

# University of Pittsburgh Titusville

# **2016-2017 Catalog**



University of Pittsburgh

## ACADEMIC CALENDAR • 2016-17

Dates in **bold** apply to all schools, on all University campuses. Those not in bold apply only to the Pittsburgh Campus. Official dates for degrees awarded apply to all schools, on all University campuses. Specific dates affecting the professional programs in the Schools of Dental Medicine, Law, Medicine, Pharmacy, and the Joseph M. Katz Graduate School of Business may be obtained from the appropriate Dean's Office.

2016 F/	ALL TER	M (2171)	
July	4	Monday	Independence Day (University closed)
	13	Wednesday	Fall Term deadline for continuing students to register
August	15	Monday	Graduate International Student Check-In and Orientation
	19-21, incl.	Friday-Sunday	Undergraduate International Student Orientation
	22	Monday	Residence halls open
	22-28, incl.	Monday-Sunday	New and Transfer Student Orientation
	24	Wednesday	New Student Convocation
	25	Thursday	New Faculty Orientation
	26	Friday	New Teaching Assistant Orientation
	29	Monday	Fall Term enrollment period ends for all students
	29	Monday	Fall Term classes begin
September	5	Monday	Labor Day (University closed)
	9	Friday	Fall Term add/drop period ends
	17	Saturday	Constitution Day
	30-Oct 1, incl.	Friday-Saturday	Family Weekend
October	7-9, incl.	Friday-Sunday	Homecoming Activities
	17	Monday	Fall Break for students (no classes); University offices and buildings remain open and staffed during Fall Break (see note below)
	18	Tuesday	Monday classes normally scheduled to meet Monday, October 17th will meet on Tuesday, October 18th. Tuesday classes will not meet this week (see note below)
	28	Friday	Fall Term deadline for students to submit Monitored Withdrawal forms to Dean's Office
	28	Friday	Spring Term enrollment appointments begin (Veteran Students)
	31	Monday	Spring Term enrollment appointments begin (Non-Veteran Students)
November	11	Friday	Last day for Spring Term enrollment appointments
	12	Saturday	Spring Term open enrollment begins
	23-27, incl.	Wednesday-Sunday	Thanksgiving Recess for students (no classes), all schools
	24-25, incl.	Thursday-Friday	Thanksgiving Recess for faculty and staff (University closed)
	28	Monday	Classes resume (all schools)
December	9	Friday	Fall Term: Last day for undergraduate day classes
	9	Friday	Spring Term deadline for continuing students to register
	10	Saturday	Reading Day
	10-17, incl.	Saturday-Saturday	College of General Studies classes, Saturday Only classes, graduate classes, and evening classes will continue to meet during this period; final examinations should be held during the last scheduled class meeting
	12-17, incl.	Monday-Saturday	Final examination period for undergraduate day classes
	17	Saturday	Fall Term Ends: Official date for degrees awarded in Fall Term
	18	Sunday	Residence halls close
	18-Jan 3, incl.	Sunday-Tuesday	Winter Recess for students (no classes), all schools
	20	Tuesday	Fall Term grades must be approved by instructors by 11:59 p.m.
	23-Jan 2, incl.	Friday-Monday	Winter Recess for faculty and staff; designated University offices, including major responsibility centers and research projects, will be staffed as necessary during this period*

Note: Regarding Fall Break, students in the professional programs in the Schools of Dental Medicine, Law, Medicine, Pharmacy, as well as the Joseph M. Katz Graduate School of Business, should contact their Dean's Office.

\*Employees covered by collective bargaining agreements will be governed by the terms of those agreements.

Visit our Web site at www.pitt.edu/calendars.html

2017 S	PRING 1	FERM (2174)	
January	2	Monday	Residence halls reopen
	3	Tuesday	All University offices and buildings reopen
	4	Wednesday	Spring Term enrollment period ends for all students
	4	Wednesday	Spring Term classes begin
	16	Monday	Dr. Martin Luther King's birthday observance (University closed)
	18	Wednesday	Spring Term add/drop period ends
February	10	Friday	Summer Term enrollment appointments begin (Veteran Students)
-	13	Monday	Summer Term enrollment appointments begin (Non-Veteran Students)
	24	Friday	Honors Convocation
March	5-12 incl.	Sunday-Sunday	Spring Recess for students (no classes); University offices and buildings remain open and staffed during Spring Recess except on Friday, Spring Holiday
	10	Friday	University's observance of Spring Holiday (University closed)
	15	Wednesday	Spring Term deadline for students to submit Monitored Withdrawal forms to Dean's Office
	24	Friday	Fall Term enrollment appointments begin (Veteran Students)
	27	Monday	Fall Term enrollment appointments begin (Non-Veteran Students)
April	7	Friday	Last day for Fall Term enrollment appointments
	8	Saturday	Fall Term open enrollment period begins
	21	Friday	Spring Term: Last day for undergraduate day classes
	22	Saturday	Reading Day
	22-29 incl.	Saturday-Saturday	College of General Studies classes, Saturday Only classes, graduate classes, and evening classes will continue to meet during this period; final examinations should be held during the last scheduled class meeting
	24-29 incl.	Monday-Saturday	Final examination period for all undergraduate day classes
	29	Saturday	Spring Term Ends: Official date for degrees awarded in Spring Term
	30	Sunday	Residence halls close (except for graduating seniors)
	30	Sunday	Annual Commencement Convocation
2017 S	UMMER	<b>TERM (2177)</b>	
May	3	Wednesday	Spring Term grades must be approved by instructors by 11:59 p.m.
	7	Sunday	Summer Term: Residence halls open
	8	Monday	Summer Term enrollment period ends and classes begin
	15	Monday	Summer 12-WEEK, 6-WEEK-1, 4-WEEK-1 sessions enrollment period ends and classes begin
	17	Wednesday	Summer 4-WEEK-1 and 6-WEEK-1 sessions add/drop period ends
	19	Friday	Summer Term add/drop period ends
	22	Monday	Summer 12-WEEK session add/drop period ends
	27	Saturday	Official date for degrees awarded in the School of Law and School of Dental Medicine
	29	Monday	Memorial Day (University closed)
	31	Wednesday	Summer 4-WEEK-1 session deadline for students to submit Monitored Withdrawal forms to Dean's Office
June	2	Friday	Summer 6-WEEK-1 session deadline for students to submit Monitored Withdrawal forms to Dean's Office
	10	Saturday	Summer 4-WEEK-1 session ends: Final examinations scheduled during last class meeting
	12	Monday	Summer 4-WEEK-2 session enrollment period ends and classes begin
	14	Wednesday	Summer 4-WEEK-1 session grades must be approved by instructors by 11:59 p.m.
	14	Wednesday	Summer 4-WEEK-2 session add/drop period ends
	24	Saturday	Summer 6-WEEK-1 session ends: Final examinations scheduled during last class meeting
	24	Saturday	Official date for awarding of degrees
	26	Monday	Summer 6-WEEK-2 session enrollment period ends and classes begin
	28	Wednesday	Summer 6-WEEK-1 session grades must be approved by instructors by 11:59 p.m.
	28	Wednesday	Summer 6-WEEK-2 session add/drop period ends
	28	Wednesday	Summer 4-WEEK-2 session deadline for students to submit Monitored Withdrawal forms to Dean's Office

#### 2017 SUMMER TERM (2177)

July	4	Tuesday	Independence Day (University Closed)
	7	Friday	Summer Term and 12-WEEK session deadline for students to submit Monitored Withdrawal forms to Dean's Office
	8	Saturday	Summer 4-WEEK-2 session ends: Final examinations scheduled during last class meeting
	10	Monday	Summer 4-WEEK-3 session enrollment period ends and classes begin
	12	Wednesday	Summer 4-WEEK-2 session grades must be approved by instructors by 11:59 p.m.
	12	Wednesday	Fall Term deadline for continuing students to register
	12	Wednesday	Summer 4-WEEK-3 session add/drop period ends
	21	Friday	Summer 6-WEEK-2 session deadline for students to submit Monitored Withdrawal forms to Dean's Office
	26	Wednesday	Summer 4-WEEK-3 session deadline for students to submit Monitored Withdrawal forms to Dean's Office
August	5	Saturday	Summer 12-WEEK, 6-WEEK-2, 4-WEEK-3 sessions end: Final examinations scheduled during last class meeting
	9	Wednesday	Summer 12-WEEK, 6-WEEK-2, 4-WEEK-3 sessions grades must be approved by instructors by 11:59 p.m.
	12	Saturday	Summer Term Ends: Final examinations scheduled during last class meeting
	12	Saturday	Official date for awarding degrees
	13	Sunday	Residence halls close
	16	Wednesday	Summer Term grades must be approved by instructors by 11:59 p.m.

#### 2017 FALL TERM (2181)

The beginning, ending, and add/drop dates for 2017 Fall Term (2181) classes and the beginning date for 2018 Spring Term (2184) classes are firm; ALL OTHER DATES ARE TENTATIVE.

August	21	Monday	Residence halls open
	28	Monday	Fall Term enrollment period ends for all students
	28	Monday	Fall Term classes begin
September	4	Monday	Labor Day (University closed)
	8	Friday	Fall Term add/drop period ends
	17	Sunday	Constitution Day
October	TBD	Monday	Fall Break for students (no classes); University offices and buildings remain open and staffed during Fall Break
	TBD	Tuesday	Monday classes normally scheduled to meet Monday, TBD will meet on Tuesday, TBD. Tuesday classes will not meet this week.
	27	Friday	Fall Term deadline for students to submit Monitored Withdrawal forms to Dean's Office
	27	Friday	Spring Term enrollment appointments begin (Veteran Students)
	30	Monday	Spring Term enrollment appointments begin (Non-Veteran Students)
November	10	Friday	Last day for Spring Term enrollment appointments
	11	Saturday	Spring Term open enrollment period begins
	22-26, incl.	Wednesday-Sunday	Thanksgiving Recess for students (no classes), all schools
	23-24, incl.	Thursday-Friday	Thanksgiving Recess for faculty and staff (University closed)
	27	Monday	Classes resume (all schools)
December	8	Friday	Fall Term: Last day for undergraduate day classes
	8	Friday	Spring Term deadline for continuing students to register
	9	Saturday	Reading Day
	9-16, incl.	Saturday-Saturday	College of General Studies classes, Saturday Only classes, graduate classes, and evening classes will continue to meet during this period; final examinations should be held during the last scheduled class meeting
	11-16, incl.	Monday-Saturday	Final examination period for undergraduate day classes
	16	Saturday	Fall Term Ends: Official date for degrees awarded in Fall Term
	17	Sunday	Residence halls close
	17-Jan. 2, incl.	Sunday-Tuesday	Winter Recess for students (no classes), all schools

#### 2017 FALL TERM (2181)

December 20 22-Jan. 1,

incl.

2

2

3

Wednesday Friday-Monday Fall Term grades must be approved by instructors by 11:59 p.m.

Winter Recess for faculty and staff; designated University offices, including major responsibility centers and research projects, will be staffed as necessary during this period\*

Note: Regarding Fall Break, students in the professional programs in the schools of Dental Medicine, Law, Medicine, Pharmacy, as well as the Joseph M. Katz Graduate School of Business, should contact their Dean's Office.

\*Employees covered by collective bargaining agreements will be governed by the terms of those agreements.

#### 2018 SPRING TERM (2184)

January

Tuesday Tuesday Wednesday

Residence halls open All University offices and buildings reopen Spring Term classes begin

#### NOTE: THE UNIVERSITY RESERVES THE RIGHT TO MAKE SUCH CALENDAR CHANGES AS IT DEEMS NECESSARY.



#### SUMMER 2017 ACADEMIC CALENDAR BY SESSION

ENROLLMENT and ADD/DROP BEGINS	4WK I 4-Week- I	4WK2 4-Week-2	4WK3 4-Week-3	6WKI 6-Week-I	6WK2 6-Week-2	12 WK 12-Week	TERM Term
MONDAY, FEBRUARY 13th	* Mon 5/15 Sat 6/10	+ Mon 6/12 Sat 7/8	Mon 7/10 Sat 8/5	* Mon 5/15 Sat 6/24	+ Mon 6/26 Sat 8/5	*+ Mon 5/15 Sat 8/5	*+ Mon 5/8 Mon 8/14
Residence Halls Open	Sun 5/14	Sun 6/11	Sun 7/9	Sun 5/14	Sun 6/25	Sun 5/14	Sun 5/7
Enrollment Ends/ Classes Begin	Mon 5/15	Mon 6/12	Mon 7/10	Mon 5/15	Mon 6/26	Mon 5/15	Mon 5/8
Add/Drop Ends	Wed 5/17	Wed 6/14	Wed 7/12	Wed 5/17	Wed 6/28	Mon 5/22	Fri 5/19
Monitored Withdrawal Deadline	Wed 5/31	Wed 6/28	Wed 7/26	Fri 6/9	Fri 7/21	Fri 7/7	Fri7/7
Classes End/Final Exam Held in Last Class Meeting	Sat 6/10	Sat 7/8	Sat 8/5	Sat 6/24	Sat 8/5	Sat 8/5	Sat 8/12
Residence Halls Close	Sun 6/11	Sun 7/9	Sun 8/6	Sun 6/25	Sun 8/6	Sun 8/6	Sun 8/13
Grade Roster Approval Deadline	Wed 6/14	Wed 7/12	Wed 8/9	Wed 6/28	Wed 8/9	Wed 8/9	Wed 8/16

+ Independence Day, Tuesday 7/4, University Closed

\* Memorial Day, Monday 5/29, University Closed



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#### 2016-17

Faculty Assembly	7	Senate Counci	1	Staff Association Council	
Tuesday	June 7, 2016 (tentative)	Wednesday	June 15, 2016 (tentative)		July 12, 2016 (New Member Orientation Luncheon)
Tuesday	September 13, 2016	Wednesday	September 21, 2016	Wednesday	July 13, 2016
Tuesday	October 11, 2016	Wednesday	October 19, 2016	Wednesday	August 17, 2016
Tuesday	November 8, 2016	Wednesday	November 16, 2016	Wednesday	September 21, 2016
Tuesday	December 6, 2016	Wednesday	December 14, 2016	Wednesday	October 19, 2016
2017		2017		Wednesday	November 16, 2016
Tuesday	January 17, 2017	Wednesday	January 25, 2017	Wednesday	December 21, 2016
Tuesday	February 14, 2017	Wednesday	February 22, 2017	2017	
Tuesday	March 14, 2017	Wednesday	March 22, 2017	Wednesday	January 18, 2017
Tuesday	April 11, 2017	Wednesday	April 19, 2017	Wednesday	February 15, 2017
Tuesday	May 9, 2017	Wednesday	May 17, 2017	Wednesday	March 15, 2017
Tuesday	June 6, 2017 (tentative)	Wednesday	June 14, 2017 (tentative)	Wednesday	April 19, 2017
Tuesday	September 12, 2017	Wednesday	September 20, 2017	Wednesday	May 17, 2017
Tuesday	October 10, 2017	Wednesday	October 18, 2017	Wednesday	June 14, 2017
Tuesday	November 7, 2017	Wednesday	November 15, 2017	Wednesday	July 19, 2017
Tuesday	December 5, 2017	Wednesday	December 13, 2017	Wednesday	August 16, 2017
				Wednesday	September 13, 2017
				Wednesday	October 18, 2017
University Senate	2			Wednesday	November 15, 2017
Thursday	October 2016, TBA (Ple	mary Session)		Wednesday	December 13, 2017
Wednesday	March 2017, TBA (Plen	-		-	

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## Welcome to the University of Pittsburgh Catalog for the **Titusville Campus!**

Whether you are interested in attending the University of Pittsburgh, or are already enrolled, you can search the Catalog to obtain campus information, academic programs, policies, and courses. Should you have any questions about the content in the catalog, please email us at catalogs@pitt.edu.

## Looking for a Different Catalog?

Archived Catalogs - To view a Titusville Campus Catalog from a previous academic year, click on the Archived Catalogs link in the right-hand menu.

Other Pitt Catalogs - The University of Pittsburgh has five campuses in total. To view a Catalog for another campus, click the following link: Other Pitt Catalogs

## Search Programs, Courses & Policies

Use the Catalog Search at the top of the right-hand navigation to find information in the online catalog.

You can also click on the Advanced Search link below the Catalog Search to narrow or expand your search of the catalog.

## University of Pittsburgh Nondiscrimination Policy Statement

The University of Pittsburgh, as an educational institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, as fully explained in Policy 07-01-03, the University prohibits and will not engage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity and expression, genetic information, disability, or status as a veteran. The University also prohibits and will not engage in retaliation against any person who makes a claim of discrimination or harassment or who provides information in such an investigation. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University's mission. This policy applies to admissions, employment, access to and treatment in University programs and activities. This is a commitment made by the University and is in accordance with federal, state, and/or local laws and regulations.

For information on University equal opportunity and affirmative action programs, please contact: University of Pittsburgh, Office of Affirmative Action, Diversity and Inclusion, Pamela W. Connelly, Associate Vice Chancellor, 500 Craig Hall, Pittsburgh, PA 15260 (412) 648-7860.

For complete details on the University's Nondiscrimination Policy, please refer to Policy 07-01-03. For information on how to file a complaint under this policy, please refer to Procedure 07-01-03.

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At the top of every page you may information on how to use the Catalog.

**Catalog Help** 

## About the University of Pittsburgh at Titusville

The University of Pittsburgh at Titusville (Pitt-Titusville) is a regional campus of the University of Pittsburgh. While Pitt-Titusville provides careeroriented programs for those interested in an associate degree, it also offers more than 100 relocation and transfer programs for students pursuing baccalaureate or professional degrees. Pitt-Titusville also provides a cultural event series, lecture series, and community service projects, as part of its mission to serve the region as an educational, cultural, and economic resource.

The campus is in northwestern Pennsylvania in the pleasant residential city of Titusville. The city's historic significance, as the site of the first commercially successful oil well, brings countless visitors to the area throughout the year. The University of Pittsburgh affiliation, the excellent physical environment, and the small class sizes combine to make Pitt-Titusville an especially favorable setting for new college students. Pitt-Titusville offers the advantages of a liberal arts college and the resources, diversity, and prestige of a major research university.

Pitt-Titusville seeks to enroll approximately 500 full- and part-time students. About 60 percent of full-time students live on campus. The average class size is less than 20 students. Pitt-Titusville undergraduate students enjoy individual attention, both in and outside the classroom, and there are many opportunities for involvement and leadership in campus activities. Likewise they enjoy access to the support services and comprehensive academic offerings of the University of Pittsburgh, one of the finest research and professional institutions in the world.

## Accreditation

Since its inception in 1963, Pitt-Titusville has been accredited through its affiliation with the University of Pittsburgh by the Commission on Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104, 267-284-5000.

## **Educational Mission**

The University of Pittsburgh at Titusville provides students with a quality educational experience offered in a supportive environment conducive to learning, self-discipline, and mutual respect. Pitt-Titusville combines the advantages of a small college with the resources of an internationally renowned institution by:

- 1. Providing a point of access to the instructional and research facilities of the University of Pittsburgh for northwest Pennsylvania;
- 2. Providing a full range of associate degrees that serve as entry level access to a variety of professions or as prerequisites to baccalaureate programs;
- 3. Offering an excellent undergraduate curriculum in the liberal arts and sciences and professional programs with an emphasis on personalized attention to students;
- 4. Serving as an educational, cultural and economic resource for northwest Pennsylvania.

## The Titusville Community

Titusville is a small city in the foothills of the Allegheny Mountains with a distinctive place in world history. Col. Edwin L. Drake drilled the first commercial oil well here in 1859, making Titusville the birthplace of the oil industry and the center of early developments in petroleum technology. The Drake Well Museum, within walking distance of campus, preserves that rich technological and cultural history.

Today, Titusville is permanent home to about 6,000 people. It is an attractive residential community. Its tree-lined streets and stately homes mark its heritage and provide a pleasant environment in which to study and work. Located about 40 miles south of Erie and 90 miles north of Pittsburgh, Titusville is a gateway to outdoor recreational activities such as hunting, fishing, boating, swimming, canoeing, skiing, golfing, hiking, biking, and horseback riding. Just minutes from campus, for example, is Oil Creek State Park, which covers 6,400 acres and offers a 10-mile paved biking path, and the city-owned par course exercise trail. Though small, Titusville is large enough to offer a variety of stores, banks, churches, restaurants, and lodging facilities.

## **Buildings and Facilities**

The Titusville Campus, located on and adjacent to the former McKinney Estate, offers modern comfort and convenience in a traditional residential setting. The beautiful, compact campus is a vital academic and educational resource to the surrounding community. All facilities on campus offer wireless network access.

McKinney Hall, built in 1870, houses administrative and faculty offices as well as classrooms.

**Bennett Davis Hall**, formerly the carriage house of the estate, now houses the Offices of the Registrar, Student Accounts, Financial Aid Office, Office of Human Resources, and Office of Business Affairs.

**The Haskell Memorial Library** building is also on land originally part of the McKinney Estate. This building houses a 150-seat auditorium, the Pitt-Titusville Computer Center, classrooms, faculty offices, the Physical Therapist Assistant and Nursing Programs' facilities and the Haskell Library that houses the campus collection of books and periodicals. Currently, Haskell Library holds nearly 44,000 volumes and subscribes to more than 200 periodicals, from professional journals to magazines of general interest. CD-ROM databases and workstations have been added to complement traditional library information resources. The library also offers microfilm reading and copying equipment. These represent only a small portion of the resources available to Pitt-Titusville students. Haskell Library is linked to the 27 libraries in the Pitt system through PITTCAT Plus, an online computer catalog that allows easy access to the University's collection of more than 6,700,000 volumes (including microforms) and over 25,000 subscriptions. Pitt-Titusville students can also access numerous computerized databases and, through interlibrary loan networks, can gather data from major research libraries in the United States and abroad.

Also in the Haskell Library is the Pitt-Titusville Learning Center to provide students with convenient access to tutors, research material and computer facilities.

The \$5 million **Broadhurst Science Center** opened in 1998. The 32,000-square-foot structure houses biology, chemistry, psychology, geology, physics, computer laboratories, faculty offices, two demonstration/lecture halls, and one general classroom, all with multimedia video capability. The Campus Dean's Office and the Office of Academic Affairs is also found here. The building features a 417-seat theater/auditorium-the new home for Pitt-Titusville's Spotlight on the Lively Arts cultural events series, and other events that enrich the life of the campus and surrounding communities.

Adjacent to the above group of buildings is the **J. Curtis McKinney II Student Union/Gymnasium**. The building offers a full-size gymnasium, an auxiliary gym, racquetball courts, the Book Center, the Counseling Center, the Office of Student Conduct and the UPT Health Center. The newest addition to the building is McKinney Commons, an 8,100 square-foot dining facility. The dining area includes a Wood Stone Oven and a cutting edge service area with cook-to-order stations offering a wide variety of food choices. The building also houses several classrooms and administrative offices.

Behind the student union/gymnasium stands Pitt-Titusville 's largest residence facility, **Spruce Street Residence Hall**. An additional residence facility lies one block east of the center of the campus, and adjacent to a community park, Burgess Park. The **Pitt-Titusville Town Houses** provide apartment-style living arrangements. Each student living in a residence facility is provided with a computer port for direct access to the Pitt network as well as Wi-Fi capability.

## **Student Affairs**

The Division of Student Affairs includes the Offices of the Executive Director of Student Affairs and the Offices of Student Life, Counseling and Student Development, Health Services, Residence Life and Student Conduct.

#### **Health Services**

The Office of Health Services includes primary assessment and treatment, medical counseling, referral to local professional offices and agencies, and educational programming in current health issues.

#### **Counseling and Student Development**

The Office of Counseling and Student Development provides personal and career counseling, disability resources and services, academic support services, and personal development programming.

#### **Residential Services**

All full-time students outside a 30-mile radius are required to reside in campus housing, unless they are living with parents or immediate relatives. Exemptions are made for married students or those 21 years or older. Residential Services offer a variety of housing options in two housing facilities. Students may choose between traditional residence hall living, and town house accommodations. Private rooms are also available when space permits.

#### **Dining Services**

Several meal plan options are available to students. Dining hall hours are Monday-Friday, 7:00 a.m. to 7:00 p.m.; Saturday, Sunday, and holidays 11:00 a.m. - 6:00 p.m. Per meal food service is also available to commuter students, faculty and staff. All residential students are required to subscribe to one of the meal plans, unless exempted by the Disability Services Office at the University of Pittsburgh Main Campus.

## **Student Organizations and Athletics**

A diverse spectrum of activities offers a variety of opportunities to suit student interests. Among active student organizations are the Black Student Union, Cheerleaders, Commuter Student Association (CSA), Student Organization of the Pitt-Titusville Nursing Program, Student Activities Board, Student Government Association, Alpha Omega Campus Ministries, ALLIES, American Chemical Society, and the Student Physical Therapy Association. Pitt-Titusville also has a local chapter of Phi Theta Kappa, an academic honor society serving two-year institutions. Facilitating student involvement on campus are the Student Government Association and the Student Activities Board.

Students are especially encouraged to take advantage of the unique leadership opportunities afforded through involvement in student activities.

## **Intercollegiate Athletics**

The University of Pittsburgh at Titusville offers three intercollegiate sports: men's and women's basketball, and women's volleyball. All students may try out for the teams. Contact the Director of Athletics and Student Recreation for more information.

