WESTMONT

Faculty Position Request Form

(Used for requesting a new faculty position or filling a vacant position)

Department: __Physics and Engineering____

Submitted by: _Bob Haring-Kaye_____

Date: _____03/31/21_____

Nature of request:

_____This is a request for a new faculty position (addition) in the department.

__X___This is a request to fill a vacancy.

Who is the faculty member leaving or retiring? ___Michael Sommermann___

Rationale: On a separate page, please briefly describe the curricular need for this faculty position, including benefit to the department if the position is filled and the negative impact if it is not.

Additional documents needed:

(a) Please complete the table on the next page listing courses the person will teach and the enrollment in these courses for the past 3 years. Also, identify any new courses the department hopes to offer if this position is filled.

(b) Position job description

Please submit materials to the Provost's Office.

Faculty Position Supporting Documentation

Enrollment in course during the past 3 years**

Proposed schedule (long-term):

Dept/Cr Num.		S21	F20	S20	F19	M19	S19	F18
Fall:								
PHS-007	Astronomy: Discovering the Universe		33		38	15		38
PHY-011	Physics for Life Sciences I		40		34			40
PHY-115	Mathematical Physics (alt. yrs.)		7		7			6
PHY-127	Astrophysics I (alt. yrs.)*						15	
Spring:								
PHY-013	Physics for Life Sciences II	34		30			29	
PHS-117	Exploration of the Universe (alt. yrs.)							
PHY-X	Observational Astronomy (new, alt. yrs.)*							
PHY-128	Astrophysics II (alt. yrs.)*							
PHY-130	Mechanics (alt. yrs.)	3		7			8	
PHY-198	Research	2		4	1		1	2

New courses:

PHY-X: Observational Astronomy*	Alt. spring semesters	4 units

** Blank cells indicate that the course was not offered during the corresponding semester.

* These courses would likely be offered only if a new Astrophysics Major is approved.

Faculty Position Supporting Documentation: Rationale

The Department of Physics and Engineering requests a full-time, tenure-track position as a replacement for Michael Sommermann, who plans to retire after the 2022–23 academic year. Although Michael will be with us for another two years, he will be gradually reducing his teaching load over that span to include only four courses during the 2021–22 academic year and two during 2022–23, making up for a missed sabbatical two years ago. Thus, Michael will effectively be teaching part-time during the next two years, and we will need to cover several of the courses that he ordinarily teaches, in addition to filling the vacancy left by his retirement.

Like the other members of the department, Michael's teaching load each semester usually consists of an introductory-level physics course, a course specifically designed for physics and/or engineering majors, and a general education (GE) course. Among the GE course offerings in our division, he often taught PHS 007 (Astronomy: Discovering the Universe), a course with typically high enrollments (see recent enrollment data). Given the historical popularity of this course, we feel that it is essential to continue offering it at least once each academic year, preferably taught by someone with expertise in the field of astronomy (which none of the other departmental faculty have). Additionally, we anticipate greatly renewed interest in the use of our campus observatory once the pandemic subsides, both for observing sessions in PHS 007 and public viewings of astronomical events. **Therefore, we are specifically requesting a position for someone with a PhD in astronomy or astrophysics to fill these crucial needs. Not only would such a person be the ideal fit for PHS 007 (and the companion PHS-117: Exploration of the Universe course), but she/he would also likely be qualified to teach any of the other courses in our physics curriculum.** Note that Tom Whittemore, who often hosted public observing sessions at our observatory, retired after the spring 2020 semester and no longer plans to continue in this role. If we are not granted this position, it's not clear how the PHS 007 course would be taught regularly or how our observatory, a currently underutilized resource, would be used for anything but subsidiary purposes.

Longer term, we feel that our department and the college as a whole would benefit greatly from the addition of an astrophysics major to the curriculum. A 2016 study of the top 100 national liberal arts schools (based on *US News and World Report* rankings) indicated that only 35 of them offer an astronomy/astrophysics major or minor (none that identify as Christian institutions), 29 of which are in the top 50. Thus the addition of such a major would be a distinctive feature of our curriculum, particularly among mission-driven institutions, and would contribute to the new program development outlined in our 2021-24 strategic map. Most of the necessary resources and infrastructure already exist, including a research-grade observatory with dedicated lab space for faculty and students and upper-division courses necessary for the major (PHY 127 and 128: Astrophysics I and II). Given the likely increased interest in astronomy as advancements are made in human space travel, including a possible return to the Moon and the first human exploration of Mars, this is a great opportunity to attract a diverse population of students to a growing field of study. The addition of an astronomer as Michael's replacement thus represents a strategic investment in enhancing our departmental curriculum, research opportunities for students, and GE course offerings.

Faculty Position Supporting Documentation: Job Description

The Department of Physics and Engineering at Westmont College invites applications for a tenure-track faculty position at the Assistant or Associate rank in Astrophysics to begin in August 2022. Candidates must have a PhD in astronomy or astrophysics (postdoctoral experience preferred), a commitment to excellence in teaching a broad range of undergraduate astronomy and physics courses, and a passion to mentor undergraduate research. Teaching responsibilities will include both lower- and upper-division courses in astronomy and physics as well as general education courses with an emphasis on astronomical phenomena. Support facilities include a modern observatory housing a computer-controlled 24-inch reflector telescope with Ritchey-Chrétien optics and a dedicated research laboratory beneath.

Westmont College is a national liberal arts college in the evangelical Protestant tradition, seeking faculty with a vital and informed commitment to the Christian faith. We continually aim to diversify the faculty and strongly encourage applications from historically underrepresented groups within the physical sciences for this position.

Use this link to access the application. Questions may be addressed to Dr. Robert Haring-Kaye, chair of Physics and Engineering, at rharingkaye@westmont.edu. Review of applications will begin in September 2021 and will continue until the position is filled.