, M.Ed.**

*Associate Dean of Residence Life*

**Douglas W. Conrad, M.A.**

*Director of Academic Technology*

**Patti L. Cook, B.A.**

*Head Coach, Women's Volleyball*

**Toya M. Cooper, J.D.**

*College Counsel*

**Tony W. Cougoule, M.S.**

*Assistant Baseball Coach/Facilities Liaison*

**Scott E. Craig, B.A.**

*Manager of Media Relations*

**Angela L. D'Amour, Ph.D.**

*Director of Campus Life*

**Neil J. DiMaggio, M.Mus.**

*Director of Research*

**Lorinda L. Dry, B.A.**

*Assistant Director of Alumni & Parent  
Programs*

**M. Bradley Elliott, B.A.**

*Manager of A/V Production, Sound &  
Light*

**Selena W. English, M.Ed.**

*Assistant Women's Basketball Coach &  
Recruitment Coordinator*

**Nancy P. Everest, B.S.**

*Administrative Applications and Data  
Services Administrator*

**Rachel Fabian, M.A.**

*Resident Director*

**Anna Fearer, B.S.**

*Assistant Registrar*

## PERSONNEL

**Anna Fletcher, M.A.**

*Resident Director*

**Hugo N. Franco**

*Manager of Trades Department*

**Christen E. Foell, M.A.**

*Assistant Director of the Gaede  
Institute*  
**Dawn M. Gendron**  
*Admissions Information Systems  
Administrator*

**Esther L. Gilbert, B.A.**

*Accountant & Payroll Manager*

**Joanne M. Gish**

*Assistant Director of the College Store and  
Mailing Services*

**William M. Groeneveld, B.A.**

*Associate Director of Procurement &  
Contracts*

**Peter J. Hansen, M.A.**

*Resident Director*

**Melinda Moers Harriman, M.A.**

*Director of Conference Services & Campus  
Scheduling*

**Jena M. Harris**

*College Real Estate Office/ Executive  
Assistant to the Vice President for Finance*