#### **Intramural Sports**

Intramural sports are an important part of the educational experience at Pitt-Titusville. Activities include indoor soccer, flag football, volleyball, racquetball, bowling, golf, dodge ball, and rag ball. Contact the Director of Athletics and Student Recreation for more information.

## Admissions

McKinney Hall504 East Main Street Titusville, PA 16354Phone: 814-827-4509Phone toll-free: 888-878-0462Fax: 814-827-4519E-mail: uptadm@pitt.edu

The University of Pittsburgh at Titusville (Pitt-Titusville) seeks applicants interested in building a strong academic foundation in a personalized campus setting. University programs focus on the first two years of college and prepare students for direct career entry upon completion of associate degrees or successful relocation and completion of four-year, baccalaureate degree programs.

Each application to Pitt-Titusville is evaluated individually by the Admissions Committee. In addition to scholastic achievement, the Committee considers co- and extracurricular involvement, leadership, special interests and talents, performance on college entrance examinations, personal motivation, and perceived ability for success at Pitt-Titusville . The Admissions Committee seeks to identify and admit candidates who will benefit from and contribute to the diversity of the Pitt-Titusville student body.

Any student with a high school diploma or its equivalent may apply for admission to an associate degree program at Pitt-Titusville.

#### **Admission Procedure**

All high school graduates, equivalency diploma recipients, and transfer students interested in pursuing undergraduate education at Pitt-Titusville and applying for admission to full-time study or degree-seeking part-time study must file an application for admission. Applications are provided by the Office of Admissions, or they can be submitted electronically at www.upt.pitt.edu. Specific questions regarding admission should be addressed to the Director of Admissions. Once admitted, students will receive information about orientation and registration.

Applicants for admission to the University of Pittsburgh at Titusville should submit the following materials to the Pitt-Titusville Office of Admissions:

- 1. Pitt-Titusville application form
- 2. \$45 nonrefundable application fee
- 3. Official high school transcript
- 4. Scholastic Aptitude Test (SAT) or American College Testing Program (ACT) scores
- 5. Transfer applicants must also submit official academic transcripts from each college attended.

In addition, the following items, while not required, will be considered by the Admissions Committee, and applicants are encouraged to include these optional items:

- 1. Admissions interview
- 2. References/letters of recommendation
- 3. Essay/personal statements

## **Transfer Credits**

Students who have taken credits at other colleges or universities may be able to apply them toward one of Pitt-Titusville's associate degrees. However, not all credits will transfer, and only a maximum of 30 credits will be accepted toward completion of the degree. Evaluation of transcripts for transfer into an associate degree program will be made by the Campus Dean on an individual basis. It should also be noted that the final 30 credits of the degree must be completed in residence at the Titusville campus.

#### **Campus Visit**

Appointments for interviews and campus visits, although not required, are encouraged. The purpose of the campus visit is to allow student candidates and their families an opportunity to gain first-hand knowledge of the programs, facilities, admission policies, and campus environment. Interviews and visits may be scheduled weekdays between 9 a.m. and 3 p.m. throughout the year, and Saturdays by appointment.

#### **Non-degree Admission Procedure**

Students interested in attending Pitt-Titusville without seeking a degree must complete and return the non-degree application and the applicant data sheet to the Office of Admissions. Upon completion of 18 University of Pittsburgh credits, students who wish to continue must apply for degree-seeking status through the Office of Academic Affairs. No financial assistance is available for non-degree students.

#### **Early Admission of Accelerated High School Students**

Students who have demonstrated a readiness to take on the challenges of college work at the end of their junior year of high school may be offered early admission to Pitt-Titusville in lieu of or complementary to their senior year. Readiness is determined on the basis of outstanding academic achievement, test information, school recommendations, and interviews. The early admission program is offered in cooperation with the student's secondary school, and the high school diploma must be awarded at the end of the student's first year of university study. Students interested in early admission must be recommended by their high school, and they should contact the Office of Academic Affairs for additional information.

#### **Academic Enrichment Program**

Academic enrichment classes are offered to qualified high school juniors and seniors through several regional high schools. Each high school sets its own standards for enrollment in consultation with the University of Pittsburgh at Titusville and arranges for university classes to be offered to their respective high school students. For information regarding this program, contact your high school guidance office or the Office of Academic Affairs at the University of Pittsburgh at Titusville.

#### **SUCCESS Program**

SUCCESS (Students Utilizing College Courses for Enrichment and Special Skills) is open to qualified high school juniors or seniors who wish to take college courses at Pitt-Titusville while still enrolled in high school. To be admitted to the program, high school juniors or seniors must have a minimum grade point average (GPA) of 3.50 on a 4.00 scale. Students may contact the Office of Academic Affairs for further information.

#### **Admission Requirements**

All applicants for admission to the University of Pittsburgh at Titusville must graduate from an accredited secondary school or hold an equivalency diploma; submit 15 units of secondary school credit; and submit scores from one of the following: the Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). Test requirements may be waived in special circumstances where the student has been out of school for a number of years. Recommended preparation includes:

Total	15 units
Academic Electives	7 units
Laboratory Science	1 unit
History	1 unit
Plane Geometry or Algebra II	1 unit
Algebra	1 unit
English	4 units

In addition to the above, engineering applicants should also complete trigonometry, chemistry, and physics. Pharmacy applicants should also complete trigonometry, biology, and chemistry.

Applicants for the Physical Therapist Assistant program have additional admission requirements. Contact the Office of Admissions or the Office of the Physical Therapist Assistant Program for full details.

Applicants for the Nursing program have additional admission requirements. Contact the Office of Admissions or the Nursing Program office for full details.

## **Advanced Placement**

The University accepts advanced placement credits according to the following schedule:

Exam Cod	e Description	Score	e Credits For	Credits
A2AP	Studio Art - 2-D	4,5	SA 0110	3
A3AP	Studio Art - 3-D	4,5	SA 0120	3
ADAP	Studio Art - Drawing	4,5	SA 0130	3
АНАР	Art History	3,4,5	HA&A 0010	3
AMAP	U.S. History	4,5	HIST 0600 or 0601	3
BSAP	Biology	4	BIOSC 0050, 0150	4
		5	BIOSC 0050, 0150, 0060, 0160	8
CAAP	Computer Science A	3, 4, 5	5 CS 0401	4
CBAP	Computer Science AB	3, 4, 5	5 CS 0401	4
CGAP	Comparative Government and Politic	s 4, 5	PS 0300	3
СНАР	Chemistry	3,4	CHEM 0110	4
		5	CHEM 0110, 0120	8
EEAP	Economics-Macroeconomics	4, 5	ECON 0110	3
ЕНАР	European History	4, 5	HIST 0100 or 0101	3
EIAP	Economics-Microeconomics	4, 5	ECON 0100	3
ESAP	Environmental Science	4, 5	GEOL 0860	3
FLAP	French Literature	4	FR 0055	3
FLAP	French Literature	5	FR 0021, 0055	6
FRAP	French Language	4	FR 0055	3
FRAP	French Language	5	FR 0055 & 0056	6
GRAP	German Language	4	GER 1490	3

GRAP	German Language	5	GER 1490	6
LAAP	English Language and Composition	4, 5	ENGLIT 0000	3
	With 600 on verbal SAT	5	ENGCMP 0200 & ENGLIT 0000	) 6
LCAP	Latin-Literature	4, 5	LATN 0220	3
LIAP	English Literature and Composition	4, 5	ENGLIT 0000	3
	With 600 on verbal SAT	5	ENGCMP 0200	6
LVAP	Latin-Virgil	4, 5	LATN 0220	3
MAAP	Calculus AB	4, 5	MATH 0220	4
MBAP	Calculus BC	4, 5	MATH 0220, 0230	8
MLAP	Music-Listening and Literature	3, 4, 5	MUSIC 0211	3
МТАР	Music Theory	3, 4, 5	MUSIC 0100	3
РНАР	Physics B	4	PHYS 0110	3
РМАР	Physics C Mechanics	4, 5	PHYS 0174	4
PSAP	Psychology	4, 5	Psychology 0010	3
SLAP	Spanish Literature	4, 5	SPAN 1600	3
SSAP	Statistics	4, 5	STAT 1000	4
STAP	Spanish Language	4, 5	See Dept.	3
UGAP	U.S. Government and Politics	4, 5	PS 0200	3
WHAP	World History	4, 5	HIST 0700	3

#### **Credit by Examination**

Students at the University of Pittsburgh may earn credits toward graduation by taking special examinations subject to the following qualifications:

- 1. Each department determines the courses for which students may earn credit by examination, and the time and type of examination.
- 2. Students may not take credit examinations in areas specified as prerequisites for admission.
- 3. Credit by exam cannot be obtained for a college-level course for which credit has already been awarded, nor can it be used to change a grade already received.
- 4. Credit by exam cannot be earned in lower-level sequence courses if the student has already taken a higher-level course in the sequence.
- 5. Students may not audit a course and then apply for credit by examination.
- 6. There is a fee for the examination, whether or not credits are earned.

## **College Level Examination Program**

The University of Pittsburgh at Titusville cooperates with the National College Level Examination Program (CLEP). Under this program, students who feel that their knowledge of a certain subject is extensive may elect to take CLEP examinations. Scores required for the award of credit from CLEP examinations (as well as Advanced Placement [AP] credit) have been set by the College faculty. Students are eligible for CLEP credit only if CLEP examinations are taken prior to the completion of 30 college credits, including transfer credits. Limitations of credit earned through CLEP examinations are as follows:

- 1. The credit must be useful in a student's program of study.
- 2. Credit will not be granted if a student has completed an equivalent or more advanced course in the discipline.
- 3. Duplicate credit in the same subject is not awarded in any case.
- 4. A student who has earned CLEP credit at other institutions must have their test scores evaluated to determine eligibility for credit at the University of Pittsburgh at Titusville.
- 5. Credit is granted, but grades and quality points are not assigned or recorded.
- 6. The acceptance of CLEP credit toward degree requirements varies from program to program. Consult with the Office of Academic Affairs for further information as to whether CLEP credits can be used to meet specific degree requirements.

**Credit Maximum:** A combined total of 30 credits may be awarded through CLEP, AP, transfer credits from other schools, and challenge examinations administered by the academic department within the University of Pittsburgh at Titusville.

Upon completing an examination, a student will receive credit (as indicated in the chart below) based on the score he or she achieves.

Note: Pitt Titusville does not use all available CLEP exams and will not accept CLEP credits for the following:

#### General exams:

- Humanities
- Natural Sciences
- Social Sciences

#### **Upper Level course exams:**

Marketing

#### **Other exams:**

- Algebra-Trigonometry (there are separate exams for Algebra and Trigonometry)
- English Literature (no Pitt Titusville equivalent)
- Composition, Freshman College (use the English Composition exam with Essay)

#### **Credit Awarded for CLEP Exams (equivalent course at Pitt-Titusville)**

Tests are Administered Through Computer Based Testing (CBT)

Composition and Literature	Score*	Credits
American Literature (ENGLIT 0570)	58	3
Analyzing and Interpreting Literature (ENGLIT 0370)	58	3

English Composition with Essay (ENGCMP 0200)	58	3
Second Languages		
French Language, Level 1 (FR 0001)	58	5
French Language, Level 2 (FR 0001 & 0002)	74	10
Spanish Language, Level 1 (SPAN 0001)	58	5
Spanish Language, Level 2 (SPAN 0001 & 0002)	74	10
Social Sciences and History		
American Government (PS 0200)	58	3
Educational Psychology, Introduction to (EDPSY 0006)	58	3
History of the United States I (HIST 0600)	58	3
History of the United States II (HIST 0601)	58	3
Human Growth and Development (PSY 0310)	58	3
Macroeconomics, Principles of (ECON 0110)	58	3
Microeconomics, Principles of (ECON 0100)	58	3
Psychology, Introductory (PSY 0010)	58	3
Sociology, Introductory (SOC 0010)	58	3
Western Civilization I (HIST 0100)	58	3
Western Civilization II (HIST 0101)	58	3
Science and Mathematics		
Algebra, College (MATH 0031)	58	3
Trigonometry (MATH 0032)	58	2
Calculus (MATH 0220)	58	4
**Biology (BIOSC 0150 and 0160 - without lab)	58	6
**Chemistry (CHEM 0110 and 0120 - without lab)	58	6
Business		
Accounting, Principles of (ACCT 0111 & 0112)	58	6
Business Law, Introductory (BUS 0106)	58	3
Information Systems and Computer Applications (CS 0131)	58	3

58 3

\* Scores are weighted with top score of 80.

\*\* Without laboratory

## **Academic Policies and Procedures**

## **Course Load**

To be considered full time a student must carry a minimum of 12 credits per term. In addition, a student will not be allowed to take more than 18 credits per term without special permission from the Campus Dean. A student will never be allowed to carry more than 21 credits per term. A course load above 18 credits carries an additional tuition charge. Background Checks and Clearance for Certain Academic

## **Background Checks and Clearance for Certain Academic Programs**

Please be advised that some programs or courses of study require that students complete rotations, fieldwork, internships/externships and/or teaching assignments at facilities external to the university, while other programs or courses of study may offer voluntary internships or externships at facilities external to the university. Depending on the program or course, such facilities will or may require a criminal background check, an act 33/34 clearance (if applicable), and perhaps a drug screen to determine participant qualification or eligibility. Additionally, in order to become licensed, many states will inquire as to whether the applicant has been convicted of a misdemeanor, a felony, or a felonious or illegal act associated with alcohol and/or substance abuse.

## **Course Changes and Resignation**

Students may change their course schedule by adding and dropping courses according to the deadlines printed in that term's class schedule booklet (also see Dropping a Course[s] below). Before making such changes, the student should carefully check compliance with the course load requirements listed above. **Dropping below full-time status may adversely affect a student's financial aid and housing.** Students may also resign from the University following the deadlines listed in that term's class schedule booklet. A student will receive a W grade if dropping a course after a certain point in the term, and an R grade if resigning after a certain point. Neither grade, however, will affect a student's grade point average.

## **Dropping a Course(s)**

Students who need to drop courses should log on to my.pitt.edu where they can change their schedule via adding or dropping a class through the end of the add/drop period. After the add/drop deadline established for the term or session, students cannot drop a course(s) but may withdraw through the Office of the Campus Dean.

Specific dates for every add/drop period are published in the Schedule of Classes. Students who decide not to attend the University may drop all of the courses they are registered for during the add/drop period with no financial liability. Students who make this decision after the add/drop period must process a resignation form through the Office of Student Accounts.

## Academic Standing, Probation, and Suspension

These guidelines are solely for the purpose of determining academic probation, suspension, and dismissal. While these are minimal standards, any degree, program, or major may set its own higher standards. Those standards take precedence over these.

In determining the academic standing of students, The University of Pittsburgh at Titusville has the right to treat each student's case on its merits. The primary consideration is the probability that the student can meet academic standards and achieve graduation in not more than five full time semesters or their equivalent. The committee may consider courses attempted, credits and grades earned, and the trend of performance.

These guidelines are solely for the purpose of determining academic probation, suspension, and dismissal. While these are minimal standards, any degree, program, or major may set its own higher standards. Those standards take precedence over these.

#### Probation

- 1. Students who have attempted 19 hours or less (including transfer credit) and whose cumulative grade point average is below 1.50 will be placed on probation.
- 2. Students who have attempted 20 to 35 hours (including transfer credit) and whose cumulative grade point average is below 1.75 will be placed on probation.
- 3. Students who have attempted 36 hours or more (including transfer credit) and whose cumulative grade point average is below 2.00 will be placed on probation.

#### Suspension

- 1. Students who are placed on probation for a second consecutive term will be suspended for the following term.
- 2. Students whose term grade point average is below a 1.00 will be suspended for the following term.

#### Dismissal

- 1. Students who are placed on probation for a third term will be dismissed.
- 2. Students who do not successfully complete any course after three attempts will be dismissed.

#### **Re-admittance for Summer Course Work after Suspension**

Students who have been suspended in the spring term may be allowed, with the permission of the Campus Dean, to enroll in course work at Pitt-Titusville during the summer sessions following that particular spring term. A student who moves back to good academic standing through summer course work may request reinstatement to resume studies on continued probation in the following fall term.

#### Honors

The University is pleased to award honors to students whose academic performance exceeds expectations. At the end of a term students may be recognized as a University Scholar or be placed on the President's or Dean's Lists. To earn academic honors for a term, students must have earned at least 12 credits and have a specific term grade point average. If a course has a mandatory grading system of S/N, grades of N will not be acceptable for University Scholar honors.

Honor	Term GPA
University Scholar	4.00
President's List	3.50 to 3.99
Dean's List	3.20 to 3.49

#### **Preparatory Courses**

The University offers courses for students who are not well prepared for college level mathematics and writing. To promote the academic progress of students in preparatory courses, students who test or place into MATH 0029, MATH 0030, and/or ENG 0100:

- 1. Must take those preparatory classes during their first term at the University of Pittsburgh at Titusville and every subsequent term until they are passed.
- 2. Will not be permitted to withdraw from those classes.

- 3. Are strongly encouraged to take IL 0210 College Reading and Study Skills.
- 4. Are strongly encouraged to use the resources of the Learning Center and other academic support services to their full benefit.

## Reinstatement

A student with prior UPT credits who left in good academic standing and wants to return within one academic year must complete and submit a routine *Reinstatement Form* to the Registrar's Office.

If a student was on suspension from the university, the student must submit a *Reinstatement Following Suspension Form* and include a statement explaining the circumstances that led to suspension and why they feel they will be successful if given the opportunity to return. Decisions regarding reinstatement are made by the Campus Dean and may include consultation with other campus administrators. Any non-Pitt credits obtained during the time they were on suspension will not be accepted.

#### Readmittance

A student who has left the University for any reason and remained unregistered for at least one year must apply and be readmitted before resuming his or her program. Students who attend another university during their absence from Pitt-Titusville must be readmitted and submit a transcript for evaluation. Reinstatement and readmission decisions are made through the Office of the Campus Dean. It should be noted that the University of Pittsburgh will not accept credits earned at another institution while the student is on academic suspension or probation at a Pitt campus.

## **Admittance of Students with Prior Pitt Degrees**

Students who have received a prior degree from another University of Pittsburgh campus must reapply through the Admissions Office if pursuing an additional degree.

## **Academic Integrity**

Academic integrity is a moral obligation of both students and faculty; it is expected that both students and faculty behave in a professional manner in the University setting. The following guidelines follow those established by the University of Pittsburgh for each group:

## **Student Responsibilities**

The student must conduct himself or herself in an appropriate manner in and out of the classroom. Principally, this involves doing one's own work at all times and complying with each instructor's class guidelines and requirements, including class attendance. A student violates academic integrity when he or she is involved in any of the following:

- 1. Cheating (such as unauthorized use of a text or notes during an exam, copying the work of another student, or obtaining and using a copy of an exam in advance of its administration)
- 2. Plagiarism (presenting as one's own the work of another without proper acknowledgment)
- 3. Deceitful practice (such as knowingly allowing one's work to be submitted by another student)
- 4. Class conduct that is so disruptive as to infringe upon the rights of the instructor or fellow students

If a student is involved in any of the preceding, there is a specific set of guidelines explained in the *Student Handbook* for actions that may be taken by the University and for sanctions imposed. This may involve a hearing before the Academic Integrity Board and sanctions ranging from dismissal from the University to failing the course involved.

#### **Faculty Responsibilities**

Faculty members also have obligations under the academic integrity guidelines. These include the following:

- 1. Meeting classes as scheduled
- 2. Being available for, and keeping, established office hours and appointments
- 3. Making appropriate preparations for all classes
- 4. Grading and returning all tests and assignments promptly
- 5. Describing course goals, prerequisites, and grading procedures before the end of the add/drop period
- 6. Using good-faith professional judgment as the basis for all academic evaluations
- 7. Not considering, in academic evaluation, such factors as race, color, religion, ethnicity, national origin, age, sex, sexual orientation, marital, veteran, or disability status
- 8. Respecting the confidentiality of information regarding a student as stated in University guidelines
- 9. Not exploiting their professional relationship with a student for private or personal advantage
- 10. Respecting the dignity of students, individually and collectively, in the classroom and other academic settings

If a student feels that any of these have been violated by a professor, he or she should seek appropriate judgment of the grievance by the Campus Dean.

#### Grades

The following is a list of grades used by the University of Pittsburgh at Titusville and their numerical value, which is used to calculate a student's grade point average:

A+	=	4.00	
A	=	4.00	Superior attainment
A-	=	3.75	
B+	=	3.25	
В	=	3.00	Meritorious attainment
B-	=	2.75	
C+	=	2.25	
С	=	2.00	Adequate attainment
C-	=	1.75	
D+	=	1.25	
D	=	1.00	Minimal attainment
D-	=	0.75	

A final grade in a course represents the cumulative evaluation and judgment of the faculty member placed in charge of that course. If a student feels the final grade or an academic decision in a course was not determined in accordance with university policies or was determined arbitrarily, the student may appeal by adhering to the procedure described in the Student Handbook.

It is the responsibility of the student, before seeking to have a grievance adjudicated, to attempt to resolve the matter by personal conference with the faculty member concerned, and, if such attempts are unsuccessful, to call the matter to the attention of the Campus Dean for consideration and adjustment by informal means. If a matter remains unresolved after such efforts have been made, the grievance procedures shall be employed.

This grievance procedure must be initiated by the student and the written statement of charges must be received by the Campus Dean within the first ten (10) regularly scheduled class meeting days of the term immediately following the term in which the appealed grade was received. The written statement must be an accurate and complete statement of all facts pertaining to the matter.

Complete details pertaining to this policy can be found in the Policy Manual of the University of Pittsburgh, Academic Affairs, Academic Integrity, Guidelines on Academic Integrity-Student and Faculty Obligations and Hearing Procedures, Document Number 02-03-01.

#### **Other Grades**

The following entries may also be made on a student's transcript:

- Work incomplete for reasons beyond the control of the student. Proper forms must be filed in the Office of the Dean explaining why a G
   grade should be given and what work must be made up to complete the course. The student must make up the course work during his or her next fall or spring term. Failure to complete the course work will result in loss of the credits earned in the course.
- N Noncredit audit. If a student wishes to audit a course, then he or she must file the appropriate grade option form with the Office of the Registrar no later than one week after the end of the add/drop period.
- W Withdrawal from a course with no penalty and no credit
- R Resignation from all courses and the University
- S Satisfactory completion of course requirements
- U Unsatisfactory completion of course requirements
- LG Letter Grade option
- S/NC Satisfactory/Audit option
- LG/NC Letter Grade and Satisfactory/Audit option

#### **Transfer Credits**

A student who has earned credits at another college, university, or post secondary educational institution may have the credits evaluated for transfer into the University of Pittsburgh at Titusville. Official transcripts are evaluated and are subject to the individual requirements of the program to which a student is applying. Credit cannot be given for courses taken at another university while the student is on probation or suspension from any University of Pittsburgh campus. The following general rules will apply in most cases:

- 1. Credits will be considered for transfer based on course equivalencies. The University will not refuse to consider transfer credit based on accreditation of the sending institution.
- 2. Course work must have been completed in the last 12 years prior to matriculation (courses in some programs require a shorter time frame)
- 3. Course work must have been completed with a grade of C or better (C- is not acceptable)
- 4. Transfer courses that are part of a sequence may or may not be transferrable depending on requirements of the specific program for which the student is enrolling
- 5. The maximum number of credits that the University of Pittsburgh at Titusville will transfer toward an associate degree is 30.

- 6. The number of credits granted for a course cannot exceed those on the transcript from the school where they were earned; nor can they exceed the number of credits for the corresponding course at UPT.
- 7. Quarter credit hours are considered as follows: 5 quarter credit hours = 3 semester credit hours; 3 quarter credit hours = 1 UPT semester credit hour

## **Cross Registration**

Only students who are on unrestricted academic standing at Pitt-Titusville will be allowed to cross register during the fall and spring terms. Cross registration is limited to two courses or eight credits per term or session. Students enrolled at Pitt-Titusville wishing to take courses at another University or at another University of Pittsburgh campus must receive written permission of the Campus Dean.

#### **Course Repetitions**

In general, students are allowed to repeat courses at the University of Pittsburgh at Titusville. The last grade earned is the one used in calculating credits to be awarded and in computing the GPA. In other words, grades are not averaged when a course is repeated. Course repetitions are limited in the PTA and Nursing programs. Contact these program offices for more specific information about the course progression requirements. Students are encouraged, and sometimes required, to repeat courses in which they have earned less than a C- grade. This policy is limited, however, by the following exceptions:

- 1. No sequence course may be repeated for credit after a higher-numbered course in the same area has been passed.
- 2. No course may be repeated more than twice except by special permission of the instructor and the Campus Dean. In no case will a student be allowed to repeat a course more than three times. *NOTE: If the student has received a W or an R in a course, this rule does not apply.*
- 3. No course may be repeated for credit at another institution outside of the University of Pittsburgh system. Nursing students enrolled in the Associate of Science in Nursing degree program are subject to additional curriculum policy requirements including the policy that no course may be repeated more than once. See the Nursing Program Curriculum Policy for more details.

#### **Second Associate Degree**

A student wishing to earn two or more associate degrees may do so by completing the following:

- 1. The associate degree general and core requirements and
- 2. The concentration requirements for each degree sought

Courses used to fulfill concentration requirements for one associate degree may not be used to fulfill concentration requirements for another. Thus, a student would need a minimum of 15 additional credits to earn a second associate degree.

#### Academic Internship(s)

An academic internship is a method of receiving academic credit for work experience gained in a "real world" environment related to a specific field of study.

#### UPT offers the Opportunity for Internships in the following areas:

ACCT 1399 - ACCOUNTING INTERNSHIP BIS 1399 - INFORMATION SYSTEMS INTERNSHIP BUS 1399 - BUSINESS MANAGEMENT INTERNSHIP CS 1399 - COMPUTER SCIENCE INTERNSHIP HRP 0080 - HEALTH SCIENCES INTERNSHIP HUSERV 0399 - HUMAN SERVICES INTERNSHIP

## Certain regulations and requirements must be observed which are as follows:

#### 1. The Student:

- 1. Students must have completed a minimum of 30-45 credits, depending on the program requirements in the course syllabus, with a **minimum overall GPA of 2.5** in their associate degree program.
- 2. Students must have grades no lower than "C" in their major courses (ACCT, BIS, BUS, HRP, HUSERV) to be eligible for an internship.
- 3. The student is required to attend an Internship Preparedness Session with the Internship Coordinator/Supervisor at UPT before the internship can begin and at which time they will be given a copy of the course syllabus. Internships can be completed in the fall, spring or summer semesters but must be arranged before the semester begins.
- 4. The student may begin the internship before registering for the class; however, registration must take place during a regular registration period.
- 5. No more than three credits can be earned through the same position.
- 6. The internship may be in a paid or unpaid position.
- 7. The student cannot do an internship in an organization where he/she is currently employed. Exceptions may be granted by the Internship Coordinator if 1) the student will be assigned new tasks related to the internship and 2) adequate supervision is maintained.

#### 2. The Internship Coordinator:

The Internship Coordinator/Supervisor at UPT and the student are jointly responsible for finding the internship location. The student's Academic Advisor is a key figure and should be included in all transactions. No internship site will be approved until a visit to the site has been completed by the Internship Coordinator/Supervisor. The position must be one that allows the student to use the skills acquired in the pursuit of the degree.

#### **3. Required Internship Documents:**

The student will complete and provide to their Faculty Advisor the following documents (may be obtained from the Academic Affairs Office) before the internship begins:

- 1. The official Undergraduate Internship Contract with a description of the project/objectives or job duties on the internship site signed by the student, the Internship Site Supervisor, UPT's Internship Supervisor/ Coordinator and Academic Dean.
- 2. A current resume
- 3. A letter from the work site offering the student an internship.
- 4. Class registration form signed by the Faculty Advisor, Internship Coordinator/Supervisor and Academic Dean.
- 5. Depending on the job requirements, some internships may require the students to obtain additional documents such as a criminal background check, an act 33/34 clearance, an act 151 child abuse background clearance, drug-testing, Hepatitis B vaccination, HIPPA training, bloodborne pathogen training, etc. These would be the responsibility of the student to obtain before beginning the internship. Additionally, in order to obtain licensing if required in certain areas, many states will inquire as to whether the applicant has been convicted of a misdemeanor, a felony, or a felonious or illegal act associated with alcohol and/or substance abuse. Also, some internship sites require liability insurance, which would be included as part of the course fee and arranged through UPT.

#### 4. Evaluation and Grading Procedure:

- 1. Individual meetings with the student and their Faculty Advisor during the internship period may be required. These meetings may take place at the internship site.
- 2. A "Student Midpoint Performance Appraisal" form and "Student Intern Final Performance Appraisal" form must be completed by the Internship Employer and submitted to the Faculty Advisor before the final grade can be awarded. Standard forms are available; however, the program area may use forms specific to their needs.
- 3. The grade will be awarded by the Faculty Advisor after meeting with the student at the internship site, reviewing the midterm and final evaluations, and after the student has completed all internship requirements outlined on the course syllabus.

#### 5. Table of Credits Earned/Academic Assignments Required\*

\*per A&S faculty teaching guidelines

No. of credits to be earned	No. of hours at the internship site	Academic Assignment Required
1 credit	40 hours	Topical paper (5 pages in length) that integrates the intern's experience with topics within the academic discipline approved by the UPT internship supervisor
2 credits	80 hours	Topical paper (10 pages in length) that integrates the intern's experience with topics within the academic discipline approved by the UPT internship supervisor.ANDPortfolio containing samples of student's work at the internship siteORReflective Journal
3 credits	120 hours	Topical paper (15-20 pages) that integrates the intern's experience with topics within the academic discipline approved by the UPT internship supervisor.ANDPortfolio containing samples of student's work at the internship siteORReflective Journal

#### **Academic Honors**

#### **Term Honors**

The University of Pittsburgh at Titusville has the following policy:

University Scholar	r = GPA  of  4.00
President's List	= GPA of 3.50-3.99
Dean's List	= GPA of 3.20-3.49

To receive honors recognition for the term, a student must have earned at least 12 credits. If a course has a mandatory grading system of S/NC, NC grades will not be acceptable for University Scholar honors.

#### **Graduation Honors**

Students completing an associate degree who have attained an outstanding scholastic record are graduated with honors. To qualify for university honors, a student must have attained a cumulative GPA of 3.25 for cum laude, 3.50 for magna cum laude, and 3.75 for summa cum laude, and this recognition is noted on the student's diploma and transcript. To qualify for program honors, a student must have attained a cumulative GPA of 3.20 or above, and this recognition is noted on the student's transcript. Honors are calculated only after a student has completed a minimum of 60 credits at the University of Pittsburgh.

#### Phi Theta Kappa

This International Honor Society of the Two-Year College recognizes the promotion of scholarship, the development of leadership and service, and the cultivation of fellowship among qualified students. The Alpha Pi Zeta Chapter on the campus of the University of Pittsburgh at Titusville invites students for membership who have completed a minimum of 15 credits with a cumulative GPA of 3.50 or above and who have demonstrated good moral character with recognized qualities of citizenship.

## **Other University Policies**

## **University Policies**

#### **Affirmative Action and University of Pittsburgh Nondiscrimination Policy Statement**

The University of Pittsburgh, as an educastional institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, as fully explained in Policy 07-01-03, the University prohibits and will not enage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry,m sex, age, marital status, familial status, sexual orientation, gender identity and expression, genetic information, disability, or status as a veteran. The University also prohibits and will not engage in retaliation against any person who makes a claim of discrimination or harassment or who provides information in such an investigation. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University's mission. This policy applies to admissions, employment, access to and treatment in University programs and activities. This is a commitment made by the University and is in accordance with federal, state, and/or local laws and regulations.

For information on University equal opportunity and affirmative action programs, please contact: University of Pittsburgh, Office of Affirmative Action, Diversity and Inclusion, Pam W. Connelly, Associate Vice Chancellor, 500 Craig Hall, Pittsburgh, PA 15260, (412) 648-7860.

For complete details on the University's Nondiscrimination Policy, please refer to Policy 07-01-03. For information on how to file a complaint under this Policy, please refer to Procedure 07-01-03.

#### **Computing Use Policy**

Every member of the University community has two basic rights regarding computing: privacy and a fair share of resources. It is unethical for another person to violate these rights. All users, in turn, are expected to exercise common sense and decency with regard to the campus computing resources. Please read Ethical Guidelines for Computing, available in campus computing labs or online at http://technology.pitt.edu/security/compliance/acceptable-use.html for details.

Students are subject to the rules and regulations as described in the University of Pittsburgh *Student Code of Conduct* and the *University of Pittsburgh at Titusville Student Handbook*. Students should realize that any misuse of computing resources may result in the suspension of their computing privileges.

#### **Drug-free Workplace/Drug-free Schools Policy**

The University of Pittsburgh prohibits the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance on University property or as part of any University activity. Faculty, staff, and students of the University must also comply with the laws of the Commonwealth of Pennsylvania on the possession and consumption of alcohol.

Violation of this policy will result in disciplinary action within 30 days, including, but not limited to, a warning, written reprimand, suspension, dismissal, expulsion, and/or mandatory participation and successful completion of a drug abuse assistance or rehabilitation program approved by an appropriate health or law enforcement agency.

Any University employee paid from federally funded grants or contracts, or any student participating in any federally funded or Guaranteed Student Loan Program, must notify the University of any criminal drug statute conviction for a violation occurring at the University or while engaged in University activities.

#### **Faculty-Student Relationship Policy**

The University of Pittsburgh's educational mission is promoted by professional relationships between faculty members and students. Relationships of an intimate nature (that is, sexual and/or romantic) compromise the integrity of a faculty-student relationship whenever the faculty member has a professional responsibility for the student. The University prohibits relationships between a faculty member and a student whose academic work, teaching, or research is being supervised or evaluated by the faculty member.

If an intimate relationship should exist or develop between a faculty member and a student, the University requires the faculty member to remove himself/herself from all supervisory, evaluative, and/or formal advisory roles with respect to the student.

Definition Note: In this policy, the definition of "faculty member" refers to anyone appointed by the University as a teacher, researcher, or academic administrator, including graduate and undergraduate students so appointed.

#### **Family Educational Rights and Privacy Act**

In compliance with the Family Educational Rights and Privacy Act of 1974, the University guarantees that students have the right to inspect all personally identifiable records maintained by the institution and may challenge the content and accuracy of those records through appropriate institutional procedure. It is further guaranteed by the University that student records containing personally identifiable information will not be released except as permitted by the Family Educational Rights and Privacy Act.

For more information, students may contact the Office of Student Services, 504 East Main Street, Titusville, PA 16354, or call 814-827-4470.

#### **Harassment Policy**

No University employee, student, or individual on University property may intentionally harass or abuse a person (physically or verbally) with the purpose or effect of unreasonably interfering with such person's work or academic performance, or of creating an intimidating, hostile, or offensive work or academic environment.

#### **Immunization Policy**

All incoming full-time students must submit proof of immunization against measles (rubeola), German measles (rubella), and mumps. A current inoculation of the MMR (measles, mumps, rubella) vaccine satisfies the University immunization requirement. Resident students must also provide proof of meningitis vaccine or sign a waiver.

All incoming students must provide to the University Student Health Center documentation of immunization which includes the month, day, and year the immunizations were administered. Completed immunization forms must be kept on file in the Student Health Center Service. A student may be granted a medical exemption from immunization based on danger to health or religious beliefs.

*Failure to Comply:* Incoming full-time students who, after receipt of notification by the University that their immunization records are incomplete, fail to provide proof of immunization or written request for exemption as described above, will be prohibited from registering for any classes beyond the term following initial enrollment.

Students enrolled in the Nursing program have additional health screening requirements and immunization requirements. Contact the Office of the Nursing Program for more details.

#### **Patent Policy**

A University student, during his or her period of enrollment, may be responsible for new discoveries and inventions that could have commercial value and contribute to scientific, technological, social, and cultural progress. Those accomplishments should be patented in the best interest of the student, the University, the public, and the government. The University's policy on patent rights and technology transfer determines the rights and obligations of the student and the University in any technology the student may invent while enrolled in the University. Details of the University policy are available from the Office of Technology Transfer and Intellectual Property.

#### **Research Integrity**

The University of Pittsburgh seeks excellence in the discovery and dissemination of knowledge. Excellence in scholarship requires all members of the University community to adhere strictly to the highest standards of integrity with regard to research, instruction, and evaluation. Research misconduct carries potential for serious harm to the University community, to the integrity of science, and to society as a whole.

#### **Sexual Harassment Policy**

The University of Pittsburgh is committed to the maintenance of a community free from all forms of sexual harassment. Sexual harassment violates University policy as well as state, federal, and local laws. It is neither permitted nor condoned.

It is also a violation of the University of Pittsburgh's policy against sexual harassment for any employee or student at the University of Pittsburgh to attempt in any way to retaliate against a person who makes a claim of sexual harassment. For information regarding sexual harassment policy at the University of Pittsburgh, see http://www.cfo.pitt.edu/policies/documents/policy06-05-01web.pdf. Additional information and reporting options of sexual harassment and sexual assault are available at <a href="http://www.upt.pitt.edu/sexual-assault-awareness-and-prevention-0">http://www.upt.pitt.edu/sexual-assault-awareness-and-prevention-0</a>.

#### **Smoking Policy**

This policy is in compliance with University of Pittsburgh regulations effective February 1, 1991, "restricting smoking in University of Pittsburgh facilities at all campuses."

*Policy:* Smoking is prohibited in all University owned and leased facilities, and in all University vehicles and has been revised to prohibit smoking within fifteen (15) feet of all University building primary entrances and Heating, Ventilation, and Air Conditioning (HVAC) intake vents.

The Human Resources directive provides the following details:

"Primary entrances shall be defined as the common public access points to each building, and is not intended for doors exclusively designated as emergency exits only or as service entrances. Note: portions of loading docks that are under building cover and interior garages shall be considered as inside the building and smoking shall be prohibited."

Contact the Affirmative Action Officer at 412-648-7860 for questions on the policy or its application.

#### **Student Code of Conduct**

The purpose of the Student Code of Conduct is to outline nonacademic standards of conduct appropriate to the University in conjunction with the educational goals of the University. The code shall apply to all undergraduate students registered at the University of Pittsburgh at Titusville. Any member of the University community may institute a proceeding against a student by filing a complaint in the Office of Student Affairs. For a copy of the code, please contact the Resident Life and Student Conduct Office in the J. Curtis McKinney II Student Union, Room 216, 814-827-4440.

#### **University AIDS Policy**

The University of Pittsburgh does not discriminate against individuals who are diagnosed as HIV positive or as having AIDS.

The University recognizes that the health condition of individuals is personal and confidential. Reasonable precautions will be taken to protect information regarding the health condition of all members of the University community.

Based on medical evidence that indicates that there is no risk of transmitting HIV through casual contact in the classroom or circumstances involving only casual contact with others, the University will impose no undue restrictions on faculty, staff, or students who are infected with HIV.

## **Financial Information**

114 McKinney Hall 504 East Main Street Titusville, PA 16354 Phone: 814-827-4495 Fax: 814-827-4522

Pitt-Titusville has established a program of financial aid to provide assistance to students whose resources cannot meet the total cost of education. Students are encouraged to apply for financial aid and to explore all potential sources of financial assistance including state, federal, and community sources, as well as the University.

Students may receive various types of financial assistance from a variety of government, university, and privately-sponsored programs including grants and scholarships (direct awards with no repayment required), loans (normally offered at low interest with repayment due in small installments after the student leaves college), and/or campus-based employment. Additional information and appropriate applications may be obtained from the Office of Financial Aid.

Students should also check with their high school guidance office for additional grants and scholarships that may be available locally.

## **Financial Aid Application Procedure**

To be considered for financial aid, students must file the Free Application for Federal Student Aid (FAFSA). A variety of factors are typically considered in determining eligibility, including college costs, family contributions, student earnings, family size, savings, and date of submission of all appropriate financial aid materials.

Financial aid awards are made for one academic year, and eligibility must be determined on an annual basis. Therefore students must file a FAFSA each year. Students must show continued need, and must submit all appropriate applications each year within established deadlines, as well as meet all federal regulations regarding verification if selected (this may include submitting tax, transcripts and other supporting documents). In addition, students must be in good academic standing and must show satisfactory academic progress toward a degree, as defined below, to be eligible to receive, or to continue to receive financial aid.

Detailed information about all financial aid programs, including financial aid policies, application procedures, and deadlines, in addition to financial aid applications, can be obtained from the Office of Financial Aid. Individual appointments can be made Monday through Friday, 8:30 a.m.-5 p.m.

## **Satisfactory Academic Progress Policy**

Federal regulations require that the University of Pittsburgh at Titusville's Office of Financial Aid monitor the Satisfactory Academic Progress of all students applying for, or receiving financial aid. The programs governed by these regulations are known as Federal Title IV Aid and include: Federal Perkins Loan, Federal Direct Parent PLUS Loan, Federal Direct Loan (Subsidized/Unsubsidized), Federal Supplemental Educational Opportunity Grant (SEOG), Federal Work-Study, Federal Pell Grant, and most University aid. This standard does not apply to tuition remission for dependents of Pitt employees, some outside scholarships, or state student incentive grants (i.e., PHEAA. State Grants). State agencies awarding state grants establish their own academic standard.

All students who meet the Satisfactory Academic Progress requirements will be assigned a Satisfactory Academic Progress indicator for the upcoming school year.

Satisfactory Academic Progress (SAP) standards include three components:

1. GPA Requirement.

Students must achieve a 1.50 minimum cumulative GPA at the end of their first academic year (max of 29 credits attempted), and a 2.00 cumulative GPA at the end of their second and subsequent academic years.

2. Pace of Completion.

Students must maintain a minimum 67% cumulative course completion rate based on cumulative credits attempted and cumulative credits completed. All courses with a passing or failing grade will be counted as credits attempted.

#### 3. Attempted Credits/Program Length.

Credits attempted by a student cannot exceed 150% of the credits required as defined by the University's published length of the specific program. For example, for a 2 year degree (60 credits), a student must complete their program within 90 credits.

All courses with a passing or failing grade will be counted as credits attempted. All courses with a grade designated as G, I, R, or W will be counted as credits attempted. Credits on all repeated courses will be counted as credits attempted. Transfer credits from another school will be counted both in terms of hours attempted and hours completed in SAP evaluation. Reinstated students do not have prior attempted credits excluded from the determination for student aid eligibility, as required by federal regulations.

#### **Unsatisfactory Progress**

Those not making progress will be dropped to unsatisfactory progress and be denied student aid for any upcoming enrollment period until they have met the requirements for satisfactory academic progress. Students academically dismissed are automatically ineligible for further financial aid.

The student can regain Satisfactory Academic Progress after being placed on Unsatisfactory Progress by:

- Registering and paying for classes using his/her own funds. Students may wish to consider the PittPAY Payment PLAN or certain
  alternative loans that do not require SAP. Upon meeting financial aid satisfactory academic progress criteria as stated above, the student
  must request financial aid reinstatement and complete a Free Application for Federal Student Aid (FAFSA), OR
- The student may appeal the loss of financial aid eligibility if a student has experienced circumstances beyond control that have kept them from maintaining satisfactory academic progress. After review by the Financial Aid Office, if an appeal is reviewed favorably, the student will be granted one term of Probation for financial aid and eligibility will be reinstated for one payment period. Students must be able to demonstrate that they will be able to meet SAP standards at the end of the next payment period. In cases where it is not possible for a student to meet minimum requirements for Satisfactory Academic Progress in one term, the student can be placed on an academic plan. If the academic plan is approved, the student's financial aid eligibility will be reinstated for one payment period. Students must meet the requirements of the academic plan at the end of the payment period to be eligible to receive aid for subsequent terms. The student will remain on the academic plan until they have met the Satisfactory Academic Progress requirements. Please contact the Financial Aid Office for more information on the appeals process.

#### **PHEAA State Grant Program**

In addition to the general Satisfactory Academic Progress guidelines, undergraduate students receiving a PHEAA State Grant are subject to a separate satisfactory academic progress review. Full-time students are required to complete a minimum of 12 credits for each full-time PHEAA grant received or a minimum of 6 credits for each part-time PHEAA grant received in the most recent completed academic year.

For more specific information, please contact the Office of Financial Aid.

#### **Financial Assistance Programs**

By completing the FAFSA application process outlined above, students are applying for:

Federal Pell Grant-federal entitlement program providing assistance to qualified applicants;

Federal Supplemental Opportunity Grant (SEOG)-institutionally controlled federal grant program awarded on the basis of significant financial need and available funding (must be Federal Pell Grant eligible to receive;

Federal Work Study-on-campus employment program supported by federal and institutional funds;

**Federal Perkins Loan**-federally funded need based loan program administered through the college-only available to returning students who received a Federal Perkins loan this past year. The Federal Perkins loan program is set to expire September 2017.

PHEAA Grant-state-sponsored grant program available to eligible Pennsylvania residents;

In addition, students are eligible to apply for Federal Direct Subsidized and/or Unsubsidized Loans and Federal Direct Parent PLUS loans. Students who receive loans are reminded of their repayment obligations. Promissory notes required for each loan will detail these obligations.

## **Veterans' Educational Benefits**

For questions and information regarding educational benefits for veterans or spouses and children of service connected disabled veterans, visit our Web site at: www.upt.pitt.edu. and click on Veterans' Services under the Prospective Students index tab. You may also call the Veteran's Affairs campus representative at 814-827-4495.

## **University Scholarships and Grants**

Donor Scholarships -- Pitt-Titusville awards several scholarships made possible by gifts from private donors and direct institutional funds based on a student's high school academic achievements. Admitted students are considered for assistance from all sources offered by the college.

All donor scholarships require the student complete a FAFSA application and be enrolled full-time and continuously during the academic year. These scholarships are awardable for a maximum of two academic years (August-April) - Summers not included. In order to renew for a second year, a student must have a minimum cumulative 2.85 GPA. The following are the specific awards and their additional specific eligibility criteria:

John Nesbit Rees and Sara Henne Rees Charitable Foundation Scholarships-awarded to students majoring in science-related fields and humanities

The DeFrees Family Foundation Scholarship-awarded to students enrolled at Pitt-Titusville from Warren County

Ruth R. Gilson Scholarships-awarded to Titusville High School graduates

Betty Root Scholarships (in memory of Delbert Proper and Jessie Lamberton Proper)-awarded to students who are accepted into our Nursing Program who are graduates of Maplewood High School

**The Panizza Family Scholarships**-awarded first to graduates of Fort Cherry or Monesson High Schools, then to students from Monessen or McDonald, PA, then to students from Fayette, Washington and Westmoreland counties.

Ben McEnteer Scholarship Fund-awarded to deserving full-time students

John Hugh Erickson II Memorial Scholarship-awarded to deserving full-time students

Marshall A. Fisher Scholarship-available to graduates of Titusville Area High School (application forms are available in the high school guidance office)

Walter Scott Kriner Family Scholarship-awarded to deserving full-time students

**Merit Scholarships**-Pitt-Titusville Merit Scholarship is awarded based on a student's cumulative high school GPA and SAT or ACT scores to newly admitted first time freshmen who plan to enroll full-time and live on campus. It is renewable for the second year only at the Titusville campus if the student remains a full-time, on-campus student with minimum 2.0 overall GPA.

For more specific details on each of these scholarships, please visit http://www.upt.pitt.edu/financial-aid/types-financial-aid/upt-scholarships

#### **Tuition, Fees, and Other Charges**

The following are the costs for the 2016-2017 academic year (subject to change each academic year).

The University of Pittsburgh reserves the right to change the tuition rate and fees at any time without advance notice.

Application fee (non refundable)	\$45 one time
Tuition deposit (non refundable) (applied to first term's tuition)	\$100
Tuition-Housing deposit (combined)	\$200

#### **Non- Nursing Tuition**

Tuition, full-time, in-state, * (12-18 credits) \$5,479 per term		
Tuition, full-time, out-of-state	\$10,351 per term	
Tuition, part-time, in-state,	\$456 per credit	
Tuition, part-time, out-of-state,	\$862 per credit	
Nursing Tuition		
Tuition, full-time, in-state,	\$7,968 per term	
Tuition, full-time, out-of-state,	\$14,822 per term	
Tuition, part-time, in-state,	\$664 per credit	
Tuition, part-time, out-of-state,	\$1,235 per credit	
*Additional charge per credit over 18 cred	lits.	
The difference between in-state and out-or Eligibility for Reduced Tuition).	f-state tuition is provided through an appropriation from the Commonwealth of Pennsylvania (see	
Room charge, double	\$2,698 per term	
Room charge, single (incl. \$300 surcharg	e) \$2,998 per term	
Private room surcharge	\$300 per term	
Board:		
Unlimited Block plus 50 Flex Dollars	\$2,538 per term	
Unlimited Block	\$2,488 per term	
225 Block plus 100 Flex Dollars	\$2,199 per term	
225 Block	\$2,099 per term	
Commuter Charges:		
75 meals plus 100 flex dollars	\$726 per term	
25 meals plus 100 flex dollars	\$297 per term	
10 meals plus 100 flex dollars	\$179 per term	

All full-time students who do not reside with their parents are required to live in University housing unless a waiver is granted by the Campus Dean. Resident students are required to take a board plan. Part-time students (fewer than 12 credits) are not eligible for University housing. Room and Board charges will be prorated from the date of departure for resignations.

#### **Other Mandatory Fees For All Students**

Student activity fee, full-time	\$90 per term
Student activity fee, part-time	\$15 per term
Recreation fee, full-time	\$100 per term
Recreation fee, part-time	\$20 per term
Student health service fee, full-time	\$50 per term
New student orientation fee	\$60 one time
Computing and network fee (full-time)	\$175 per term
Computing and network fee (part-time)	\$100 per term

#### **Course Fees**

Physical education fee	\$10 per course
Studio Arts fee	\$20 per course
Chemistry lab fee (applies also to Organic Chemistry labs)	\$50 per course
Biology lab fee (applies also to Microbiology and A & P labs)	\$50 per course
Human Body System lab fee	\$25 per course
Geology lab fee	\$50 per course
Microbiology lab fee	\$50 per course
PTA lab fee, basic	\$25 per course
PTA lab fee, advanced	\$50 per course
Nursing fundamentals lab fee	\$75 per course
Nursing lab fee	\$35 per course
Nursing 3-day licensing seminar fee (Role Development)	\$35 NUR 0525
Student Malpractice Insurance (all PTA and Nursing)	\$12 per year

An additional charge for excessive breakage will be made in all lab courses.