**Keith R. Harris, A.A.**

*Telecommunications Manager*

**Troy Harris, C.P.M.**

*Assistant Vice President for Institutional  
Resilience*

**David A. Hernandez, M.D.**

*Director of Health Center*

**Sergio R. Hernandez, M.B.A.**

*Current Student & Young Alumni  
Coordinator*

**Kevin J. Hess, B.A.**

*Senior Director of Information Technology*

**Celia E. Howen, M.Ed.**

*Assistant Director Career Development &  
Calling*

**Olympia S. Hugo, B.A.**

*Assistant Director of Admissions for  
Diversity*

**Karen I. Jacobs, M.A.**

*Marriage and Family Therapist*

**Ben Johnson, B.A.**

*Graphic Designer*

**Randy L. Jones, B.S.**

*Director of Campus Planning*

**Sophie D. Judd, B.A.**

*Admissions Counselor*

**Candace C. Kim**

*Business Services Supervisor*

**David W. King, B.A.**

*Director of Housing*

**Zachary R. Landrum, M.N.A.**

*Director of Advancement Services*

**Judy L. Larson, Ph.D.**

*Director of Westmont Ridley Tree Museum*

**Paul V. Larson, M.B.A.**

*Controller*

**Mayra D. Leo, A.S.**

*Manager of Custodial Services*

**Melissa S. Lima, M.A.**

*Resident Director*

**Kara D. Lopez**

*Assistant Director of Financial Aid*

**Michael D. McKinniss, M.Div.**

*Senior Admissions Counselor for Transfer  
and International Students*

**Kendyll A. McMangial, B.A.**

*Head Coach, Women's Tennis*

**Kirsten M. Moore, M.B.A.**

*Head Coach, Women's Basketball  
/ Associate Athletic Director*

**Mona J. Motte, B.A.**

*Director of Gift Planning*

**Katie Mukai, B.A.**

*Psychology Lab Coordinator*

**Virginia E. Murray, B.A.**

*Manager of Office Operations &  
Transportation*

**Eric D. Nelson, Ph.D., M.A.T.**

*Director of the Counseling Center*

**Alex P. Nizet, M.Div.**

*Senior Director of Development*

**Sheri C. Noble, M.A.**

*Director of Disability Services*

**David W. Odell, C.P.A.**

*Director of Athletics*

**Helen H. Park, M.Mus.**

*Executive Assistant to the President*

**J. Ben Patterson, M.Div**

*Campus Pastor*

**Joel Patterson, B.A.**

*Director of Music & Worship*

*Liaison to Campus Pastor's Office and the  
Martin Institute*

**Nancy L. Phinney, M.A.**

*Director of College Communications*

**Barbara L. Pointer, B.S.**

*Associate Director of Global Education*

**Deborah R. Price, B.A.**

*Senior Accountant*

**James W. Reid**

*Director of Business Office Operations &  
Financial Reporting*

**Annette C. Richards, B.A.**

*Regional Director of Development*

**Elizabeth A. Robertson, M.A.**

*Resident Director*

**John R. Rodkey, B.A.**

*Director of Networks and Servers*

**Rachel J. Rowenhorst, B.S.**

*Admissions Counselor*

**Igor V. Rozhko, B.S.**

*Network Manager*

**Robert M. Ruiz, M.A.**

*Head Baseball Coach*

**Christopher M. Rupp, B.A.**

*Collections Manager*

**Erin C. Shaffer, M.S., M.F.T.**

*Marriage and Family Therapist*

**Jeff K. Sieck, B.A.**

*Advancement Services Specialist*

**Aaron W. Sizer, Ph.D.**

*Assistant Director of the Gaede Institute*

**Greg J. Smith**

*Senior Web Developer/Programmer*

**Jodi L. Smith, B.A.**

*Associate Dean of Admissions*

**Leslie D. Smith, B.A.**

*Textbook Manager*

**Ron D. Smith, B.A.**

*Sports Information Director*

**G. Sean Smith, B.S.**

*Director of Financial Aid*

**Zachary T. Smith, B.A.**

*Web Content Editor*

**Sarah Stanley, M.A., M.S.**

*Web Services and Instruction Librarian*

**Gregg Starr, M.Ed.**

*Director of Annual Giving*

**Melissa Terra, B.S.**

*Assistant Registrar*

**Dan Thomas, M.A., M.F.A.**

*Assistant Vice President for College  
Advancement*

**Elizabeth W. Toussaint, M.B.A.**

*Senior Director Of Research & Project  
Management*

**Silvio E. Vazquez, M.B.A.**

*Dean of Admissions*

**Susie Willett, BA**

*Director of Donor Relations*

**Sharon J. Willis, M.S.**

*Nurse Practitioner*

**Timothy B. Wilson, M.A.**

*Associate Dean of Students*

**Joan M. Wimberly, M.A.**

*Director of Public Events*

**Wendy R. Wright, B.A.**

*Employment & Benefits Coordinator*

# Index

Index	Page
Academic Calendar .....	2
Academic Load.....	26
Academic Merit Scholarships .....	246
Academic Program.....	24
Academic Resources .....	10
Academic Standing.....	29
Accreditation and Membership.....	12
Administrative Staff.....	281
Admission.....	241
Admission Confirmation .....	251
Advanced Placement (AP) Credit.....	250
Advising.....	10
Air Force AFROTC.....	233
Anthropology.....	204
Application Deadlines .....	245
Applied Studies Courses .....	37
Army ROTC .....	232
Art Major.....	39
Athletics.....	239
Auditing Courses.....	29, 257
Behavioral Expectations.....	235
Biology Major .....	48
Board of Trustees.....	266
Campus Life Office .....	236
Campus Pastor's Office.....	235
Career Development & Calling .....	237
Charges .....	252
Accessory Fees.....	253
Appeals.....	256
Billing Procedures.....	253
International Student Payment Plan .....	255
Meal Plan .....	252
Payment Schedule.....	254
Refunds .....	256
Room.....	252
Student Charges .....	252
Tuition.....	252
Chemistry Major.....	59
Class Standing/Classification .....	26
CLEP Credit .....	25, 250
Commencement Awards.....	34

<b>Index</b>	<b>Page</b>
Commencement Participation Policy.....	239
Communication Studies Major.....	68
Community Life Statement.....	234
Computer Science Major.....	74
Concurrent Enrollment.....	25
Confirmation of Admission.....	251
Consortium Visitor Program.....	248
Counseling Center.....	238
Credit Limitations .....	24
Curriculum .....	35
Degree Requirements .....	24
Developmental Curriculum .....	30
Disability Services .....	10
Downtown Semester .....	229
Economics and Business Major.....	79
Education Program.....	87
Educational Program.....	14
Engineering Physics Major .....	97
England Semester.....	225
English Major .....	100
English-Modern Language Major.....	113
Ethnic Studies Minor.....	115
Europe Semester .....	225
European Studies Major.....	116
Executive Team.....	270
Extracurricular Eligibility.....	30
Faculty.....	271
Faculty Emeriti .....	280
Fifth Year Program.....	91
Financial Aid.....	258
Academic Merit Awards .....	246
Grants.....	258
How to Apply.....	260
Loans .....	259
Renewal of Aid.....	261
Right and Responsibilities .....	260
Scholarships.....	258, 261
Work-Study.....	260
First-Year Experience.....	10
Foreign Language GE Requirement .....	21
Foreign Student Application .....	249
French Major .....	118
Gender Studies Minor .....	122
General Education .....	15