#### **Service Fees**

Late registration fee \$25

Late add or drop fee	\$25 each transaction
Late graduation application fee	\$25
Official Transcript preparation fee	\$6 per transcript
Late payment fee	\$50
Returned check fee	\$30 per check
Challenge Exam fee	\$75 per exam
ID card replacement	\$20 each time
Senior/Guest Student fee	\$25 per course
Student Parking Permit Fee	\$10

# **Eligibility for Reduced Tuition**

Tuition rates for the University of Pittsburgh are based on whether or not the student is a permanent resident of the Commonwealth of Pennsylvania. A higher tuition rate is charged to nonresidents. A student who has lived in the Commonwealth of Pennsylvania for a continuous period of 12 months immediately prior to attending any college or university in the state may be eligible for reduced tuition rates. To be eligible, the student must be a citizen of the United States or have an immigrant or permanent resident visa. For a student under 21 years of age, both the student and parents or legal guardian must reside in Pennsylvania.

Copies of Guidelines and Procedures for Determining Eligibility for Reduced Tuition Rates are available upon request in the Office of Admissions. Any admitted student may petition for reduced tuition rates by supplying convincing evidence to be reviewed by the Campus Dean.

To be effective for a particular term, petitions must be submitted within the first 30 calendar days of the term. NO DUE DATES WILL BE EXTENDED, NOR WILL LATE PAYMENT OR LATE REGISTRATION FEES BE WAIVED FOR ANY REASON RELATED TO THE DETERMINATIONS OF ELIGIBILITY FOR REDUCED TUITION.

Only the Campus Dean may evaluate eligibility for tuition purposes. Students who change their domicile from Pennsylvania to another state must promptly give written notice to the Office of Admissions.

Students under 21 years of age must report a change in their parents' or legal guardians' address.

Students who are found eligible for resident tuition rates at the time of initial classification due to an error in classification are subject to retroactive reclassification as nonresidents and are responsible for the payment of all related tuition and fees.

Students who are found eligible for reduced tuition rates as a result of facts concealed or falsified at the time of initial classification are subject to University discipline and legal action and are responsible for the payment of all nonresident tuition and fees, including legal fees.

# **Payment Policies**

An eBill for each term or session will be **e-mailed** to each student. eBills detail all charges and all credits (scholarship aid, loans, deposits paid, etc.) and indicate the amount due and the date by which payment must be made.

**Pending loans** will be counted as a credit to the student's balance for 60 days. If the loans are not finalized by the end of 60 days, the loan amount(s) will be added back into the total amount due and become the responsibility of the student.

A monthly statement will indicate only the additional charges and/or credits applied to an account during that month.

Any payments made by check should include the student ID on the check.

# REGISTRATION FOR ANY SUBSEQUENT TERM WILL NOT BE PERMITTED UNTIL AN ACCOUNT IS COMPLETELY SETTLED.

# **Payment Plan Option**

The University offers one payment plan for up to six installments per term, depending on the date you enroll in the plan. Enrollment is in PittPAY and begins in April for the fall term and October for the spring term. There is a \$55 charge for fall or spring term plans and a \$90 charge for an annual plan that spans fall and spring terms. Payment is automatically debited each month from the bank account or credit card you designate when you enroll in a plan. There is a 2.75% nonrefundable service charge if you elect to make installment payments by American Express, Discover Card, MasterCard, or VISA; installments paid by eCheck are processed for no additional charge.

## Late Fees

If a balance due is not paid by the due date, late payment fees will be charged. Repeated failures to pay will also incur financial holds and withholding of transcripts and/or grades. No student will be allowed to register for a subsequent term until the current term's account is fully settled. Past due accounts will also be referred for collection.

# **Registration Status**

A student who is registered for 12 or more credits, or the equivalent, during the fall, spring, and/or summer term is considered to have full-time status for that term. Students registered for less than 12 credits are considered part-time.

A student's registration status is active when admitted and enrolled in the term of admission. A student must register for at least one credit in a 12month period in order to maintain active status.

## **Termination of Registration by the Add/Drop Process**

Students may terminate registration for all classes by informing the Office of Student Services of their intent to do so **prior** to the end of the add/drop period for the term.

## **Termination of Registration by the Resignation Process**

After the end of the add/drop period for the term, students must resign through the Office of Student Services.

An official resignation occurs when the student notifies the Office of Student Services of his or her intent to terminate his or her registration for all classes after the end of that term/session's add/drop period, but no later than the 60 percent point (in time) of the term or session.

After the 60 percent point of the term or session, students can only terminate their registration by withdrawing through the Office of the Campus Dean.

Failing to attend the classes for which a student is registered or failing to notify the appropriate academic and administrative offices of nonattendance is not considered an official resignation. Students who fail to follow proper procedures for termination of their registration are responsible for all tuition and fees assessed for the term or session.

The effective date of resignation is determined by one of the following: (1) the date of in-person contact with the Office of Student Services or the Campus Dean, (2) the date of the postmark on the letter of intent to resign (or the date of receipt if no postmark exists), or (3) the date of notification by telephone or e-mail.

# **Charges When Dropping a Course(s)**

When a student drops a course or courses, there is no tuition charge if the course(s) is/are dropped before the add/drop period ends. After the add/drop period ends, no refund of tuition or fees will be given unless a student resigns (drops all courses); then a prorated refund may be given during a limited time frame.

# **Title IV Refund Policy**

Adjustments to tuition charges resulting from official resignations are based on the effective date of the resignation and in accordance with the federally mandated calculation.

The calculation is based on the period of enrollment completed. That percentage is computed by dividing the total number of calendar days in the term into the number of calendar days completed, as of the date of student notification. The percentage of Title IV assistance to which the student is entitled (has "earned") is equal to this percentage of the term completed, up to 60%. If the resignation occurs after 60% of the term is completed, the percentage is equal to 100%. The amount of Title IV aid which must be returned is based on the percentage of "unearned" aid. That percentage is computed by subtracting earned aid from 100%. The University is required to return the lesser of 1) the unearned aid percentage applied to institutional charges or 2) the unearned aid percentage applied to the total Title IV aid received. The student is required to return the difference between the amount of unearned aid and the amount returned by the University. If the student (or parents in the case of PLUS loans) is required to return a portion or all of their loan proceeds, the calculated amount is to be repaid according to the loan's terms. Funds are returned to the following Title IV sources in order of priority: 1. Unsubsidized Federal Family Education Loans (FFEL) 2. Subsidized Federal Family Education Loans (FFEL) 3. Federal Perkins Loans 4. FFEL PLUS loans 5. Federal Pell Grants 6. Federal Supplemental Educational Opportunity Grant (SEOG) program 7. Other Title IV assistance for which a return of funds is required 8. Other federal, state, private, or institutional financial assistance.

- 1. Title IV Programs
  - 1. Federal Direct Unsubsidized Loans
  - 2. Federal Direct Subsidized Loans
  - 3. Federal Perkins Loans
  - 4. Direct Plus Loans
  - 5. Federal Pell Grants
  - 6. Federal Supplemental Ed. Opportunity Grants (FSEOG)
  - 7. Any other Title IV program
- 2. Non-Title IV Programs (refunded according to resignation percentage)
  - 1. Institutional Loans
  - 2. Institutional Scholarships and/or Grants
  - 3. Private Scholarships
  - 4. Private Loans
  - 5. State Grants

# Administrative Officers, Schools, and Campuses

# Administration

Livingston Alexander, PhD, President David E. Fitz, PhD, Campus Dean Richard T. Esch, Vice President for Business Affairs

# **Emeritus Faculty**

Joe M. Ball, President (Deceased) Lois J. Hayweiser, Associate Professor, Psychology (Deceased) James R. Messmer, Associate Professor of Physics Margaret H. Peaslee, Vice President for Academic Affairs and Professor of Biology (Deceased) Ki R. Shim, Associate Professor, Economics Michael A. Worman, President

# Faculty

#### A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

Adams, Rachele L., MS, Mathematics Education, University of Tennessee (2005); Visiting Instructor of Mathematics

Atteberry, Phillip D., PhD, English, Washington University (1983); Associate Professor, English.

Bouthellier, Paul R., DSc, Systems Science and Mathematics, Washington University (1990); Associate Professor, Mathematics and Computer Science.

Carbaugh, Joyce D., BS, Physical Education, Slippery Rock University (1992), Instructor and Academic Coordinator of Clinical Education in the Physical Therapist Program.

Carr, Lawrence A., MBA, Clarion University of Pennsylvania (1982); Assistant Professor of Business.

Caton, Mary Ann, MA, History, Clarion University of Pennsylvania (1977); Liberal Arts Area Chairperson, Assistant Professor, History and Political Science.

Choo, Charles C., PhD, Theoretical Physics, University of Notre Dame (1988), Assistant Professor, Physics, Mathematics, and Computer Science.

Choo, Robin E., PhD, Toxicology, University of Maryland (2005). Assistant Professor of Natural Science/Biology.

Daugherty, Mary Jane, MSN, Carlow University (2009). Instructor of Nursing.

Dories, Jeffrey S., PhD, English Literature and Criticism, Indiana University of Pennsylvania (2010), Visiting Assistant Professor of English

Dubas, Saeed M., PhD, Mathematics, University of Wisconsin-Milwaukee (1999); Associate Professor, Mathematics and Engineering.

Flickner, Elizabeth, MSN, Robert Morris University (2015), Instructor of Nursing

Guth, Karen E., DPT, Physical Therapy, Rocky Mountain University (2015); Assistant Professor and Director of the Physical Therapist Assistant Program

Kenyon, Meredith B., MA, English Literature, St. Bonaventure University (2007); Assistant Professor of English.

Ledebur, Jeff, MEd, Westminster College (in progress), Visiting Instructor and Director of the Learning Center.

McClain, Patricia A., MSN, Carlow University (2010). Instructor of Nursing and Director of the Nursing Program.

Mulcahy, Richard P., PhD, American History, West Virginia University (1988); Professor, History and Political Science.

Patterson, Sherri, MSN, Carlow University, (2012); Instructor of Nursing

Patton, Susan G., MBA, Business Administration, Clarion University, (1987); Assistant Professor, Business.

Peters, Kristi, Ph.D., Biochemistry and Molecular Biology, University of Nebraska Medical Center (1997), Visiting Assistant Professor of Chemistry

Reynolds, Kristen, MA, Teaching, Secondary Biological Sciences, Miami University (1999), Visiting Instructor of Biology

Terwilliger, Laura, PhD, Counseling Studies, Edinboro University (2014); Visiting Assistant Professor of Psychology.

Tress, Nancy Barsic, PhD, Biochemistry, University of Pittsburgh (1994); Associate Professor, Biology and Natural Sciences Area Chairperson.

# **Adjunct Faculty**

Barrett, Gayle, RN, MSN, Nursing Bish, Barry, DPT, Pathology Campbell, Caroline, MA, English Composition Clark, Tammi, BA, Mathematics Cramer, Jackie, PhD, Computer Science Crow, Ruby, RN, MSN, Nursing Cubbon, Tiffany, BA, Yoga Domnick, Diane, PhD, History Elliot-Disque Sommer, MS, Freshman Seminar Feroz, Barbara A., MEd, Human Services, PhD, Sociology Fiely, Stephanie, MEd, Freshman Seminar

Hall, Sara, MS, Clinical Nutrition

Kern, Gary, Esq., JD, Business Law

Irvin, Jillian, MEd, Engineering Lalone, Melanie, BS, Learning Center Instructor Larson, Tracey, MA, Communications Last, Kerri, MSN, CRNP, Nursing Millar, Judy, BS, Theatre Arts Miller, Harry, BA, Education Myer, Bettye, PhD, French Pfennigwerth, Thomas C., DPM, Biology and Nutrition Pilewski, Robert M., MD, Clinical Pathology Ross, Marc, MLIS, Freshman Seminar Schmidt, Karen, MS, RD, LDN, Clinical Nutrition Shoup, Ronald, MEd, Mathematics Simon, Margherita M., MA, Studio Arts Smith, Autumn, RN, MSN, Nursing Stein, Robert, MS, Administration of Justice Straub, Marjorie, MS, Computer Science Wagner, Molly, MA, Psychology Watson, William, AS, Computer Science

# **Pitt-Titusville Advisory Board**

Coleman, Stephen C. Duratz, James J. Fledderman, Lawrence H. Jez, Karen Knepp, Ann H. Mckinney, Catherine Q. Miller, Virginia\* Nasralla, Anthony J. Peterson, John E. Robbins, Robert D. Roeder, Richard W. Smith, Bruce L. Spadafore, Emil M. Jr. Upt Faculty Senate President\*\* Winger, Kenneth E.

\*Emeritus \*\*Ex Officio

# **General Education Requirements**

# Competencies

(A minimum grade of C- is required in all competency courses.)

<u>Written Literacy</u> ENG 0101 - ENGLISH COMPOSITION 1 ENG 0102 - ENGLISH COMPOSITION 2

<u>Mathematics (3 credits in MATH 0031 or Higher)</u> MATH 0031 - ALGEBRA

> MATH 0032 - TRIGONOMETRY AND FUNCTIONS MATH 0110 - FUNDAMENTALS OF MATHEMATICS MATH 0120 - BUSINESS CALCULUS MATH 0200 - PREP FOR SCIENTIFIC CALCULUS MATH 0220 - ANALYTC GEOMETRY & CALCULUS 1 MATH 0230 - ANALYTC GEOMETRY & CALCULUS 2

# The Human Experience

#### Arts and Letters

(Students must complete at least six credits in Arts and Letters. Three credits must be completed in literature or creative, fine, or performing arts.)

#### Literature

AFRCNA 0150 - AFRICAN AMERICAN LITERATURE

CLASS 1130 /RELGST 1144 - CLASSICAL MYTHOLOGY & LIT

ENGLIT 0315 - READING POETRY

ENGLIT 0325 - THE SHORT STORY

ENGLIT 0370 - LITERATURE AND IDEAS

ENGLIT 0570 - AMERICAN LITERATURE

ENGLIT 0580 - INTRODUCTION TO SHAKESPEARE

ENGLIT 0625 - DETECTIVE FICTION

ENGLIT 1647 - LITERATURE FOR ADOLESCENTS

RELGST 0135 - CHRISTIAN BIBLE

#### Creative, Fine, and Performing Arts

AFRCNA 0639/MUSIC 0711 - HISTORY OF JAZZ

HAA 0010 - INTRODUCTION TO WORLD ART

HAA 0020 - INTRODUCTION TO ASIAN ART

HAA 0040 - INTRO TO WESTERN ARCHITECTURE

HAA 0050 - INTRODUCTION TO MEDIEVAL ART

HAA 0070 - EURPN VISL TRADTN RENASNC-PRES

HAA 0440 - FRANK LLOYD WRIGHT

SA 0120 - PAINTING STUDIO 1

SA 0130 - DRAWING STUDIO 1

Foreign Languages

FR 0101 - ELEMENTARY FRENCH 1

FR 0102 - ELEMENTARY FRENCH 2

SPAN 0101 - ELEMENTARY SPANISH 1

SPAN 0102 - ELEMENTARY SPANISH 2

## **Behavioral, Economics, and Political Sciences**

(Students must complete six credits from at least two different categories.)

Behavioral Sciences

COMM 0101 - INTRO TO HUMAN COMMUNICATION

COMMRC 0520 - PUBLIC SPEAKING

COMMRC 0530 - INTERPERSONAL COMMUNICATION

HUSERV 0331 - INTRODUCTION TO HUMAN SERVICES

PSY 0010 - INTRODUCTION TO PSYCHOLOGY

PSY 0160 - PSYCHOLOGY OF PERSONALITY

PSY 0203 - SOCIAL PSYCHOLOGY

PSY 0265 - DATA ANALYSIS & RESEARCH WRIT

PSY 0310 - DEVELOPMENTAL PSYCHOLOGY

PSY 0405 - LEARNING AND MOTIVATION

PSY 1205 - ABNORMAL PSYCHOLOGY

SOC 0007 - SOCIAL PROBLEMS

SOC 0010 - INTRODUCTION TO SOCIOLOGY

SOC 0471 - DEVIANCE AND SOCIAL CONTROL

SOC 0472/ADMJ 0600 - INTRODUCTION TO CRIMINOLOGY

SOC 0474/ADMJ 0100 - SOCIETY AND THE LAW

#### Economics

ECON 0100 - INTRO MICROECONOMIC THEORY

#### Political Science

PS 0200 - AMERICAN POLITICS PS 0205 - LAW AND THE COURTS PS 0500 - WORLD POLITICS PS 0600 - POLITICAL THEORY PS 1262 - HEALTH POLICY IN UNITED STATES

# **History and Philosophical Inquiry**

(Students must complete six total credits. Three credits must be in History. The other three credits can be from History or Philosophical Inquiry.)

#### History

AFRCNA 0629/HIST 0670 - AFRO-AMERICAN HISTORY 1

AFRCNA 0630/HIST 0671 - AFRO-AMERICAN HISTORY 2

HIST 0100 - WESTERN CIVILIZATION 1

HIST 0101 - WESTERN CIVILIZATION 2

HIST 0600 - UNITED STATES TO 1877

HIST 0601 - UNITED STATES 1865-PRESENT

HIST 0678/RELGST 0283 - US AND THE HOLOCAUST

HIST 1656 - AMERICAN WORKERS 20TH CENTURY

**RELGST 0135 - CHRISTIAN BIBLE** 

#### **Philosophical Inquiry**

HPS 0437 - DARWINISM AND ITS CRITICS

PHIL 0080 - INTRO TO PHILOSOPHCAL PROBLEMS

PHIL 0473/RELGST 0715 - PHILOSOPHY OF RELIGION

PHIL 0500 - INTRODUCTION TO LOGIC

PHIL 1303 - EASTERN PHILOSOPHY

# **Physical, Life and Computational Sciences**

(Students must complete at least 3 credits from either the physical of life sciences. The remaining three credits myst be from the computational sciences or from physical or life sciences. The total six credits cannot be from the same category.)

#### Physical Sciences

CHEM 0106 - CHEMISTRY OF THE ENVIRONMENT

CHEM 0110 - GENERAL CHEMISTRY 1 CHEM 0120 - GENERAL CHEMISTRY 2 CHEM 0310/0330 ORGANIC CHEMISTRY LABORATORY 1 CHEM 0320/0340 ORGANIC CHEMISTRY LABORATORY 2 GEOL 0101 - PHYSICAL GEOLOGY HRP 0184 - INTRO TO SCIENCE FOR HLTH PROF PHYS 0110 - INTRODUCTION TO PHYSICS 1 PHYS 0111 - INTRODUCTION TO PHYSICS 2 PHYS 0174 - BASC PHYS SCI & ENGR 1 (INTGD) PHYS 0175 - BASC PHYS SCI & ENGR 2 (INTGD) PHYS 0212 - INTRO TO LABORATORY PHYSICS PHYS 0219 - BASIC LAB PHYS SCIENCE & ENGRG

#### Life Sciences

BIOSC 0050 - FOUNDATIONS OF BIOLOGY LAB 1 BIOSC 0060 - FOUNDATIONS OF BIOLOGY LAB 2 **BIOSC 0096 - INTRODUCTION TO HUMAN SYSTEMS** BIOSC 0097 - INTRO TO HUMAN SYSTEMS LAB **BIOSC 0100 - PREPARATION FOR BIOLOGY BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1 BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2** BIOSC 0212 - HUMAN ANATOMY & PHYSIOLOGY 1 BIOSC 0213 - HUMAN ANATOMY & PHYSIOLOGY 2 BIOSC 0214 - HUMN ANATMY & PHYSIOLOGY LAB 1 BIOSC 0215 - HUMN ANATMY & PHYSIOLOGY LAB 2 BIOSC 0370 - ECOLOGY **BIOSC 0390 - ECOLOGY LABORATORY BIOSC 0820 - ENVIRONMENTAL SCIENCE** HPRED 0106 - NUTRITION HPRED 0107 - NUTRITION LABORATORY **BIOSC 1000 - BIOCHEMISTRY** Computational Sciences

CS 0007 - INTRO TO COMPUTER PROGRAMMING

CS 0180 - DATABASE DESIGN

CS /COE 0401 - INTRMEDT PROGRMMING USING JAVA

CS 0441 - DISCRETE STRUCTURES FOR CS

MATH 0220 - ANALYTC GEOMETRY & CALCULUS 1

MATH 0230 - ANALYTC GEOMETRY & CALCULUS 2

STAT 1000 - APPLIED STATISTICAL METHODS

# **Liberal Arts**

# Accounting, AS

Pitt-Titusville's Associate of Science degree in accounting gives students a strong foundation in business concepts, communication skills, and analytical skills that serve as a solid base for a professional career in accounting or for advanced study in accounting. This program also provides students the opportunity to explore other streams of knowledge to broaden their horizons.

- Explain basic accounting principles, concepts, and constraints.
- Demonstrate an understanding of the accounting process and apply the rules of debit and credit.
- Identify basic financial statements, explain their purpose, and perform basic financial statement analysis.
- Demonstrate an understanding and basic working knowledge of the theories, concepts, and methods used in management, marketing, finance, business law, and economics.
- Apply concepts and skills to make basic business decisions.

### General Education Course Requirements

### Competencies

### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

#### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

#### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Sciences

• ECON 0110 - INTRO MACROECONOMIC THEORY

- COMMRC 0520 PUBLIC SPEAKING or
- COMMRC 0530 INTERPERSONAL COMMUNICATION

#### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

#### Physical, Life, and Computational Sciences

- Physical Science 3 Credits or
- Life Science 3 Credits
- STAT 1000 APPLIED STATISTICAL METHODS

### Major Course Requirements

- BUS 0102 PRINCIPLES OF MANAGEMENT
- BUS 1111 CORPORATE FINANCE
- BUS 1301 PRINCIPLES OF MARKETING
- ACCT 0111 FINANCIAL ACCOUNTING
- ACCT 0112 MANAGERIAL ACCOUNTING
- ACCT 0221 INTERMEDIATE ACCOUNTING 1
- ACCT 0222 INTERMEDIATE ACCOUNTING 2
- ACCT 1303 STRATEGIC COST MANAGEMENT
- CS 0131 SOFTWARE FOR PERSONAL COMPUTNG or
- CS 0135 ADV SOFTWARE-PERSNL COMPUTING

### Total Credits: 62

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

## **Business Information Systems, AS**

Pitt-Titusville's Associate of Science Degree in business information systems provides a strong foundation in information systems, business concepts, communication skills, and analytical skills that will serve as a solid base for a professional career or for advanced study in business information systems. This program also gives students the opportunity to explore other streams of knowledge to broaden their horizons.

- Demonstrate proficiency in Microsoft Office products and systems.
- Demonstrate proficiency in managing networks, operating systems, and system hardware and software.
- Describe and discuss fundamental management theories, concepts, methods, andbusiness practices.
- Demonstrate an understanding and basic working knowledge of the theories, concepts, and methods used in management, marketing, finance, business law, and economics.

• Recognize, analyze, and manage ethical dilemmas in business.

### General Education Course Requirements

### Competencies

### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

### Behavioral, Economic, and Political Sciences

- ECON 0110 INTRO MACROECONOMIC THEORY
- COMMRC 0520 PUBLIC SPEAKING or
- COMMRC 0530 INTERPERSONAL COMMUNICATION

### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

### Physical, Life, and Computational Sciences

• Physical Science - 3 Credits or

- Life Science 3 Credits
- STAT 1000 APPLIED STATISTICAL METHODS

### Major Course Requirements

- BUS 0102 PRINCIPLES OF MANAGEMENT
- BUS 1111 CORPORATE FINANCE
- BUS 1301 PRINCIPLES OF MARKETING
- ACCT 0111 FINANCIAL ACCOUNTING
- ACCT 0112 MANAGERIAL ACCOUNTING
- BIS 1310 INFORMTN SYS DESIGN & DEVELP
- BIS 0015 HARDWR MAINTEN & SOFTWR SUPPRT
- BIS 1317 NETWORK AND OPERATING SYSTEMS
- CS 0131 SOFTWARE FOR PERSONAL COMPUTNG or
- CS 0135 ADV SOFTWARE-PERSNL COMPUTING

### Total Credits: 62

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

## **Business Management, AS**

The Associate of Science degree in business management at Pitt-Titusville provides a strong foundation in business concepts, communication skills, and analytical skills that will serve as a solid base for a professional career in business or for advanced study in business management. This program also gives students the opportunity to explore other streams of knowledge to broaden their horizons.

### General Education Course Requirements

### Competencies

First Year Experience

• FS 0002 - FRESHMAN SEMINAR

### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

#### Arts and Letters

(6 credits - at least 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Sciences

- ECON 0110 INTRO MACROECONOMIC THEORY
- COMMRC 0520 PUBLIC SPEAKING or
- COMMRC 0530 INTERPERSONAL COMMUNICATION

### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

#### Physical, Life, and Computational Sciences

- Physical Science 3 Credits or
- Life Science 3 Credits
- STAT 1000 APPLIED STATISTICAL METHODS

### Major Course Requirements

- BUS 0102 PRINCIPLES OF MANAGEMENT
- BUS 1111 CORPORATE FINANCE
- BUS 1301 PRINCIPLES OF MARKETING
- ACCT 0111 FINANCIAL ACCOUNTING
- ACCT 0112 MANAGERIAL ACCOUNTING
- BUS 0108 SMALL BUSINESS MANAGEMENT
- BUS 0106 BUSINESS LAW
- CS 0131 SOFTWARE FOR PERSONAL COMPUTNG or
- CS 0135 ADV SOFTWARE-PERSNL COMPUTING

### Electives

• One Course - 3 Credits

### Total Credits: 62

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

# **Criminal Justice, AS**

The Pitt-Titusville associate's degree in criminal justice prepares you to enter four-year criminal justice programs at Pitt's Bradford, Greensburg, and Pittsburgh campuses and at other colleges and universities. It also provides the degree needed for most police work and entry-level positions in the criminal justice system. The program of study includes courses in criminal justice, sociology, psychology, and political science.

### General Education Course Requirements

### Competencies

#### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

#### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

- MATH 0031 ALGEBRA or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS

#### The Human Experience

#### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine, or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Sciences

- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- SOC 0010 INTRODUCTION TO SOCIOLOGY
- PS 0200 AMERICAN POLITICS

#### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

#### Physical, Life, and Computational Sciences

(6 credits - must be in two areas)

- Physical Science 3 Credits
- Life Science 3 Credits
- Computational 3 Credits

### Major Course Requirements

- ADMJ 0204 POLICE AND SOCIETY
- ADMJ 0500 INTRO TO ADMIN OF JUSTICE
- ADMJ 0600 INTRODUCTION TO CRIMINOLOGY or
- SOC 0472 INTRODUCTION TO CRIMINOLOGY
- ADMJ 0203 PROBATION AND PAROLE
- PS 0205 LAW AND THE COURTS

### **Elective Courses**

- Elective 3 Credits
- Elective 3 Credits
- Elective 3 Credits

### Total Credits: 61

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031/MATH 0110.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

## History, AA

The Pitt-Titusville associate degree in history provides a solid foundation in the history of Western civilization, U.S. history, and African American history in addition to preparing you to enter four-year history programs within the University of Pittsburgh system and at other colleges and universities. The program of study includes courses in history, political science, and sociology.

### General Education Course Requirements

### Competencies

### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

- MATH 0031 ALGEBRA or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS

### The Human Experience

### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Sciences

(6 credits - must be in 2 different areas)

- Behavioral 3 Credits
- Economic 3 Credits
- Political Sciences 3 Credits

### History and Philosophical Inquiry

- HIST 0100 WESTERN CIVILIZATION 1
- Philosophical Inquiry 3 Credits

Physical, Life, and Computational Sciences

(6 credits - must be in 2 areas)

- Physical Science 3 Credits
- Life Science 3 Credits
- Computational 3 Credits

### Major Course Requirements

- HIST 0100 WESTERN CIVILIZATION 1
- HIST 0101 WESTERN CIVILIZATION 2
- HIST 0600 UNITED STATES TO 1877
- HIST 0601 UNITED STATES 1865-PRESENT
- HIST 0670 AFRO-AMERICAN HISTORY 1 or
- HIST 0671 AFRO-AMERICAN HISTORY 2
- History Elective 3 Credits

### **Elective Courses**

- Elective 3 Credits
- Elective 3 Credits
- Elective 3 Credits
- Elective 3 Credits

### Total Credits: 61

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031/MATH 0110.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

## Human Services, AA

Pitt-Titusville's Associate of Science degree in human services provides a strong foundation in human service concepts, communication skills, and analytical skills that will serve as a solid base for a professional career and for advanced study in human services. Human Services is a multidisciplinary field that prepares professionals for employment in supportive, therapeutic, community services, and intervention programs. Classes include an overview of issues and history involving human services work, philosophical models, types of services, and professional roles. Our graduates work for community social services agencies, public and private schools, and within the judicial system, among other areas. See internship requirements .

- Understand the concepts important in human service delivery.
- Apply critical thinking skills in analyzing data relevant to a career in a human service agency.
- Demonstrate their understanding of human service concepts by successfully completing an internship in a human service agency.

### General Education Course Requirements

### Competencies

#### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

#### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

- MATH 0031 ALGEBRA or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS

### The Human Experience

### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Science

- PS 1262 HEALTH POLICY IN UNITED STATES
- SOC 0010 INTRODUCTION TO SOCIOLOGY or
- SOC 0007 SOCIAL PROBLEMS

### History and Philosophical Inquiry

- History 3 Credits
- PHIL 0080 INTRO TO PHILOSOPHCAL PROBLEMS or
- PHIL 0300 INTRODUCTION TO ETHICS

#### Physical, Life, and Computational Sciences

- Physical Science 3 Credits or
- Life Science 3 Credits
- STAT 1000 APPLIED STATISTICAL METHODS

### Major Course Requirements

- ENGCMP 0211 LIBRARY RESEARCH METHODS
- CS 0131 SOFTWARE FOR PERSONAL COMPUTNG
- COMMRC 0520 PUBLIC SPEAKING or
- COMMRC 0530 INTERPERSONAL COMMUNICATION
- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- PSY 1205 ABNORMAL PSYCHOLOGY or
- PSY 0405 LEARNING AND MOTIVATION or
- PSY 0160 PSYCHOLOGY OF PERSONALITY
- PSYED 0005 LIFE SPAN DEVELOPMENT or
- ADMJ 0500 INTRO TO ADMIN OF JUSTICE
- PEDC 0146 FIRST AID AND CPR
- HUSERV 0331 INTRODUCTION TO HUMAN SERVICES
- HUSERV 0399 HUMAN SERVICES INTERNSHIP

### **Elective Courses**

• Elective Course - 2-3 Credits

### Total Credits: 60

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031/MATH 0110.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

# Liberal Arts, AA

The Liberal Arts Division invites students to develop their critical skills by providing a wide variety of courses that meet the University's General Education requirements. It also prepares students for majoring in baccalaureate programs in the liberal arts and social sciences, and for furthering their education at the graduate level. Liberal arts courses are offered to non-majors as well, to transcend boundaries of specialization and provide all students with common experiences and skills.

### General Education Course Requirements

### Competencies

A minimum grade of C- is required in all competency courses.

### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

- MATH 0031 ALGEBRA Or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS

### The Human Experience

#### Arts and Letters

#### (6 credits)

- Literature 3 credits
- Creative, Fine, and Performing Arts or Foreign Language- 3 credits

#### Behavioral, Economic, and Political Sciences

(6 credits - must be in two areas)

- Behavioral 3 Credits
- Economic 3 Credits
- Political Sciences 3 Credits

### History and Philosophical Inquiry

- History 3 credits
- Philosophical Inquiry 3 credits

### Physical, Life and Computational Sciences

(6 credits - must be from 2 different areas)

- Physical Science 3 credits
- Life Science 3 credits
- Computational Science 3 credits

### Major Course Requirements

- COMMRC 0520 PUBLIC SPEAKING
- Additional Literature, Arts or Foreign Language course 3 Credits

- Additional History course 3 Credits
- Additional Behavioral, Economic or Political Science course 3 Credits

### **Elective Courses**

- Elective 3 Credits

### Total Credits: 61

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031/MATH 0110.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience)
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

# Psychology, AS

The Pitt-Titusville associate degree in psychology prepares you to enter four-year psychology programs at other Pitt campuses as well as other colleges and universities. It also prepares you for some entry-level positions in human service agencies. The program of study includes courses in psychology, research methods, sociology, and human biology.

### General Education Course Requirements

Competencies

First Year Experience

• FS 0002 - FRESHMAN SEMINAR

#### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

#### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Sciences

- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- Economic 3 Credits or
- Political Sciences 3 Credits

#### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

#### Physical, Life, and Computational Sciences (7-8 credits)

(must be in two areas)

- Physical or Computational Science\* 3-4 Credits (If continuing at Bradford, student should take the 1st course of the BIOSC 0150/BIOSC 0050 or BIOSC 0212/BIOSC 0214 sequence course.)
- BIOSC 0096 INTRODUCTION TO HUMAN SYSTEMS and
- BIOSC 0097 INTRO TO HUMAN SYSTEMS LAB (If continuing at Bradford, student should take instead the 2nd course of the BIOSC sequence-BIOSC 0160/BIOSC 0060 or BIOSC 0213/BIOSC 0215.)

### Major Course Requirements

- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- PSY 1270 CHILD PSYCHOPATHOLOGY

Choose three courses from at least two of the following subfields:

### **Cognitive Development**

- PSY 0310 DEVELOPMENTAL PSYCHOLOGY
- PSY 0405 LEARNING AND MOTIVATION

### Applied Social Psychology

- PSY 0160 PSYCHOLOGY OF PERSONALITY
- PSY 0203 SOCIAL PSYCHOLOGY

### Counseling Psychology

• PSY 1205 - ABNORMAL PSYCHOLOGY

### **Elective Courses**

- Elective 3 Credits
- Elective 3 Credits
- Elective 3 Credits
- Elective 3 Credits
- (Additional Elective if Physical/Comp. Sci. course is only 3 credits)\* 1-3 Credits

### Total Credits: 60

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

# **Natural Sciences**

# **Biological Sciences, AS**

Pitt-Titusville's associate degree in biological sciences prepares you to enter four-year biological sciences programs at Pitt's Bradford, Greensburg, and Pittsburgh campuses as well as at other colleges and universities. It can also help to prepare you for a career in such fields as medicine, biotechnology, and environmental conservation and management. The program of study includes courses in biology, chemistry, and math.

### General Education Course Requirements

### Competencies

### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

#### Arts and Letters

#### (6 credits)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economics, and Political Sciences

(6 credits - must be from 2 different categories)

- Behavioral 3 Credits
- Economic 3 Credits
- Political Sciences 3 Credits

### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

Physical, Life, and Computational Sciences

- CHEM 0110 GENERAL CHEMISTRY 1 (see Major course requirement)
- BIOSC 0150 FOUNDATIONS OF BIOLOGY 1
- BIOSC 0050 FOUNDATIONS OF BIOLOGY LAB 1 (see Major course requirement)

### Major Course Requirements

- MATH 0032 TRIGONOMETRY AND FUNCTIONS or
- MATH 0200 PREP FOR SCIENTIFIC CALCULUS
- BIOSC 0150 FOUNDATIONS OF BIOLOGY 1
- BIOSC 0050 FOUNDATIONS OF BIOLOGY LAB 1
- BIOSC 0160 FOUNDATIONS OF BIOLOGY 2
- BIOSC 0060 FOUNDATIONS OF BIOLOGY LAB 2
- BIOSC 0370 ECOLOGY
- BIOSC 0390 ECOLOGY LABORATORY
- BIOSC 0350 GENETICS
- BIOSC 0351 GENETICS LABORATORY
- CHEM 0110 GENERAL CHEMISTRY 1
- CHEM 0120 GENERAL CHEMISTRY 2

### **Elective Courses**

- Elective 3 Credits
- Elective 3 Credits

### Total Credits: 60

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

# **Computer Technology, AS**

The Pitt-Titusville associate degree in computer technology prepares you for an entry-level position as a computer technologist. The program of study includes courses in Microsoft Office products, database design, networking, computer hardware, and Web design. It also includes an internship experience. See internship requirements for information on completing the internship for this major.

### General Education Course Requirements

### Competencies

### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

### Behavioral, Economic, and Political Sciences

(6 credits - must be in 2 different areas)

- Behavioral 3 Credits
- Economic 3 Credits
- Political Sciences 3 Credits

### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

### Physical, Life, and Computational Sciences

- Physical Science 3 Credits or
- Life Science 3 Credits
- CS 0007 INTRO TO COMPUTER PROGRAMMING

### Major Course Requirements

• MATH 0032 - TRIGONOMETRY AND FUNCTIONS or

- MATH 0200 PREP FOR SCIENTIFIC CALCULUS
- CS 0007 INTRO TO COMPUTER PROGRAMMING (see Physical, Life, and Computational Sciences requirement)
- CS 0135 ADV SOFTWARE-PERSNL COMPUTING
- CS 0134 WEB SITE DESIGN & DEVELOPMENT
- CS 0401 INTRMEDT PROGRMMING USING JAVA
- CS 0180 DATABASE DESIGN
- CS 0334 INTM WEB DESIGN & DEVELOPMENT
- CS 0441 DISCRETE STRUCTURES FOR CS
- BIS 1317 NETWORK AND OPERATING SYSTEMS
- BIS 0015 HARDWR MAINTEN & SOFTWR SUPPRT
- Internship 1 Credit

### Total Credits: 62

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

## **Natural Science, AS**

The Natural Sciences Division prepares students to complete programs in various STEM (science, technology, engineering, mathematics) fields; for admission to pharmacy, medical, and dental schools; and receive an associate's degree that strengthens their career pursuits in health-related disciplines. Natural science courses are also offered to non-majors and students in health care programs.

### General Education Course Requirements

#### Competencies

#### First Year Experience

• FS 0002 - FRESHMAN SEMINAR

#### Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

#### Mathematics

• MATH 0031 - ALGEBRA

### The Human Experience

### Arts and Letters

(6 credits - 3 credits must be in literature or creative, fine or performing arts)

- Literature 3 Credits
- Creative, Fine, and Performing Arts 3 Credits
- Foreign Language 3 Credits

#### Behavioral, Economic, and Political Sciences

(6 credits - must be from 2 different areas)

- Behavioral 3 Credits
- Economic 3 Credits
- Political Sciences 3 Credits

#### History and Philosophical Inquiry

- History 3 Credits
- History 3 Credits or
- Philosophical Inquiry 3 Credits

#### Physical, Life, and Computational Sciences

(two courses in either a Life Science or Physical Science sequence. Must include labs.)

- Physical Science 8 Credits or
- Life Science 8 Credits

### Major Course Requirements

- MATH 0032 TRIGONOMETRY AND FUNCTIONS or
- MATH 0200 PREP FOR SCIENTIFIC CALCULUS
- MATH 0120 BUSINESS CALCULUS or
- MATH 0220 ANALYTC GEOMETRY & CALCULUS 1
- Course in Computer Science 3 Credits
- Science course in field related to major 3-4 Credits
- Science course in field related to major 3-4 Credits
- Science course in field related to major 3-4 Credits
- Science course in field related to major 3-4 Credits

### Computational Science Course

- MATH 0230 ANALYTC GEOMETRY & CALCULUS 2 (or above) or
- PHIL 0500 INTRODUCTION TO LOGIC (or STAT)

### Total Credits: 60

- Students must earn a C- or better in FS 0002, ENG 0101 and MATH 0031.
- Student must earn a minimum 2.0 grade point average in the general education program (competencies and human experience).
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.

# Engineering

Students interested in careers in engineering can begin their studies at Pitt-Titusville. Upon successful completion of a required number of courses, students are eligible to relocate to either the Pittsburgh or Johnstown campus to complete their Bachelor of Science degree requirements.

Fields of engineering study include: chemical and petroleum, civil and environmental, electrical, industrial, material science, mechanical, bioengineering, computer, engineering physics, energy resources, and manufacturing systems.

The curriculum at Pitt-Titusville offers three tracks of study, determined by the candidate's placement at the time of admission.

- Three-Year Track Students who need to take pre-algebra coursework
- Two-Year Track Students prepared to take college algebra or trigonometry
- One-Year Track

### **One-Year Track**

### Fall - First Year

- MATH 0220 ANALYTC GEOMETRY & CALCULUS 1
- ENGR 0011 INTRO TO ENGINEERING ANALYSIS
- CHEM 0960 Chemistry for Engineering 1 with Lab 4 Credits
- PHYS 0174 BASC PHYS SCI & ENGR 1 (INTGD)
- Humanities/Social Science Elective 3 Credits
- Freshman Engineering Seminar 0 Credits

Total Credit Hours: 18

#### Spring - First Year

- MATH 0230 ANALYTC GEOMETRY & CALCULUS 2
- ENGR 0012 INTRO TO ENGINEERING COMPUTING
- CHEM 0970 Chemistry for Engineering 2 with Lab 4 Credits
- PHYS 0175 BASC PHYS SCI & ENGR 2 (INTGD)
- Humanities/Social Science Elective 3 Credits

Total Credit Hours: 18

(Upon completion of the above courses, the student will be eligible to enter the sophomore class in engineering at most colleges.)

Communication Classics Philosophy Studio Arts Foreign Languages English Composition English Literature History of Art Architecture Music Theatre

### Social Science Electives:

History History of Jazz Anthropology Economics Political Science Psychology Africana Studies History and Philosophy of Science Sociology

### \*Breadth and depth requirements for elective courses:

Required to take courses in three areas with at least two courses in each area.

### Two-Year Track

### Fall - First Year

- MATH 0031 ALGEBRA
- ENGCMP 0200 SEMINAR IN COMPOSITION
- CHEM 0110 GENERAL CHEMISTRY 1
- COMMRC 0520 PUBLIC SPEAKING
- One Social Science Course 3 Credits

#### Total Credit Hours: 16

### Spring - First Year

- MATH 0032 TRIGONOMETRY AND FUNCTIONS
- CHEM 0120 GENERAL CHEMISTRY 2
- Humanities Course 3 Credits
- Second Social Science Course 3 Credits
- Third Social Science Course or Second Humanities Course 3 Credits or
- ENGCMP 0400 WRITTEN PROFESSNL COMMUNICTN

#### Total Credit Hours: 15

### Fall - Second Year

- MATH 0220 ANALYTC GEOMETRY & CALCULUS 1
- ENGR 0011 INTRO TO ENGINEERING ANALYSIS
- PHYS 0174 BASC PHYS SCI & ENGR 1 (INTGD)
- ENGR 0081 FRESHMAN ENGINEERING SEMINAR 1
- CS 0401 INTRMEDT PROGRMMING USING JAVA or
- One Social Science or Humanities course 3 Credits

Total Credit Hours: 14-15

### Spring - Second Year

- MATH 0230 ANALYTC GEOMETRY & CALCULUS 2
- ENGR 0012 INTRO TO ENGINEERING COMPUTING
- PHYS 0175 BASC PHYS SCI & ENGR 2 (INTGD)
- ENGR 0082 FRESHMAN ENGINEERING SEMINAR 2
- PHYS 0219 BASIC LAB PHYS SCIENCE & ENGRG
- Science Elective 3 Credits

Total Credit Hours: 16

(Upon completion of the above courses, the student will be eligible to enter the sophomore class in engineering at most colleges.)

### Humanities Electives:

Communication Classics Philosophy Studio Arts Foreign Languages English Composition English Literature History of Art Architecture Music Theatre

#### Social Science Electives:

History History of Jazz Anthropology Economics Political Science Psychology Africana Studies History and Philosophy of Science Sociology

#### \*Breadth and depth requirements for elective courses:

Required to take courses in three areas with at least two courses in each area. See http://www.engr.pitt.edu/students/electives.html for list.

\*Science electives are selected depending on Engineering interest and include:

- CHEM 0175 INTRODUCTION TO NANO SCIENCE
- CHEM 0176 NANOSCIENCE LAB
- BIOSC 0150 FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 FOUNDATIONS OF BIOLOGY 2
- CHEM 0310 ORGANIC CHEMISTRY 1
- CHEM 0330 ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 ORGANIC CHEMISTRY 2
- CHEM 0340 ORGANIC CHEMISTRY LABORATORY 2
- CHEM 0250 INTRO ANALYTICAL CHEMISTRY
- CHEM 0260 INTRO ANALYTICAL CHEMISTRY LAB
- STAT 1000 APPLIED STATISTICAL METHODS
- CS 0441 DISCRETE STRUCTURES FOR CS

### Three-Year Track

### Fall - First Year

- MATH 0029 FUNDAMENTALS OF MATH 1
- ENGCMP 0150 WORKSHOP IN COMPOSITION
- IL 0210 COLLEGE READING & STUDY SKILLS
- One Social Science or Humanities course 3 Credits
- PEDC or CS Course 1-3 Credits

Total Credit Hours: 13-15

### Spring - First Year

- MATH 0030 FUNDAMENTALS OF MATH 2
- ENGCMP 0200 SEMINAR IN COMPOSITION
- Second Social Science Elective 3 Credits
- One Humanities Elective 3 Credits
- Second Humanities Elective 3 Credits or
- COMMRC 0520 PUBLIC SPEAKING

#### Total Credit Hours: 15

### Fall - Second Year

- MATH 0031 ALGEBRA
- Third Humanities Elective 3 Credits
- CHEM 0110 GENERAL CHEMISTRY 1
- CS 0401 INTRMEDT PROGRMMING USING JAVA

Total Credit Hours: 14

### Spring - Second Year

- MATH 0032 TRIGONOMETRY AND FUNCTIONS
- Third Social Science Elective 3 Credits
- Science Elective\* 3 Credits
- CHEM 0120 GENERAL CHEMISTRY 2
- ENGCMP 0400 WRITTEN PROFESSNL COMMUNICTN

Total Credit Hours: 15

### Fall - Third Year

- MATH 0220 ANALYTC GEOMETRY & CALCULUS 1
- ENGR 0011 INTRO TO ENGINEERING ANALYSIS
- PHYS 0174 BASC PHYS SCI & ENGR 1 (INTGD)
- ENGR 0081 FRESHMAN ENGINEERING SEMINAR 1
- Science Elective\* 3-4 Credits

Total Credit Hours: 14

### Spring - Third Year

- MATH 0230 ANALYTC GEOMETRY & CALCULUS 2
- ENGR 0012 INTRO TO ENGINEERING COMPUTING
- PHYS 0175 BASC PHYS SCI & ENGR 2 (INTGD)
- PHYS 0219 BASIC LAB PHYS SCIENCE & ENGRG
- ENGR 0082 FRESHMAN ENGINEERING SEMINAR 2
- Science Elective\* 3-4 Credits

Total Credit Hours: 16-17

(Upon completion of the above courses, the student will be eligible to enter the sophomore class in engineering at most colleges.)

## Humanities Electives:

Communication Classics Philosophy Studio Arts Foreign Languages English Composition English Literature History of Art Architecture Music Theatre

## Social Science Electives:

History
History of Jazz
Anthropology
Economics
Political Science
Psychology
Africana Studies
History and Philosophy of Science
Sociology

## \*Breadth and depth requirements for elective courses:

Required to take courses in three areas with at least two courses in each area. See http://www.engr.pitt.edu/students/electives.html for list.

\*Science Electives are selected depending on Engineering interest and include:

- CHEM 0175 INTRODUCTION TO NANO SCIENCE
- BIOSC 0150 FOUNDATIONS OF BIOLOGY 1
- BIOSC 0160 FOUNDATIONS OF BIOLOGY 2
- BIOSC 0810 BIOLOGY FOR NON-MAJORS 2
- CHEM 0310 ORGANIC CHEMISTRY 1
- CHEM 0330 ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 ORGANIC CHEMISTRY 2
- CHEM 0340 ORGANIC CHEMISTRY LABORATORY 2
- CHEM 0250 INTRO ANALYTICAL CHEMISTRY
- STAT 1000 APPLIED STATISTICAL METHODS
- CS 0441 DISCRETE STRUCTURES FOR CS

# Petroleum Technology, AS

#### "ONE + ONE" (One Year at Titusville/One Year at Bradford)

With the growth of the petroleum industry in Pennsylvania and other areas nationwide, we are offering an Associate Degree in Petroleum Technology. This is a 2-year joint program with the University of Pittsburgh at Bradford, which allows you to to receive the first year of the curriculum on our campus and then relocate to Bradford to complete your degree. When you receive your degree, you'll be prepared to apply for a career in the oil and gas industry in this growing field.

Along with general education requirements, courses will include Geology of Marcellus Shale and Utica Shale, Drilling, Fracking, Oil and Gas Transportation, Well Log Interpretation, and other major topics to meet national standards.

# General Education Course Requirements

## Written Literacy

- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2

## Mathematics

- MATH 0110 FUNDAMENTALS OF MATHEMATICS
- Human Experience Elective 3 Credits
- Human Experience Elective (Bradford) 3 Credits

# Major Course Requirements

- CHEM 0101 GENERAL CHEMISTRY I (Bradford) 4 Credits
- GEOL 0101 PHYSICAL GEOLOGY
- PET 0101 INTRODUCTION TO PETROLEUM INDUSTRY 3 Credits
- PET 0102 ENVIRONMENTAL & SAFTEY 3 Credits
- PET 0103 INTRODUCTION TO PETROLEUM GEOLOGY & GEOPHYSICS 3 Credits
- PET 0105 INTRODUCTION TO GIS AND TECHNOLOGY (Bradford) 3 Credits
- PET 0106 DRILLING AND COMPLETION I 3 Credits
- PET 0107 GEOLOGY OF MARCELLUS SHALE 3 Credits
- PET 0110 BASIC PRINCIPLES OF WELL CONTROL AND MUD LOGGING (Bradford) 3 Credits
- PET 0201 PETROLEUM AND NATURAL GAS (Bradford) 3 Credits
- PET 0203 OIL & GAS GATHERING TRANSPORTATION (Bradford) 3 Credits
- PET 0204 WELL LOG INTERPRETATION (Bradford) 3 Credits
- PET 0206 DRILLING AND COMPLETION II (Bradford) 3 Credits
- PET 0207 GEOLOGY OF UTICA SHALE (Bradford) 3 Credits
- PET 0208 HYDRAULIC FRACTURING (Fracking) (6-Week Summer Course) (Bradford) 3 Credits
- PHYS 0103 CONCEPTS OF MODERN PHYSICS (Bradford) 3 Credits
- PHYS 0203 FOUNDATION OF PHYSICS LAB (Bradford) 1 Credit or
- PHYS 0204 FOUNDATION OF PHYSICS LAB (Bradford) 1 Credit

# Total Credits: 66

- Students must earn a C- or better in ENG 0101, ENG 0102 and MATH 0110.
- Students must earn a minimum cumulative 2.0 in the Major course requirements.
- Students must earn a minimum 2.0 cumulative grade point average.
- Some courses require students complete rotations, fieldwork, or other assignments at facilities external to the university. Depending on the course, a criminal background check, act 33/34 clearance and drug screening may be required. To become licensed, some states inquire if the applicant has been convicted of a misdemeanor, felony, or illegal act associated with alcohol and/or substance abuse.