<b>Index</b>	<b>Page</b>
General Education Honors .....	32
German Studies .....	114
Global Health Uganda Semester .....	226
Grading.....	27
Graduation Rate .....	13
Health Services .....	238
History Major.....	123
Honors and Awards.....	30
Honors Classes .....	32
Honors/Directed Study .....	31
Housing .....	237
Inoculum .....	229
Intercultural Programs.....	236
Interdisciplinary Major .....	36
Interdisciplinary Studies .....	131
International Baccalaureate (IB) Credit .....	250
International Mayterm.....	229
Internship .....	31
Intramural Program .....	239
Istanbul Semester .....	227
Jerusalem Semester .....	227
Kinesiology Major.....	135
Liberal Studies Major.....	143
Library.....	11
Life Sciences.....	166
Major Requirements .....	26
Majors and Programs.....	35
Map .....	288
Mathematics Major .....	148
Mayterm.....	30, 229
Mexico Semester .....	227
Minor Requirements .....	26
Multiple Subject Credential.....	88
Music Major .....	156
Name Change .....	240
National Honor Societies.....	32
Natural Science.....	166
Northern Europe Semester .....	226
Off-Campus Programs .....	224
Orientation.....	10

<b>Index</b>	<b>Page</b>
Personnel.....	266
Philosophy Major.....	167
Philosophy of Education.....	5
Physical Education Activity.....	141
Physical Sciences.....	166
Physics Major.....	173
Political Science Major.....	178
Pre-Engineering Program.....	231
Pre-Law Program.....	231
Pre-Medical/Dental Program.....	232
Private Music Instruction.....	164
Probation and Suspension.....	29
Psychology Major.....	187
Public-Taking Courses.....	257
Reapplicants.....	249
Reinstatement.....	30
Religious Studies Major.....	194
Repeating Courses.....	29
Residence Life.....	237
Residency Requirement.....	24
ROTC-Army-Air Force.....	232-233
San Francisco Program.....	226
Second Baccalaureate Degree.....	25
Single Subject Credential.....	89
Social Science Major.....	202
Sociology Major.....	204
Spanish Major.....	212
Special Programs.....	231
Statement of Faith.....	8
Student Activities.....	238
Student Behavior.....	235
Student Life.....	234
Study Abroad Programs.....	224
Teacher Preparation Program.....	91
Theatre Arts Major.....	218
Transfer Students.....	243
Trustees Emeriti.....	269
Tutorial.....	31
Writer's Corner.....	11



Abbott Tennis Courts	1	Page Hall	27	Thorrington Field	35	Van Kampen Hall	38
Adams Center for the Visual Arts	2	Physical Plant/Central Receiving	28	Track	36	Nancy Voskuyl Prayer Chapel	39
Administrative Building B	3	Porter Center	29	Track Storage	37	Voskuyl Library	40
Armington Hall	4	Porter Hall/Theatre	30			Westmont Ridley-Tree Museum of Art	41
Biology Laboratory	5	Post Office and Reprographics	31			Whittier Hall	42
Bookstore	6	Residence	32			Winter Hall for Science and Mathematics	43
Campus Planning	7	Reynolds Hall	33				
Carr Field	8	Clark Classroom	34				
Carroll Hall	9						
Central Cooling Plant	10						
Clark Hall	11						
Deane Chapel	12						
Deane Field	13						
Deane Hall	14						
Emerson Hall	15						
Gaede Institute Administrative Building A	16						
Health and Counseling Center	17						
Housing and Parking Office	18						
Hubbard Hall	19						
Kerr Memorial Student Center Dining Commons	20						
Kerrwood Hall	21						
Lovik Field	22						
Martin Institute/Willard Center	23						
Murchison Physical Education Complex and Pool	24						
Music Building	25						
Observatory	26						