# **Pre-Pharmacy**

The University of Pittsburgh at Titusville offers a two-year curriculum to give students the foundation they need to apply to degree programs in Pharmacy at other locations. For more information on the Pharmacy program, click here.

# General Admissions Requirements

- BIOSC 0150 FOUNDATIONS OF BIOLOGY 1
- BIOSC 0050 FOUNDATIONS OF BIOLOGY LAB 1
- BIOSC 0160 FOUNDATIONS OF BIOLOGY 2
- BIOSC 0060 FOUNDATIONS OF BIOLOGY LAB 2
- CHEM 0110 GENERAL CHEMISTRY 1
- CHEM 0120 GENERAL CHEMISTRY 2
- CHEM 0310 ORGANIC CHEMISTRY 1
- CHEM 0330 ORGANIC CHEMISTRY LABORATORY 1
- CHEM 0320 ORGANIC CHEMISTRY 2
- CHEM 0340 ORGANIC CHEMISTRY LABORATORY 2
- MATH 0220 ANALYTC GEOMETRY & CALCULUS 1
- STAT 1000 APPLIED STATISTICAL METHODS
- ENG 0101 ENGLISH COMPOSITION 1
- ENG 0102 ENGLISH COMPOSITION 2
- ECON 0100 INTRO MICROECONOMIC THEORY or
- ECON 0110 INTRO MACROECONOMIC THEORY
- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- Two Social Science Electivies (from two different disciplines) 6 Credits
- Two Humanities Electives (from two different disciplines) 6 Credits
- Two additional Electivies (from list of Humanities or Social Science electivies) 6 Credits

# Total Credit Hours: 62

(see your pharmacy advisor for courses in Elective areas)

## Humanities Electivies:

Communication Classics Philosophy Studio Arts Foreign Languages English Composition English Literature History of Art Architecture Music Theatre

## Social Science Electivies:

History
History of Jazz
Anthropology
Economics
Politicial Science

Psychology Africana Studies History and Philosophy of Science Sociology

# Nursing

# Nursing, AS

The Nursing Program provides an Associate of Science in Nursing which prepares students at the undergraduate level to sit for the State Board of Nursing examination to become a Registered Nurse. Learn more about our program here.

# Fall Term - 1st year

- BIOSC 0212 HUMAN ANATOMY & PHYSIOLOGY 1 and
- BIOSC 0214 HUMN ANATMY & PHYSIOLOGY LAB 1 Theory Hrs/Wk: 3 | Lab Hrs/Wk: 3
- NUR 0066 NUTRITION FOR CLINCAL PRACTICE Theory Hrs/Wk: 3
- ENG 0101 ENGLISH COMPOSITION 1 Theory Hrs/Wk: 3
- PSY 0010 INTRODUCTION TO PSYCHOLOGY Theory Hrs/Wk: 3
- NUR 0300 NURSING FOUNDATIONS Theory Hrs/Wk: 2.5 | Clinical Hrs/Wk: 1.5

# Credits Term: 16

Total Hrs/Wk: 21

# Spring Term - 1st year

- BIOSC 0213 HUMAN ANATOMY & PHYSIOLOGY 2 and
- BIOSC 0215 HUMN ANATMY & PHYSIOLOGY LAB 2 Theory Hrs/Wk: 3 | Lab Hrs/Wk: 3
- HRP 0420 CLINICAL PATHOLOGY
   Theory Hrs/Wk: 3
- NUR 1110 PHARMACOLOGY AND THERAPEUTICS Theory Hrs/Wk: 3
- NUR 0350 NURSING FUNDAMENTALS Theory Hrs/Wk: 3 | Clinical Hrs/Wk: 9

## Credits Term: 16

Total Hrs/Wk: 25

## Summer - 1st year

- MATH 0031 ALGEBRA or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS Theory Hrs/Wk: 3
- PSYED 0005 LIFE SPAN DEVELOPMENT Theory Hrs/Wk: 3

 NUR 0400 - ADULT MEDICAL SURGICAL NURSING Theory Hrs/Wk: 3 | Clinical Hrs/Wk: 15

# Credits Term: 14

Total Hrs/Wk: 24

# Fall - 2nd year

- BIOSC 0031 MICROBIOLOGY and
- BIOSC 0032 MICROBIOLOGY LAB Theory Hrs/Wk: 3 | Lab Hrs/Wk: 2
- NUR 0450 FAMILY AND MENTAL HEALTH Theory Hrs/Wk: 4 | Clinical Hrs/Wk: 15

Credits Term: 13

Total Hrs/Wk: 24

# Spring - 2nd year

- SOC 0010 INTRODUCTION TO SOCIOLOGY Theory Hrs/Wk: 3
- NUR 0500 COMPLEX AND COMMUNITY HEALTH Theory Hrs/Wk: 4 | Clinical Hrs/Wk: 15
- NUR 0525 ROLE DEVELOPMENT Theory Hrs/Wk: 0.5 | Lab Hrs/Wk: 0.5

# Credits Term: 13

Total Hrs/Wk: 23

# 72 Total Credits

1 credit = 15 theory hours 1 credit = 45 clinical hours 832.5 Total Clinical Hours

# **Physical Therapist Assistant**

# **Physical Therapist Assistant, AS**

# **Program Overview**

The University of Pittsburgh at Titusville's (Pitt-Titusville) Physical Therapist Assistant (PTA) Program is a well-established academic based program. The Physical Therapist Assistant Program at the University of Pittsburgh at Titusville is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA). \* The program is accredited through the year 2021. The faculty are members of the American Physical Therapy Association (APTA).

Upon completion of the two-year Physical Therapist Assistant Program, students will earn an Associate of Science Degree for the Physical Therapist Assistant from the University of Pittsburgh, and will be eligible to sit for the National Physical Therapy Licensure Examination (NPTE).

The PTA Program is a five semester, two-year program. Our faculty will work with you to suggest a curriculum to fit your previous college credits or for students that cannot attend school full time. Our small class size and knowledgeable faculty give you interactive/hands-on learning and personalized attention in a comfortable atmosphere.

As a branch of the main Pitt campus, you will have access to the medical and research resources for which the University of Pittsburgh is respected worldwide.

# Accreditation and Licensure

After matriculating with an A.S. degree in physical therapist assistant (PTA), program graduates must successfully pass the National Physical Therapy Examination (NPTE) administered by each state to achieve certification/licensure which is required for clinical practice. The Pitt-Titusville PTA Program assists students in the preparation of the NPTE with the Professional Issues Seminar course and several mock board examinations.

In addition to a PTA certification/licensure, many state licensing boards require a criminal background check, child abuse clearance and a drug screening. PTA students are required to obtain Act 34 and Act 151 clearances for the program prior to beginning the clinical education courses and may be required to successfully complete a drug screen. Students with criminal records should contact the physical therapy licensing board for the state they plan to practice in prior to applying for admission to the PTA Program to inquire about potential restrictions for licensure.

# Advisors

Dr. Karen Guth Physical Therapist

Ms. Joyce Carbaugh Physical Therapist Assistant

# Affiliations

While we have numerous affiliation sites within a 50 mile radius of our campus, we encourage our students to travel to other cities/states to experience the diversity of the physical therapy practice throughout the United States. If a location is chosen in which we do not already have a clinical site, every effort is made to acquire a site of the student's choice. Ultimately, the academic needs of the student are our priority for clinical placement.

All expenses, including transportation and housing are the student's responsibility. However, many of our students choose clinical sites near friends or relatives to help offset some of their expenses.

# Two-Year Curriculum

Curriculum Subject to Change

First Year

- MATH 0031 ALGEBRA or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS
- BIOSC 0212 HUMAN ANATOMY & PHYSIOLOGY 1
- BIOSC 0214 HUMN ANATMY & PHYSIOLOGY LAB 1
- HRP 0184 INTRO TO SCIENCE FOR HLTH PROF
- ENG 0101 ENGLISH COMPOSITION 1
- CS 0131 SOFTWARE FOR PERSONAL COMPUTNG
- PHYSTA 0050 FRESHMAN SEMINAR

## Spring Term

- BIOSC 0213 HUMAN ANATOMY & PHYSIOLOGY 2
- BIOSC 0215 HUMN ANATMY & PHYSIOLOGY LAB 2
- HRP 0410 APPLIED KINESIOLOGY
- HRP 0411 APPLIED KINESIOLOGY LAB
- COMMRC 0530 INTERPERSONAL COMMUNICATION or
- COMMRC 0520 PUBLIC SPEAKING
- PHYSTA 0110 INTRO TO PHYSICAL THERAPY
- PHYSTA 0221 PTA PRINCIPLES & PROCEDURES 1

## Summer Term

- PHYSTA 0222 PTA PRINCIPLES & PROCEDURES 2
- PHYSTA 0331 CLINICAL EDUCATION 1

## Second Year

## Fall Term

- HRP 0420 CLINICAL PATHOLOGY
- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- PHYSTA 0223 PTA PRINCIPLES & PROCEDURES 3
- PHYSTA 0224 PTA PRINCIPLES & PROCEDURES 4

## Spring Term

- PHYSTA 0332 CLINICAL EDUCATION 2
- PHYSTA 0333 CLINICAL EDUCATION 3
- PHYSTA 0440 PROFESSIONAL ISSUES SEMINAR

# Part-Time Status

Students may choose to pursue the PTA Program as a part-time student. Students may take as little as one course per semester of the Required General Foundation and Behavioral Education Courses. However, the Technical and Clinical Education courses must be taken in consecutive sequence without interruption.

## General Foundation Education Courses

- BIOSC 0212 HUMAN ANATOMY & PHYSIOLOGY 1
- BIOSC 0214 HUMN ANATMY & PHYSIOLOGY LAB 1
- BIOSC 0213 HUMAN ANATOMY & PHYSIOLOGY 2
- BIOSC 0215 HUMN ANATMY & PHYSIOLOGY LAB 2
- MATH 0031 ALGEBRA or
- MATH 0110 FUNDAMENTALS OF MATHEMATICS
- HRP 0184 INTRO TO SCIENCE FOR HLTH PROF
- HRP 0420 CLINICAL PATHOLOGY

## General Behavioral Education Courses

- ENG 0101 ENGLISH COMPOSITION 1
- COMMRC 0530 INTERPERSONAL COMMUNICATION or
- COMMRC 0520 PUBLIC SPEAKING
- PSY 0010 INTRODUCTION TO PSYCHOLOGY
- CS 0131 SOFTWARE FOR PERSONAL COMPUTNG

## **Technical Education Courses**

- PHYSTA 0110 INTRO TO PHYSICAL THERAPY
- PHYSTA 0221 PTA PRINCIPLES & PROCEDURES 1
- PHYSTA 0222 PTA PRINCIPLES & PROCEDURES 2
- PHYSTA 0223 PTA PRINCIPLES & PROCEDURES 3
- PHYSTA 0224 PTA PRINCIPLES & PROCEDURES 4
- PHYSTA 0440 PROFESSIONAL ISSUES SEMINAR
- HRP 0410 APPLIED KINESIOLOGY
- HRP 0411 APPLIED KINESIOLOGY LAB

## **Clinical Education Courses**

- PHYSTA 0331 CLINICAL EDUCATION 1
- PHYSTA 0332 CLINICAL EDUCATION 2
- PHYSTA 0333 CLINICAL EDUCATION 3

## Program Outcomes

# **Graduation Rate**

The percentage of students who complete the program within 150% of the normally expected time:

- Class of 2012 (74%)
- Class of 2013 (78%)
- Class of 2014 (59%)

# **Ultimate Pass Rates**

The percentage of graduates who passed the NPTE:

- Class of 2012 (79%)
- Class of 2013 (85%)
- Class of 2014 (93%)

# **Employment Rate**

The percentage of graduates who sought employment and who were employed within 6 months of passing the NPTE:

- Class of 2012 (87%)
- Class of 2013 (73%)
- Class of 2014 (85%)

Employment Opportunities: Please see the APTA job/career center link.

# **Minimum Entry Requirements for the Program**

- High School GPA of 2.5 or GED of at least 2500
- SAT score of at least 900
- Readiness to take ENG 0101 and MATH 0031 or MATH 0110
- Earned an overall 2.0 GPA or better in all pre-technical course work.
- Students who do not meet the entry requirements of the program, but who meet the entry requirements of the University of Pittsburgh at Titusville are encouraged to pursue health science courses in preparation for later entry into the PTA program. Students must still meet all of the PTA entry requirements.

# Volunteer/Recommendation Requirements:

- Combined total of 40 hours of volunteer work at two Physical Therapy Clinics (click here for form)
- One positive letter of recommendation from the PT/PTA with whom the student has volunteered (click here for form)
- These requirements must be received by December 1st prior to beginning the technical phase of the program in January

# First Aid & CPR Requirements:

• Current certification in First Aid and CPR prior to the end of the second semester

# Clearance Requirements:

All students admitted to the technical phase of the PTA Program must complete a recent (defined as within 2 months prior to beginning first clinical experience) a criminal history information (Act 34) and Pennsylvania Child Abuse History Clearance (Act 151).

# Program Academic Requirements:

It is the policy of Pitt-Titusville's PTA Program that students must maintain a high level of academic achievement in order to continue in the PTA Program. Students are required to maintain at least a 2.5 GPA average in the PTA curriculum and an overall GPA of 2.0 each semester.

A maximum of 24 students are admitted to the technical phase of the program each spring semester. The PTA Selection Committee ranks students based on selection criteria including SAT/ACT score, GPA, core prerequisite course grades, personal essay, and volunteer hours with letter of recommendation. The highest ranking applicants, up to 24, will be offered acceptance into the technical phase of the program. Remaining candidates will either be placed on a waiting list as an alternate or denied admission.

# **Course Information**

Please note, when searching courses by Catalog Number, an asterisk (\*) can be used to return mass results. For instance a Catalog Number search of "1\*" can be entered, returning all 1000-level courses.

# Accounting

## ACCT 0111 - FINANCIAL ACCOUNTING

Minimum Credits: 3 Maximum Credits: 3 An introduction to the accounting functions used by businesses to accumulate, use, and analyze financial data. Emphasis is placed on the preparation, use, and interpretation of financial statements. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: COREQ or PREREQ: MATH 0031

## ACCT 0112 - MANAGERIAL ACCOUNTING

Minimum Credits: 3 Maximum Credits: 3 Deals with the significance and use of basic accounting concepts as they relate to the principal items contained in financial statements. Includes an introductory survey of the various cost components encountered in accounting for the manufacturing enterprise. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0111

## **ACCT 0221 - INTERMEDIATE ACCOUNTING 1**

Minimum Credits: 3 Maximum Credits: 3 Blends the theory and current practice of financial accounting for the business enterprise. Emphasis is placed on current accounting theory, valuation of assets and liabilities, and the impact of private, professional, and governmental agencies on financial accounting. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0112

#### **ACCT 0222 - INTERMEDIATE ACCOUNTING 2**

Minimum Credits: 3 Maximum Credits: 3 Continuation of ACCT 0221 which covers such topics as accounting theory related to the liability and stockholders equity sections of the balance sheet, the cash flow statement, and earnings per share computation. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0221

## ACCT 1155 - GOVERNMENT AND NONPROFIT ACCT

## Minimum Credits: 3

Maximum Credits: 3

Application of the financial accounting and reporting standards applicable to (1) federal, state, and local governments and (2) nonprofit organizations. Introduction and analysis of the identification and classification of financial statement accounts. Identifies the authoritative sources that accountants as well as auditors must adhere to in the preparation and examination of the financial statements of these entities.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **ACCT 1303 - STRATEGIC COST MANAGEMENT**

Minimum Credits: 3

Maximum Credits: 3

This course focuses on advanced topics in cost and managerial accounting. Emphasis is on standard cost systems and variance analysis; absorption and variable costing; capital budgeting techniques and income tax impact assessment; and short and long range forecasting and reporting. Academic Career: UGRD

**Course Component:** Lecture **Grade Component:** LG/SNC Elective Basis **Course Requirements:** PREQ: ACCT 0112

#### **ACCT 1304 - FEDERAL INCOME TAXES**

## Minimum Credits: 3

Maximum Credits: 3

This course is an in-depth analysis of the federal income tax statutes and regulations relating to the taxation of individuals and sole proprietorships. Topics include: concepts of revenue and expenses, tax methods and treatment of the disposition of property (including capital gains and losses and tax research).

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0112

## ACCT 1307 - FEDERAL INCOME TAX ACCOUNTING 2

Minimum Credits: 3 Maximum Credits: 3 A continuation of ACCT 0331/ACCT 1304 which examines specific tax areas applicable to different types of business organizations with exclusive emphasis on corporations during the final part of the class. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## ACCT 1308 - COST ACCOUNTING 2

Minimum Credits: 3 Maximum Credits: 3

Provides an advanced pragmatic understanding, rooted in theory, of cost accounting concepts, techniques, and systems as they relate to the purposes of cost and operations control. Covers the development and use of performance benchmarks, their integration in a standard cost system, the budget development process, differential analysis, cost-volume-profit analysis, direct costs, and analytical techniques relevant to capital expenditure decisions.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ACCT 1310 - AUDITING

Minimum Credits: 3 Maximum Credits: 3 Concepts, standards, and methods of auditing including the role of evidence, the importance of internal accounting controls, and the auditor's report. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0112

## **ACCT 1399 - ACCOUNTING INTERNSHIP**

Minimum Credits: 1 Maximum Credits: 3 Selected topics in an identified area of study in accounting. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: Sophomore or higher; 2.5 GPA; Division Consent

# **Administration and Policy Studies**

#### **ADMPS 1001 - SOCIAL FOUNDATIONS OF EDUCATN**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

Students in the course have the opportunity to develop a foundational understanding of the dynamics of schooling in society by addressing the cultural aspects that underlie society's educational ideas and practices. Through an interdisciplinary approach, readings and activities are designed for school practitioners, or those contemplating careers in education, to engage in the study of those cultural aspects and consequences. The general intent of foundational study is to introduce students to interpretive uses of knowledge Germane to education and to establish a basis for lifelong learning through normative and critical reflection on education within its historical philosophical, cultural and social contexts. Special emphasis is focused on the role of schooling in cultivating the habits necessary for democratic citizenship which include ongoing efforts to secure equitable and just social relations, and to advance the common good.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

## **Administration of Justice**

#### ADMJ 0100 - SOCIETY AND THE LAW

#### Minimum Credits: 3

## Maximum Credits: 3

Every society regulates behavior and the means, i.e., either informal or formal, with which this is done varies according to level of social development. This course examines the regulation of behavior in primitive, transitional, and modern societies and traces the development of law and legal systems and their relationship to different characteristics of social development. We will examine legal jurisprudence and the application of the principles of these philosophies and explore how they have shaped legal action.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **ADMJ 0203 - PROBATION AND PAROLE**

Minimum Credits: 3 Maximum Credits: 3 An examination of the nature of parole, the factors influencing probation decisions, adult and juvenile probation services, and how probation and parole impact on the criminal justice system and on society. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ADMJ 0204 - POLICE AND SOCIETY**

#### Minimum Credits: 3

#### Maximum Credits: 3

The law enforcement agencies of the federal, state, and local levels that are responsible for the control of crime and protection of society via maintenance of order, law enforcement, and peacekeeping functions within our social environment will be examined. Major topics include the evolution, development, functions and effects of law enforcement of crime in society. Emphasis is on the theory and practice of social control in society by traditional and emerging forms of policing responding to social and public policy.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ADMJ 0500 - INTRO TO ADMIN OF JUSTICE**

#### Minimum Credits: 3

## Maximum Credits: 3

Introductory course designed to provide the student with basic information on the criminal justice system. Views the criminal justice system as consisting of six sub-systems; police, prosecution, courts, corrections, probation and parole. Explores law and society in general, the history, structure, function and contemporary problems in each major sub-system. Also explores the trend of the criminal justice system and the directions and implications involved. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ADMJ 0600 - INTRODUCTION TO CRIMINOLOGY**

#### Minimum Credits: 3 Maximum Credits: 3

This course provides an overview of the study of the causes and social responses to crime. It examines legal definitions and elements of crime; surveys major categories of crime, i.e., Predatory and non-predatory acts; reviews major measures of crime; identifies major correlates and theories of crime; differentiates types of offenders and evaluates the working of the criminal justice system. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **ADMJ 1225 - THE JUVENILE JUSTICE PROCESS**

Minimum Credits: 3 Maximum Credits: 3 Presentation, discussion and analysis of the nature of the juvenile justice process, legal steps required in processing juveniles, nature and operation of juvenile justice institutions, interrelationships between parts of the system, and problems and prospects for their solution. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ADMJ 1450 - CRITICAL ISS IN CRIMNL JUSTICE

Minimum Credits: 3 Maximum Credits: 3 Analyzes contemporary issues relating to policies, goals, and procedures of all criminal justice agencies. Topics covered include trends and controversies regarding law enforcement activities, the changing role of police, police court controversies, standards and goals, future trends in criminal justice, manpower utilization, organizational changes, long-range planning, and projections for future of police agencies. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ADMJ 1455 - TOPICS IN ADMINSTRTN OF JUSTC**

Minimum Credits: 3 Maximum Credits: 3 The advanced study of a special topic in the administration of justice. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ADMJ 1900 - PRESERVICE INTERNSHIP**

Minimum Credits: 1 Maximum Credits: 6 This course is a supervised placement with specific agencies in the criminal justice system. Academic Career: UGRD Course Component: Practicum Grade Component: Satisfactory/No Credit

# Africana Studies

#### **AFRCNA 0031 - INTRODUCTION TO AFRCNA STUDIES**

Minimum Credits: 3 Maximum Credits: 3

This is a survey course for Africana studies. An Afrocentric approach will be used to review the eight basic subject areas of the multidisciplinary focus; black history, black religion, black creative productions, black politics, black economics, black social organizations, black psychology and black education. Two alternative views will be pursued; a theoretical review of the literature and a summation of the practical experiences of black life.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **AFRCNA 0120 - AFRICAN AMER EXPERIENCE SPORTS**

Minimum Credits: 3

Maximum Credits: 3

This course examines blacks in sports. It focuses on sport as a microcosm of the larger society and also addresses sport's relationship to politics, economics, race relations, and South African apartheid. It looks at the history of blacks in sports as well as three aspects of sports that appear to be racially biased; position allocation, performance differentials, and rewards and authority structure. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **AFRCNA 0150 - AFRICAN AMERICAN LITERATURE**

Minimum Credits: 3

Maximum Credits: 3

Introduction to black American literature from its oral traditions to the written form from the 18th to 20th century interrelated to historical social and political movements. Special emphasis will be placed upon the Harlem Renaissance period, the literature of the 1960's, and a work by the Pulitzer Prize winners (Gwendolyn brooks, James Alan McPherson, Alice Walker, or Toni Morrison). Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **AFRCNA 0318 - HISTORY OF AFRICA BEFORE 1800**

Minimum Credits: 3 Maximum Credits: 3 Surveys history of Africa from earliest times to eve of European colonization. Looks at Africa from the inside out and aims at promoting an appreciation of Africa's contribution to world civilization and an understanding of the historical processes that have shaped modern Africa. Major themes and topics include the ancient kingdoms, Islam, the slave trade and the European contact. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **AFRCNA 0629 - AFRO-AMERICAN HISTORY 1**

Minimum Credits: 3 Maximum Credits: 3 This course surveys the history of Afro-Americans from their African origins to their emancipation during the Civil War. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **AFRCNA 0630 - AFRO-AMERICAN HISTORY 2**

Minimum Credits: 3 Maximum Credits: 3 This course surveys the development of black Americans from the time of the Civil War to the present. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **AFRCNA 0639 - HISTORY OF JAZZ**

Minimum Credits: 3 Maximum Credits: 3 The course focuses on the chronological development of jazz from its beginnings on the plantation to its present state as a world concert music. Various styles such as ragtime, blues, gospel, spirituals, rhythm and blues, rock, soul, etc., Are examined. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

AFRCNA 1725 - EAST AFRICA ISSUES Minimum Credits: 3 Maximum Credits: 3 Academic Career: UGRD

# Anthropology

## ANTH 0330 - ANTHRPLGCL MYTHS & REALITY

#### Minimum Credits: 3 Maximum Credits: 3

This course examines the mysteries, myths, controversies, and frauds of anthropology. Topics covered consist of who discovered America?" And "where did the Indians come from?"; The lost continent, Atlantis, evidence for prehistoric visitors and outer space contact, the evolution of humans (who is bigfoot?); And "what is Stonehenge?" The course includes a basic review of the scientific method and archaeological techniques to facilitate discussion of the above topics and to encourage objective analysis of anthropological data."

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **ANTH 0582 - INTRODUCTION TO ARCHEOLOGY**

#### Minimum Credits: 3

Maximum Credits: 3

Examines the nature of modern archaeological research. Lectures look at how archaeologists work in the field, their analytic techniques, and some of the principal methodological and theoretical problems facing the field. Specific examples are used to illustrate these topics. **Academic Career:** UGRD

**Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

#### **ANTH 0645 - INTRODUCTION TO HUMAN BIOLOGY**

#### Minimum Credits: 3

#### Maximum Credits: 3

Human biology deals with the nature and growth of human populations, human growth and development, human ecology and physiology, and the adaptation to various hostile environments that humans have made. This is an introductory course which places these topics in the framework of the study of human origins and the environments that our ancestors may have encountered in their evolutionary history. The emphasis is on morphologic variability.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## ANTH 0680 - INTRO PHYSICAL ANTHROPOLOGY

#### Minimum Credits: 3

#### Maximum Credits: 3

This course is designed to introduce the undergraduate to the issues, theories and methods of physical anthropology. Beginning with a consideration of evolutionary, genetic and geologic principles, the course goes on to consider, the diversity of fossil and extant primates, including humans. Issues in anatomy, paleontology and behavior will all be addressed.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

## ANTH 0681 - INTRODUCTION TO HUMAN EVOLUTN

#### Minimum Credits: 3

#### Maximum Credits: 3

This is an introduction to human evolution and, in general, the evolution of the larger group to which we belong, the order primates. We will survey first the development of evolutionary ideas and modern developments in biology and geology and then review the diversity of living and fossil primates, dwelling especially on the discoveries and controversies surrounding our own evolutionary past.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

ANTH 0709 - SPEC TOPICS IN CULTRL ANTHRO Minimum Credits: 1 Maximum Credits: 1 This course will be on a topic in the area of specialization of a visiting scholar yet to be determined. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ANTH 0710 - SPEC TOPICS IN CULTRL ANTHRO

Minimum Credits: 3 Maximum Credits: 3 This course will be on a topic in the area of specialization of a visiting scholar yet to be determined. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ANTH 0780 - INTRO TO CULTURAL ANTHROPOLOGY

#### Minimum Credits: 3

#### Maximum Credits: 3

By examining the behavior and customs of peoples throughout the world, the course considers what it means to be human. We will describe the patterns of marriage, family organization, warfare and political behavior, economic systems, rituals, etc., Of other peoples, especially those of tribal societies, and compare these with American social patterns. Anthropological films and slide presentations will supplement lectures. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### ANTH 1015 - FLD METHDS PRIMT BEHAVR & BIOL

#### Minimum Credits: 3

Maximum Credits: 3

A field course exploring the interfaces between primate behavior and biology. The field site serves as a living laboratory where students experience the biology and behavior of new world monkeys in their native habitats. Daily lectures and field exercises cover aspects of primate ecology, biology, behavior, and the rain forest environment. Each student develops a research proposal to be conducted on-site during the last half of the course. **Academic Career:** UGRD

Course Component: Independent Study

Grade Component: LG/SNC Elective Basis

#### **ANTH 1016 - PRIMATE BEHAVIOR AND BIOLOGY**

#### Minimum Credits: 3

#### Maximum Credits: 3

A field course exploring the interfaces between primate behavior and biology. The field site serves as a living laboratory where students experience the biology and behavior of new world monkeys in their native habitats. Daily lectures cover aspects of primate ecology, biology, behavior, and the rain forest environment. Each student develops a research proposal to be conducted on-site during the last half of the course.

#### Academic Career: UGRD

Course Component: Independent Study Grade Component: LG/SNC Elective Basis

#### ANTH 1025 - ADV FLD METHS PRIMT BHVR BIOL

#### **Minimum Credits: 3**

Maximum Credits: 3

A field course exploring the interfaces between primate behavior and biology. The field site serves as a living laboratory where students experience the biology and behavior of new world monkeys in their native habitats. Daily field exercises cover aspects of primate ecology, biology, behavior, and the rain forest environment.

Academic Career: UGRD

Course Component: Independent Study Grade Component: LG/SNC Elective Basis

#### **ANTH 1026 - ADV PRIMATE BEHAVIOR & BIOLOGY**

## Minimum Credits: 3

Maximum Credits: 3

A field course exploring the interfaces between primate behavior and biology. The field site serves as a living laboratory where students experience the biology and behavior of new world monkeys and their native habitats. Daily lectures cover aspects of primate ecology, biology, behavior, and the rain forest environment. Prior to arrival on site each student searches the literature and develops a research proposal to be conducted on-site during

the last half of the course. Academic Career: UGRD Course Component: Independent Study Grade Component: LG/SNC Elective Basis

#### **ANTH 1535 - BASIC ARCHELOGCL FIELD TRAING**

Minimum Credits: 6 Maximum Credits: 6 The university of Pittsburgh field training program in archaeology is conducted at various locations. Features of the excavations include basic training in mapping, archaeological survey, excavation methods, soil analysis, data recording, and preliminary artifact analysis. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

## **ANTH 1540 - SPECIAL TOPICS IN ARCHEOLOGY**

Minimum Credits: 3 Maximum Credits: 3 Topics covered vary greatly with instructor and term. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ANTH 1602 - HUMAN SKELETAL ANALYSIS

Minimum Credits: 4

Maximum Credits: 4 This is an introduction to the study and analysis of the human skeleton, which will be based on lectures and lab. Topics include: development of teeth and bone, identification of whole bones and fragments and determination of sex, age, and stature (and other metric analyses), disease, and populational features. Real bony materials will be used in lab. Academic Career: UGRD Course Component: Practicum Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: BIOSC 0150, BIOSC 0160, anthropology, or permission of instructor

#### **ANTH 1607 - PRIMATE BEHAVIOR**

Minimum Credits: 3

Maximum Credits: 3

This course takes a Darwinian approach to explaining the diversity in contemporary primate behavior and ecology. We stress the comparative method, and seek to develop general principles of adaptation that will explain the taxonomic distribution of particular behavioral and ecological traits.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ANTH 1619 - SPECIAL TOPICS IN PHYSCL ANTH**

Minimum Credits: 3 Maximum Credits: 3 Topics covered vary greatly with instructor and term. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

ANTH 1725 - SOCIAL HLTH ISSUES EAST AFRICA Minimum Credits: 3 Maximum Credits: 3 Academic Career: UGRD Course Component: Seminar Grade Component: Letter Grade

## ANTH 1737 - SPECIAL TOPICS IN CULTRL ANTH

Minimum Credits: 3 Maximum Credits: 3 This course will be on a topic in the area of specialization of a visiting scholar yet to be determined. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

## ANTH 1753 - NORTH AMERICAN INDIANS

Minimum Credits: 3 Maximum Credits: 3 This course presents a survey of native American cultures North of Mexico, both historical and modern. Case studies from several different regions are used to provide in-depth material on North American Indian cultural patterns. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ANTH 1761 - PATNTS & HEALERS: MEDCL ANTH 1

Minimum Credits: 3 Maximum Credits: 3 This course surveys the field of medical anthropology and its history within the discipline of anthropology as a whole, from the perspective of socialcultural theory. Topics dealt with include ethnomedicine, ethnographic cases, cross-cultural studies of healing practices and connections between medicine and religion. Reference is also made to applied research in contemporary situations. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREO: ANTH 0780

## **ANTH 1773 - CULTURES OF MESOAMERICA**

Minimum Credits: 3 Maximum Credits: 3 A general survey of problems and cultures of Mexico and Guatemala from the time of the Spanish conquest to the present. The course will be divided into three parts; MesoAmerica at the time of the arrival of the Spaniards; the colonial transformation of the Indian population; and the contemporary position of the Indians within the Pluri-Ethnic societies of which they are part. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## ANTH 1787 - SPECIAL TOPICS IN CULTRL ANTH

Minimum Credits: 1 Maximum Credits: 4 This course will be on a topic in the area of specialization of a visiting scholar yet to be determined. Academic Career: UGRD Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

# ANTH 1903 - DIRECTED RESEARCH-READINGS

#### Minimum Credits: 1 Maximum Credits: 3

Not all topics in anthropology can be adequately addressed in formal courses. The reading course allows qualified students to develop a bibliography for a specific topic not covered by other courses in the department. The work is done in conjunction with a faculty sponsor, and the student and faculty sponsor jointly determine the work products for the course, a research paper or annotated bibliography based upon the readings is typical, but other products may be substituted.

#### Academic Career: UGRD

Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

# Astronomy

#### **ASTRON 0089 - STARS, GALAXIES AND THE COSMOS**

Minimum Credits: 3 Maximum Credits: 3 This course deals primarily with astronomical objects lying outside our solar system. The level is appropriate for non-science students. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **Biology**

#### **BIOL 0083 - HUMAN ECOLOGY**

Minimum Credits: 3 Maximum Credits: 3

A course for non-majors surveying how humans interact with their environment, especially short-term and long-term effects on the biosphere. After receiving credit with a grade of c or higher for general biology 1 (BIOL 0110) or any higher numbered biology course, a student may not enroll in or receive credit (or equivalent transfer credits) for this course.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SU3 Elective Basis

# **Biological Science**

#### **BIOSC 0031 - MICROBIOLOGY**

#### Minimum Credits: 3 Maximum Credits: 3

Designed for nursing or other health care professions. Three major areas included are the microorganisms, the immune mechanism of the host, and the interaction of the host and the microorganisms in the disease process and in homeostasis. Major emphasis is placed on infectious diseases and infection control at the nursing level.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: CREQ: BIOSC 0032

#### **BIOSC 0032 - MICROBIOLOGY LAB**

Minimum Credits: 1 Maximum Credits: 1 Content is devoted to the development of student's basic laboratory skills and application of microbiological methods, and the course emphasizes performance, scientific investigation, and safety. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade Course Requirements: CREO: BIOSC 0031

## **BIOSC 0050 - FOUNDATIONS OF BIOLOGY LAB 1**

#### Minimum Credits: 1

Maximum Credits: 1

This is the first course in a two-course sequence on the study of organisms in the laboratory and the field. We will work with techniques that are important in biology and apply these techniques to illustrate basic biological principles, with an emphasis on living organisms. The laboratory exercises focus on cell structure and function, basic cellular processes, plant structure and function, and basic animal anatomy and physiology. **Academic Career:** UGRD

Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: BIOSC 0150 or 0715 or 0170 or 0190 or BIOL 0101 or 0110 or BIOENG 1070

#### **BIOSC 0060 - FOUNDATIONS OF BIOLOGY LAB 2**

#### Minimum Credits: 1

Maximum Credits: 1

This one-credit laboratory course is the second in a two-course sequence designed to be an introduction to scientific inquiry in the biological sciences for majors in biology and related fields. You will use genetics, biochemistry, and molecular biology to undertake authentic research exploring the evolution of metabolic pathways in different species. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

#### **BIOSC 0096 - INTRODUCTION TO HUMAN SYSTEMS**

Minimum Credits: 3 Maximum Credits: 3 Introduces the general principles of human structure and function to students who intend to enter the health related professions. The study begins at the cellular level and proceeds through tissues to organ systems. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: BIOSC 0097

## **BIOSC 0097 - INTRO TO HUMAN SYSTEMS LAB**

Minimum Credits: 1 Maximum Credits: 1 Laboratory exercises designed to illustrate the principles of human structure and function. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: BIOSC 0096

## **BIOSC 0100 - PREPARATION FOR BIOLOGY**

#### Minimum Credits: 3

#### Maximum Credits: 3

This course is intended for students who have not had high school biology in the past five years. The course is also highly recommended for students who have not completed algebra. The lecture will over a subset of topics from foundations of biology 1 and 2, including a discussion of basic chemistry used in biology, cell biology including mitosis and meiosis, human anatomy and physiology, and an introduction to genetics. The weekly recitations will explore topics covered in lecture in more depth and integrate problem solving and study skills. Some laboratory exercises will be included in the recitation period to re-enforce the lecture topics by giving students the opportunity to investigate the experimental aspect of biology. The laboratory exercises and assignments will focus on basic math and writing skills.

#### Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## **BIOSC 0150 - FOUNDATIONS OF BIOLOGY 1**

#### Minimum Credits: 3

Maximum Credits: 3 This introductory course in biology is divided into two parts. The first part covers the cellular basis of life including a discussion of simple chemistry; cells as units of structure and function; and energy transformations. The second part includes an examination of those functions common to all organisms such as nutrition, gas and fluid transport, and hormonal and neuronal control. Throughout, the emphasis is on the mechanisms used to accomplish these basic functions.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: BIOSC 0050

## **BIOSC 0160 - FOUNDATIONS OF BIOLOGY 2**

Minimum Credits: 3 Maximum Credits: 3 This introductory course covers the basic principles of genetics, evolution, and ecology. Emphasis will be placed on the experimental and observational basis for our knowledge of these subjects. Academic Career: UGRD Course Component: Lecture

#### **BIOSC 0212 - HUMAN ANATOMY & PHYSIOLOGY 1**

#### Minimum Credits: 3 Maximum Credits: 3

The first course of a two-part sequence covering gross and microscopic anatomy and physiology of the human body with particular emphasis on the relationships between structure and function. Included in the two courses are cell biology, histology, and embryology, bone and skeleton, muscles and contraction, the cardiovascular system and its regulation, the nervous system and nervous impulse, the urinary system and electrolyte balance, and the respiratory, digestive system, endocrine, and reproductive systems.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: 0214

#### BIOSC 0213 - HUMAN ANATOMY & PHYSIOLOGY 2

Minimum Credits: 3 Maximum Credits: 3

This second course of the two-part sequence continues the study of gross and microscopic anatomy and physiology of the human body with particular emphasis on the relationships between structure and function. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BIOSC 0212; CREQ: BIOSC 0215

## BIOSC 0214 - HUMN ANATMY & PHYSIOLOGY LAB 1

Minimum Credits: 1 Maximum Credits: 1 Laboratory exercises illustrating the anatomy and physiology of the human. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: 0212

#### BIOSC 0215 - HUMN ANATMY & PHYSIOLOGY LAB 2

Minimum Credits: 1 Maximum Credits: 1 Laboratory exercises illustrating the anatomy and physiology of the human. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: 0213 or CREQ: 0213

#### **BIOSC 0341 - SEMINAR IN BIOTECHNOLOGY**

Minimum Credits: 1 Maximum Credits: 1 Presentations designed for discussion of current biotechnological concepts and to allow students to hear from local professionals as they provide insight into biotechnological career options. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **BIOSC 0345 - TECHNQ & INSTRMNT BIOTEC** Minimum Credits: 2

Maximum Credits: 2

Focuses on the basic techniques and instruments commonly used in the field of biotechnology. Hands-on participation is provided in such activities as protein electrophoresis, electrophoresis and restriction analysis of DNA, separation of proteins using chromatography columns, and basic cell culture techniques. Academic Career: UGRD

#### **BIOSC 0350 - GENETICS**

Minimum Credits: 3 Maximum Credits: 3

This course is designed to examine the gene in the following dimensions: the gene as a unit of transmission, a unit of function, and a unit of mutation. In addition, the distribution and activity of genes in populations will be considered in the context of current theories of evolution. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

**Course Requirements:** PREQ: BIOSC 0160 and CHEM 0120; CREQ BIOSC 0351

#### **BIOSC 0351 - GENETICS LABORATORY**

Minimum Credits: 1 Maximum Credits: 1 Laboratory exercises designed to illustrate the major principles of genetics. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BIOSC 0160 and CHEM 0120; CREQ: BIOSC 0350

## **BIOSC 0365 - BIOTEC & RECOMBINANT DNA**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

This course will focus on the structure and function of nucleic acids and proteins and the biotechnology used to isolate, replicate, and characterize these molecules. Possible sub-topics include: basic molecular biology of DNA and proteins, protein gel electrophoresis, transformation, electrophoresis and restriction analysis of DNA, restriction fragment length polymorphism (RFLP), random amplified polymorphic DNA (RAPD), DNA fingerprinting, polymerase chain reaction (PCR) analysis, DNA sequencing analysis, and southern blotting. BIOSC 0350 is strongly recommended.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIOSC 0370 - ECOLOGY**

Minimum Credits: 3 Maximum Credits: 3

The objective of the course is to provide a broad introduction to the study of ecology at the undergraduate level, through the presentation of lectures dealing with organismal, population, community, and ecosystem levels of hierarchical organization. The contributions of laboratory and field investigations to the development of ecological knowledge will be considered.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BIOSC 0160 or 0716 or 0191 or 0180 or BIOL 0102 or 0120; Min Grade 'C' for all classes listed.

#### **BIOSC 0390 - ECOLOGY LABORATORY**

#### Minimum Credits: 1

Maximum Credits: 1

The objective of the laboratory course is to provide students with practical experience in ecological methods and in the design, conduct, and analysis of ecological studies. Laboratory exercises are designed to correspond with major lecture topics presented in BIOSC 0370. Exercises will include laboratory and field studies.

Academic Career: UGRD

Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: BIOSC 0060 or 0067 or 0068 or 0080 or 0191 or BIOL 0102 or 0121; CREQ: BIOSC 0370 or 0371 or BIOL 1430 or 1515; Min Grade 'C' for all classes listed.

#### **BIOSC 0399 - INTERNSHIP IN BIOTECHNOLOGY**

Minimum Credits: 2 Maximum Credits: 2 Provides the student with the opportunity to combine academic training with practical work experience in an institution outside the university. A faculty advisor in the biotechnology (BT) program assists the student in locating an internship site and an external onsite supervisor. The student is required to devote a minimum of six clock hours per week at the internship and assessment is based on both academic and professional criteria. **Academic Career:** UGRD

Course Component: Internship

Grade Component: LG/SNC Elective Basis

#### **BIOSC 0800 - BIOLOGY FOR NON-MAJORS 1**

#### Minimum Credits: 3

#### Maximum Credits: 3

This is a course in human biology and physiology for students not majoring in biology. The goal is to provide students with an understanding of fundamental principles of life with an emphasis on the human body. The course will cover basic biochemistry and cell biology and then move to the structure and function of human organ systems. An essential part of the course is discussion of current issues, such as infectious, autoimmune and neurodegenerative diseases; asthma and allergy; nutrition and health; stem cells research and cloning; and methods of contraception and reproductive technologies.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIOSC 0810 - BIOLOGY FOR NON-MAJORS 2**

#### Minimum Credits: 3

## Maximum Credits: 3

At an ever-increasing pace, issues of biological relevance are confronting the citizenry of this country and the world. Ranging from personal through political to global, these issues require that individuals have at lEast a rudimentary knowledge of basic biological phenomena in order to make informed decisions. The major goal of this course, together with its companion, BIOSC 0800, is to provide students (citizens) with the intellectual tools needed to approach these issues as they arise.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **BIOSC 0820 - ENVIRONMENTAL SCIENCE**

#### Minimum Credits: 3

Maximum Credits: 3

A course for non-science majors utilizing basic scientific principles to investigate human interactions with the environment. The social, political and economic effects of these interactions will also be studied. Topics include scientific principles; populations and health concerns; food, land, and biological resources; and society and the environment. Through an understanding of science and the possible consequences of human decision-making regarding the environment, students are equipped to become better citizens. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## **BIOSC 0861 - SEM IN ENVIRONMNTAL TECHNLGY 1**

Minimum Credits: 2 Maximum Credits: 2 Presentations designed for discussion of current technological concepts and to allow students to hear from local professionals as they provide insight into environmental technological career options. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **BIOSC 0862 - SEM IN ENVIRONMNTAL TECHNLGY 2**

#### Minimum Credits: 2

Maximum Credits: 2 Presentations designed for discussion of current environmental technological concepts and to allow students to hear from local professionals as they provide insight into environmental technological career options. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **BIOSC 0899 - INTRNSHP ENVIRONMNTAL TECHNLGY**

#### Minimum Credits: 2

#### Maximum Credits: 2

Provides the student with the opportunity to combine training with practical work experience in an institution outside the university. A faculty advisor in the environmental technology (et) program assists the student in locating an internship site and an external on-site supervisor. The student is required to devote a minimum of six clock hours per week at the internship and assessment is based on both academic and professional criteria. Academic Career: UGRD

Course Component: Internship

Grade Component: LG/SNC Elective Basis

#### **BIOSC 1000 - BIOCHEMISTRY**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

This course is designed to provide students with a basic understanding of the principles and underlying themes of modern biochemistry. The course includes all the major topics in biochemistry in considerable depth including thermodynamics and enzymology, protein and nucleic acid structure, function, and synthesis, lipids and membranes as well as metabolic pathways. This course will require that you master a new vocabulary including chemical structures, and there is an emphasis throughout on experimental approaches, molecular mechanisms, and problem solving. Although the same topics will be covered as in the two semester biochemistry series (BIOSC 1810-1820), no one topic in BIOSC 1000 will be covered in as much detail.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

**Course Requirements:** PREQ: (BIOSC 0160 or 0716 or 0191 or 0180 or BIOENG 1071 or BIOENG 1072 or BIOL 0102 or 0120) (Min Grade 'C' for these courses) and (CHEM 0320 or 0350 or 0740 or 0208 or 0232)

#### **BIOSC 1015 - FLD METHDS PRIMT BEHAVR & BIOL**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

A field course exploring the interfaces between primate behavior and biology. The field site serves as a living laboratory where students experience the biology and behavior of new world monkeys in their native habitats. Daily lectures and field exercises cover aspects of primate ecology, biology, behavior, and the rainforest environment. Each student develops a research proposal to be conducted on-site during the last half of the course. **Academic Career:** UGRD

Course Component: Independent Study

Grade Component: LG/SNC Elective Basis

#### **BIOSC 1016 - PRIMATE BEHAVIOR AND BIOLOGY**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

A field course exploring the interfaces between primate behavior and biology. The field site serves as a living laboratory where students experience the biology and behavior of new world monkeys in their native habitats. Daily lectures cover aspects of primate ecology, biology, behavior, and the rainforest environment. Each student develops a research proposal to be conducted on-site during the last half of the course.

## Academic Career: UGRD

Course Component: Independent Study Grade Component: LG/SNC Elective Basis

#### **BIOSC 1100 - TOPICS IN BIOLOGICAL RESEARCH**

#### Minimum Credits: 2

Maximum Credits: 2

This course will address the how and why basic research in the biological sciences is performed and provide a basic knowledge behind experimental design. The goal of this course is to prepare students for undergraduate research as well as full-time research assistant positions and graduate programs. We will use real life examples of experimental systems employed by research faculty in the department of biological sciences. Meetings will consist of faculty presentations and class discussions.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIOSC 1101 - TOPICS IN BIOLOGICAL RESEARCH**

## Minimum Credits: 1

Maximum Credits: 1

This course focuses on the techniques of basic research in the biological sciences and provides an introduction to experimental design. Each student conducts a literature search and develops a research proposal to be conducted in the laboratory or in the field. The goal of this course is to prepare

students for undergraduate research as well as research assistant positions and graduate programs. Academic Career: UGRD Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

#### **BIOSC 1102 - TOPICS IN BIOLOGICAL RESEARCH**

#### Minimum Credits: 2

**Maximum Credits: 2** 

This course focuses on the techniques of basic research in the biological sciences and provides an introduction to experimental design. Each student conducts a literature search and develops a research proposal to be conducted in the laboratory or in the field. The goal of this course is to prepare students for undergraduate research as well as research assistant positions and graduate programs.

Academic Career: UGRD

**Course Component:** Directed Studies **Grade Component:** LG/SNC Elective Basis

#### **BIOSC 1103 - TOPICS IN BIOLOGICAL RESEARCH**

Minimum Credits: 3 Maximum Credits: 3

This course focuses on the techniques of basic research in the biological sciences and provides an introduction to experimental design. Each student conducts a literature search and develops a research proposal to be conducted in the laboratory or in the field. The goal of this course is to prepare students for undergraduate research as well as research assistant positions and graduate programs.

Academic Career: UGRD

Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

#### **BIOSC 1104 - HIST GENETICS CZECH REPUBLIC**

#### Minimum Credits: 3

Maximum Credits: 3 A study abroad course during which students learn about one facet of the history of the life sciences through an in-depth study of the life and work of Johann Gregor Mendel. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIOSC 1240 - HUMAN SKELETAL ANALYSIS**

#### Minimum Credits: 4 Maximum Credits: 4

A lecture and lab course applicable to students of varied interests. Lectures will cover such topics as skeletal growth; dental and skeletal pathologies; criteria for determining the sex and age of individuals; the importance of morphological variation as population markers; induced skeletal alteration; lab techniques such as x-raying, measuring and reconstructing skeletal remains. Students must learn in detail the human skeleton.

Academic Career: UGRD Course Component: Practicum Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BIOSC 0150, BIOSC 0160, anthropology, or permission of instructor

#### **BIOSC 1380 - GLOBAL ECOLOGY**

#### Minimum Credits: 3

**Maximum Credits: 3** 

Compelling evidence points to the 1990's as the decade of environmental crisis. Human quality of life, and probably survival, likely depends more on treaties about land, air, and water than on weaponry. This course will examine environmental issues of the decade and the basic concepts of the fundamental environmental science - ecology - that underlie them. The nature of key environmental changes, their extent and rates, will be considered, along with likely consequences and possible solutions.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIOSC 1450 - HISTOLOGY**

Minimum Credits: 4 Maximum Credits: 4

Course is intended to show how embryonic rudiments build or gans and how tissues and cell types interact to produce the functional systems in the

adult. The course covers descriptive, comparative, and experimental histology, but emphasizes the diversity of tissues in organs, and the differentiation of cell types. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: Grade of C or better in BIOSC 0160 and BIOSC 0060

#### **BIOSC 1590 - SPECIAL TOPICS IN BIOLOGCL SCI**

Minimum Credits: 1 Maximum Credits: 3 A single major topic in biology will be developed and explored by students in the form of student presentations of current and/or historical literature. Academic Career: UGRD Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

## **Business Information Systems**

#### **BIS 0001 - INTRODUCTION TO WINDOWS 1**

Minimum Credits: 1 Maximum Credits: 1 An introduction to the personal computer, including current terminology, with emphasis on the windows operating system. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0002 - MICROSOFT WORD 1**

Minimum Credits: 1 Maximum Credits: 1 The course covers creating, editing, saving, and printing documents using this software program. Also discussed are margin and tab settings and formatting lines and pages of text. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### BIS 0003 - MICROSOFT EXCEL 1

Minimum Credits: 1 Maximum Credits: 1 Covers spreadsheet fundamentals, including creating, editing, formatting, saving, and printing worksheets. Emphasis is placed on the use of formulas and functions, as well as creating graphs and charts. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0004 - MICROSOFT ACCESS 1**

Minimum Credits: 1 Maximum Credits: 1 The course covers planning, entering, and sorting of information. This relational database program allows the user to group, sort, categorize, and list data. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0005 - MICROSOFT POWERPOINT 1**

#### Minimum Credits: 1 Maximum Credits: 1

Covers the creation, editing, formatting, and use of a slideshow using graphics presentation software. Topics discussed will include the use of color, text, graphics (clipart and scanned), and audio files. Academic Career: UGRD

#### **BIS 0006 - MICROSOFT PUBLISHER 1**

Minimum Credits: 1 Maximum Credits: 1 This course develops skills in desktop publishing for the creation of professional-looking newsletters, brochures, and presentations. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0007 - INTRODUCTION TO THE INTERNET 1**

Minimum Credits: 1 Maximum Credits: 1 Using a popular browser, this course explores the resources of the world wide web and provides instruction in the use of e-mail. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0009 - LOTUS 1-2-3 1**

Minimum Credits: 1 Maximum Credits: 1 This course focuses on the fundamentals of entering spreadsheet data, formatting text and numbers, creating, formulas, and graphing. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0013 - INTRO BUSINESS INFORMTN SYSTEM**

#### Minimum Credits: 3 Maximum Credits: 3 This course is an introduction to developing and administering an information system within a larger organization. Topics covered include planning an organization information system, managing information systems development, and administering an information system. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## BIS 0015 - HARDWR MAINTEN & SOFTWR SUPPRT

#### Minimum Credits: 3 Maximum Credits: 3

Instructs students in basic pc hardware maintenance. Software support is also covered; students deal with trouble shooting software problems, logical resolutions of problems, and logging problems and solutions into a database for reference. Students are required to volunteer for 25 hours in the computer lab assisting students with problems. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CS 0131

## **BIS 0016 - INTRODUCTION OFFICE AUTOMATION**

## Minimum Credits: 3

Maximum Credits: 3 Introduction to the world of office automation. Includes systems concepts, computer hardware and software, telecommunications, implementation and management of automated systems in the offices and system life cycles. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0019 - INTRODUCTION TO GRAPHIC DESIGN**

Minimum Credits: 3 Maximum Credits: 3 Introduces students to desktop publishing software, scanning software, software used to enhance scanned images, and basic web page design. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CS 0131

#### **BIS 0020 - INTERNET AND E-COMMERCE**

Minimum Credits: 3 Maximum Credits: 3

Covers the history and evolution of the internet, using browsers and e-mail, searching the web, ftp, chat, plug-ins, and other appropriate topics. In addition, the role of the internet, intranets, and internet tools in business and effective application of these technologies in business are reviewed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CS 0131

#### **BIS 0021 - WEB PAGE DESIGN AND CREATION**

Minimum Credits: 3 Maximum Credits: 3 Covers the planning, design, development, and maintenance of web pages as well as design guidelines. The student plans, designs, and creates web pages using html and/or automated tools such as Microsoft FrontPage, dream weaver, or other software tools. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 0180 - DATABASE DESIGN**

Minimum Credits: 3 Maximum Credits: 3 Courses will introduce students to database design using a database software package such as access. Students will design database(s), create fields and tables, develop relations, design forms, create reports, and develop queries. Students will organize and automate the database system with macros and menus.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: CS 0131

## **BIS 0182 - PROGRAMMING WITH VISUAL BASIC**

#### Minimum Credits: 3

Maximum Credits: 3 Programming concepts will be introduced and reinforced with program development, testing and piloting of programs. Emphasis will be on designing programs to provide solutions to business needs. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: CS 0131

#### **BIS 1310 - INFORMTN SYS DESIGN & DEVELP**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

Reviews theories and practical methods to design and develop computer information systems. This would include investigation of the existing system(s), writing proposals, input design, processing methods, and output design. Hands-on use of an aid in designing systems (flowcharting software, case tools, etc.) Are included.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CS 0131 or permission of instructor

#### **BIS 1317 - NETWORK AND OPERATING SYSTEMS**

Minimum Credits: 3

Maximum Credits: 3 Introduces students to the basics of computer network setup. Provides the core foundation to install, configure, customize, optimize, network, integrate, and troubleshoot windows client software. Setup of a peer-to-peer network is reviewed, as well as integrating windows clients into an existing server environment. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BIS 1318 - ADVANCED NETWORKING**

Minimum Credits: 3 Maximum Credits: 3 Advanced networking concepts are introduced and applied. Topics covered include design, installation, analysis, optimization, and support of windows server in a multi-domain environment. Integration of multiple client platforms will also be reviewed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SU3 Elective Basis Course Requirements: PREQ: BIS 1317 or permission of instructor

## **BIS 1399 - INFORMATION SYSTEMS INTERNSHIP**

Minimum Credits: 1 Maximum Credits: 3 Selected topics in an identified area of study in business information systems. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis Course Requirements: Sophomore or higher; 2.5 GPA; Division Consent

## Business

## **BUS 0102 - PRINCIPLES OF MANAGEMENT**

Minimum Credits: 3 Maximum Credits: 3 Examines the systems philosophy in business and industry and the importance of the systems concept for supervisors. Includes discussions of values, attitudes, employee and organizational development, and kindred matters. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **BUS 0103 - INTRODUCTION TO BUSINESS**

Minimum Credits: 3 Maximum Credits: 3 An introduction to busic

An introduction to business utilizing a practical application" approach rather than the usual theoretical method. Students will observe the roles in business of the organization and management of contemporary business, production fundamentals, human resources, marketing, finance, insurance, accounting, decision making and computers and management information systems."

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0104 - LABOR RELATIONS**

## Minimum Credits: 3

Maximum Credits: 3 A study of the labor-management relationship, analyzed from the historical and economic perspective. The course includes a study of labor

legislation, an examination of union structure, objectives and discipline, a look at the white-collar worker, employment in the public sector, and an in-depth study of the collective bargaining process.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0106 - BUSINESS LAW**

Minimum Credits: 3 Maximum Credits: 3 A survey of those areas of the law which are of particular importance to the individual in the business world. A framework will be developed based on the law of contracts and will deal with a number of topics. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0107 - SALES MANAGEMENT**

Minimum Credits: 3 Maximum Credits: 3 Sales managers recruit, select, train, compensate and motivate others. They develop budgets, make sales forecasts and assign quotas. They must coordinate sales promotion, advertising, and publicity; provide their sales force with adequate support and selling tools. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0108 - SMALL BUSINESS MANAGEMENT**

Minimum Credits: 3 Maximum Credits: 3 Course provides an overview of the role of small business in the free enterprise system. Covers entrepreneurship, opportunities and trends, starting a new venture, franchising, business planning, legal aspects, financing, and managing an ongoing venture. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0109 - PRODUCTION MANAGEMENT**

Minimum Credits: 3 Maximum Credits: 3 Views the production function in terms of a planning and control system within an organization. Emphasis on models for the planning and control of inventories, work force, quality, and equipment. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0112 - RETAIL MANAGEMENT**

Minimum Credits: 3 Maximum Credits: 3 Introduces students to the field of retailing where they study store location and layout, organizational structure, retail personnel management, merchandising practices and procedures, promotional activities, etc. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **BUS 0120 - REAL ESTATE FUNDAMENTALS**

Minimum Credits: 2 Maximum Credits: 2

Surveys the fundamental branches of the real estate business and its practice in the commonwealth of Pennsylvania. Includes discussions of contracts, real estate finance, and the concepts of ownership, brokerage, and valuation. Also considers the rules, laws, and regulation affecting the real estate business in Pennsylvania. Serves as the foundation for subsequent courses in real estate. It specifically provides a foundation for real estate practice, which will consider these subjects in more detail.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

BUS 0125 - REAL ESTATE PRACTICE Minimum Credits: 2 Maximum Credits: 2 Provides more in-depth development of the conceptual base established in real estate fundamentals and, within the framework of real estate transactions, provides practical work experience with the various forms and documents used in most real estate transactions involving the sale, financing, and transfer of ownership in real estate, including related mathematics. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BUS 0120

#### **BUS 0130 - GRANT WRITING PROJECT MGMT**

Minimum Credits: 3 Maximum Credits: 3 Methods to successfully obtain and manage grant monies will be reviewed. Tracking and monitoring projects with project management tools will also be covered. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0135 - GOVERNC/LDRSHP NONPROFIT ORG**

Minimum Credits: 3 Maximum Credits: 3 Introductory concepts for effective management and organization of fundraising, volunteer organizations, board of directors, administration, and staff. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 0303 - INTEGRATIVE MGMT: THRY & APPLC**

#### Minimum Credits: 3 Maximum Credits: 3

This capstone business management course (for the as degree in business management) emphasizes effective, efficient, and ethical decision-making across the functional areas of business using the concepts studied, and knowledge and skills gained, in other business courses. Academic Career: UGRD

**Course Component:** Lecture **Grade Component:** Letter Grade

#### **BUS 0305 - INTERNATIONAL BUSINESS**

Minimum Credits: 3

**Maximum Credits:** 3 Examines the theory of international trade; the social, cultural, and political dimensions of the international environment; the History of the US in International Business; and trends in international competition. An understanding of international operations is developed through case studies and discussion of marketing, financial, and strategic issues.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

# **BUS 0398 - STUDENTS IN FREE ENTERPRISE**

Minimum Credits: 1 Maximum Credits: 1

The Students In Free Enterprise team (SIFE) enables students to participate in projects to assist elementary, middle school, and high school students, as well as community members, in learning about free enterprise. Students will learn about, teach others about, and practice free enterprise through a variety of new and existing projects.

#### Academic Career: UGRD Course Component: Practicum Grade Component: LG/SNC Elective Basis

#### **BUS 1104 - NEW MARKET ECON CZECH REPUBLIC**

#### Minimum Credits: 3

Maximum Credits: 3

A study abroad course during which students learn about entrepreneurship in an environment that has only recently become a free market.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **BUS 1111 - CORPORATE FINANCE**

Minimum Credits: 3 Maximum Credits: 3 An introductory finance course designed for basic understanding of business finance and investments. It covers financial institutions, markets, investments, and business financing. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0111

#### **BUS 1301 - PRINCIPLES OF MARKETING**

Minimum Credits: 3 Maximum Credits: 3 The concepts of marketing management are introduced through discussion of the four P's of marketing - the right product in the right place, properly priced, and effectively promoted. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ACCT 0111

#### **BUS 1305 - HUMAN RESOURCE MANAGEMENT**

Minimum Credits: 3 Maximum Credits: 3 An introduction to the responsibilities of the supervisor in managing the human resources of the organization including the organization of work, staffing, developing human resources, creating a favorable work environment, labor relations, and employee performance appraisal. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BUS 0103

#### **BUS 1398 - BUSINESS SPECIAL TOPICS**

Minimum Credits: 1 Maximum Credits: 1 Academic Career: UGRD Course Component: Independent Study Grade Component: Letter Grade

## **BUS 1399 - BUSINESS MANAGEMENT INTERNSHIP**

Minimum Credits: 1 Maximum Credits: 3 Selected topics in an identified area of study in business. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis Course Requirements: BUS 1399 requires 2.5 GPA, Sophomore Status, Division Consent

# **Civil Engineering**

#### **CE 0019 - GEOMETRONICS-SURVEYING**

Minimum Credits: 4 Maximum Credits: 4

Theory of measurement and errors with respect to cadastral, topographic and route location. Field measurements using a table, level and rod, and transit for a defined traverse; computer solutions of problems. Academic Career: UGRD

#### **CE 0109 - COMPUTER METH IN CIVIL ENGRG 1**

#### Minimum Credits: 3 Maximum Credits: 3

An introduction to the use of computers in civil engineering. Topics covered include: personal computers; the mainframe system; word processing; spreadsheets; graphics; cad system; numerical analysis; and civil engineering software packages.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **CE 0801 - BASIC ENGINEERING GEOLOGY**

Minimum Credits: 3

Maximum Credits: 3

Study of fundamental physical geology principles designed to emphasize the influence of geology in civil engineering. Laboratory topics include identification of minerals and rocks, interpretation of geologic structures, and the interpretation and preparation of topographic and geologic maps. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

# **Chemical Engineering**

#### **CHE 0035 - INTRODUCTRY CHEMCL ENGINEERING**

Minimum Credits: 4

**Maximum Credits: 4** 

The principles of conservation of mass and energy are applied to the analysis of chemical processes. Included are material balance for multiple unit processes with recycle, p-v-t properties of gases and gas-vapor mixtures, thermochemistry, combined material and energy balances, and vapor-liquid equilibrium.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SU3 Elective Basis

#### **CHE 0036 - CHEMCL ENGRNG THERMODYNAMICS 1**

Minimum Credits: 3

Maximum Credits: 3

Development of the laws of thermodynamics using a macroscopic approach. Fundamental concepts are stressed. Emphasis is placed on chemical engineering applications in problem recitation sessions. Concepts of work, heat, internal energy, potential energy, kinetic energy, enthalpy, entropy, and free energy are developed. Thermodynamic properties and equations of state are defined.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SU3 Elective Basis

# Chemistry

#### **CHEM 0100 - PREPARATION GENERAL CHEMISTRY**

#### Minimum Credits: 3

Maximum Credits: 3

This course is designed for those students who intend to take chemistry 0110 and 0120, but whose science and mathematical backgrounds are judged by their advisors to be relatively weak. The course emphasizes stoichiometry (chemical calculations), chemical equations, gas laws, elementary atomic structure and periodic properties of elements.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **CHEM 0106 - CHEMISTRY OF THE ENVIRONMENT**

#### Minimum Credits: 3

**Maximum Credits: 3** 

A global view of the environment and its impact on our changing way of life is presented. How chemistry works and how chemistry is interconnected

with other areas of life are studied. Environmental and resource problems and possible solutions are examined. Accurate and up-to-date material is presented using scientific analysis and mathematics. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### CHEM 0110 - GENERAL CHEMISTRY 1 Minimum Credits: 4

Maximum Credits: 4 Chemistry 0110 and 0120 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize applications to industrial and environmental chemistry and biochemistry. CHEM 0110 covers stoichiometry, the properties of solids, liquids and gases, thermochemistry and the electronic structure of atoms and molecules.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: MATH 0031

#### **CHEM 0120 - GENERAL CHEMISTRY 2**

## Minimum Credits: 4

Maximum Credits: 4 CHEM 0110 and 0120 comprise a two-term introduction to the fundamental properties of matter. The courses emphasize applications to industrial and environmental chemistry and biochemistry. CHEM 0110 covers stoichiometry, the properties of solids, liquids and gases, thermochemistry and the electronic structure of atoms and molecules. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: (CHEM 0110 or 0710 or 0760 or 0960 or 0101) or (CHEM 0410 and 0430) or (CHEM 0111 and 0113)

#### **CHEM 0175 - INTRODUCTION TO NANO SCIENCE**

#### Minimum Credits: 2

#### Maximum Credits: 2

This course introduces students to modern nanoscience through their direct observation and experimentation on selected nanomaterial (nanoparticles, nanowires, quantum dots, self-assembled monolayers, etc.). Instruction will be a combination of lectures, seminars and limited hands-on experimentation. Guest speakers may be invited for special topics. The course will also allow students to gain experiences with scanning tunneling microscopy (STM). Students will be required to complete a research paper that investigates the possibilities for the future uses or applications of nanoscience technology.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

#### **CHEM 0176 - NANOSCIENCE LAB**

#### Minimum Credits: 1

#### **Maximum Credits:** 1

Students are required to conduct a mini Nano-related research project of their own choice. Students will need to submit a one page project proposal by the end of the 6th week for instructor approval before beginning the project. Each project will require an extensive literature search and culminate in a written report.

Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

#### **CHEM 0196 - STUDENTS IN THE ACS**

#### Minimum Credits: 1 Maximum Credits: 1

The student affiliates chapter of the American Chemical Society (ACS) enables students to participate in projects to assist elementary, middle school, and high school students, as well as community members, in learning how chemistry affects their lives. Students will learn about, teach others about, and design demonstrations in chemistry through a variety of new and existing projects. When appropriate, students will also have the opportunity to attend the annual national meeting of the ACS. May be taken for credit three times only.

Academic Career: UGRD

Course Component: Practicum

Grade Component: LG/SNC Elective Basis

### **CHEM 0197 - DIRECTED STUDY**

Minimum Credits: 1 Maximum Credits: 6 Independent study in a topic in chemistry. Academic Career: UGRD Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

## **CHEM 0198 - CHEMISTRY SEMINAR**

Minimum Credits: 1 Maximum Credits: 1 Specialized instruction and presentations on topics appropriate for students interested in chemistry or engineering. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

## **CHEM 0250 - INTRO ANALYTICAL CHEMISTRY**

# Minimum Credits: 3

Maximum Credits: 3 This course is concerned with the rigorous treatment of equilibria that are of analytical importance and with an introduction into electroanalytical methods, emission and absorption spectrophotometry, and modern separation methods, particularly chromatography. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CHEM 0120 and CREQ: CHEM 0260

## CHEM 0260 - INTRO ANALYTICAL CHEMISTRY LAB

# Minimum Credits: 1

#### Maximum Credits: 1

The primary objectives of this course are to introduce the student to current analytical methods and to cultivate sound experimental technique. Laboratory work includes ion exchange separations, complexometric and potentiometric acid-base titrations, and absorption spectrophotometry. Academic Career: UGRD

Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: CHEM 0250 or 0201 or 0325

## **CHEM 0310 - ORGANIC CHEMISTRY 1**

# Minimum Credits: 3

Maximum Credits: 3 An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.

Academic Career: UGRD

**Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: (CHEM 0120 or 0720 or 0770 or 0970 or 0102 or CHEM 0420) or (CHEM 0112 and 0114)

#### **CHEM 0320 - ORGANIC CHEMISTRY 2**

## Minimum Credits: 3

Maximum Credits: 3

An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: CHEM 0310 and CREQ: CHEM 0340

#### **CHEM 0330 - ORGANIC CHEMISTRY LABORATORY 1**

#### Minimum Credits: 1

Maximum Credits: 1

Chemistry 0330 is devoted to the purification, characterization, and identification of organic molecules using the techniques of recrystallization, distillation, thin-layer, column and gas-liquid chromatography, melting point determination, and infrared and nuclear magnetic resonance spectroscopy.

Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: CHEM 0310 or 0730 or 0206 or 0231

## **CHEM 0340 - ORGANIC CHEMISTRY LABORATORY 2**

Minimum Credits: 1 Maximum Credits: 1 Chemistry 0340 provides an opportunity to carryout important synthetic reactions discussed in the lecture course along with an introduction to the use of the chemical literature. Reactions are analyzed and products characterized using the skills learned in chemistry 0330. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: 0330 and CREQ: 0320

## **CHEM 0800 - CHEMISTRY FOR NONSCIENTISTS**

Minimum Credits: 3 Maximum Credits: 3

This course offers a general introduction to chemistry with an emphasis on basic chemical concepts. It starts by describing how atoms and molecules were discovered and how their properties are understood. Next the process of a chemical reaction is described. Emphasis is on understanding principles, rather than on mathematical theory or calculations.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

# CHEM 0810 - CONTEM ISS IMPCT PUBLIC POLICY

## Minimum Credits: 3

Maximum Credits: 3

This course examines problems facing society where chemistry has immediate impact. Topics include such issues as environmental pollution, new vs. Old sources of energy, new sources of raw materials, nuclear energy and associated problems, and development of new pharmaceuticals, drugs and future needs in medicine, and the synthesis of new life forms. Controversial issues are presented and include debates between experts of competing viewpoints. The emphasis is scientific and the topics serve to increase the scientific depth of the students. **Academic Career:** UGRD

#### **Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

## CHEM 0910 - CHEMCL PRINCPL HEALTH PROFESSN

## Minimum Credits: 4

Maximum Credits: 4

This is a one term course covering general and biological chemistry designed primarily for students enrolled in the school of nursing or preparing for health related professions. The course covers aspects of general chemistry including atomic structure and bonding and equilibria. A brief introduction to organic chemistry including physical properties and representative reactions of common functional groups and finally the chemistry of the major classes biomolecules and metabolism.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: MATH 0031 or CREQ: MATH 0031

## **CHEM 1101 - TOPICS IN CHEMISTRY RESEARCH**

#### Minimum Credits: 1

#### Maximum Credits: 1

This course focuses on the techniques of basic research in the chemical sciences and provides an introduction to experimental design. Each student conducts a literature search and develops a research proposal to be conducted in the laboratory or in the field. The goal of this course is to prepare students for undergraduate research as well as research assistant positions and graduate programs. Academic Career: UGRD

## **CHEM 1102 - TOPICS IN CHEMISTRY RESEARCH**

# Minimum Credits: 2

Maximum Credits: 2

This course focuses on the techniques of basic research in the chemical sciences and provides an introduction to experimental design. Each student conducts a literature search and develops a research proposal to be conducted in the laboratory or in the field. The goal of this course is to prepare students for undergraduate research as well as research assistant positions and graduate programs.

Academic Career: UGRD

**Course Component:** Directed Studies **Grade Component:** LG/SNC Elective Basis

### **CHEM 1103 - TOPICS IN CHEMISTRY RESEARCH**

Minimum Credits: 3

Maximum Credits: 3 This course focuses on the techniques of basic research in the chemical sciences and provides an introduction to experimental design. Each student conducts a literature search and develops a research proposal to be conducted in the laboratory or in the field. The goal of this course is to prepare students for undergraduate research as well as research assistant positions and graduate programs.

Academic Career: UGRD Course Component: Directed Studies

Grade Component: LG/SNC Elective Basis

# Classics

# **CLASS 0010 - GREEK CIVILIZATION**

Minimum Credits: 3 Maximum Credits: 3 A general introduction to the culture and society of Ancient Greece, with emphasis on the Archaic Period and the fifth and fourth centuries B.C. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **CLASS 0020 - ROMAN CIVILIZATION**

Minimum Credits: 3 Maximum Credits: 3 A general introduction to the culture and society of the Roman world, with emphasis on the period of the republic and the early empire. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **CLASS 0100 - MASTERPIECES GREEK & ROMAN LIT**

Minimum Credits: 3 Maximum Credits: 3 An introduction to the critical analysis of literary works through the medium of selected masterpieces of Greek and Roman literature in English translation. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **CLASS 0500 - ANCIENT ART**

Minimum Credits: 3 Maximum Credits: 3 The Mediterranean Sea is a lake and its shores have produced many important cultures and artistic traditions. The course will survey the artistic traditions of Turkey and the near east, Egypt, Greece and Rome. Special attention will be paid to (1) the relationship between the artistic traditions of individual areas and the societies which produced them, and (2) the way in which influences from one culture were transformed by another. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

# CLASS 1130 - CLASSICAL MYTHOLOGY & LIT

Minimum Credits: 3 Maximum Credits: 3 This course examines how authors of classical antiquity used the traditional figures and stories of their culture's mythology as material for works of literature. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **CLASS 1210 - GREEK HISTORY**

Minimum Credits: 3 Maximum Credits: 3 A survey of the history of ancient Greece, with special emphasis on political and social developments during the fifth century B.C. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **CLASS 1220 - ROMAN HISTORY**

Minimum Credits: 3 Maximum Credits: 3 A survey of the history of Rome from the earliest times through the late empire, with particular emphasis on political and social developments during the late republic and early empire. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **CLASS 1430 - ORIGINS OF CHRISTIANITY**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

This course presents a historical-critical investigation of Christian origins. Special attention is paid to varieties of 1st century Hellenistic and Palestinian Judaism within the Greco-Roman world. Primary readings include selected Biblical passages and apocrypha, 1st century historians and philosophers (Josephus, Tacitus, Suetonius, and Philo), the New Testament corpus (including Paul and the Pastorals), and selected readings from the Dead Sea Scrolls. In addition there will be assignments from various modern New Testament critics, historians, and theologians. **Academic Career:** UGRD **Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

# **Engineering**, Computer

## **COE 0031 - LINEAR CIRCUITS AND SYSTEMS 1**

Minimum Credits: 4 Maximum Credits: 4 The analysis of linear circuits. Electric variables and circuit elements; kirchoff's and ohm's law; mesh and node equations; thevenin and norton equivalent circuits; first and second-order circuits; time domain analysis. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: (MATH 00150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PROG: Swanson School of Engineering

#### **COE 0041 - LINEAR CIRCUITS AND SYSTEMS 2**

#### Minimum Credits: 3

Maximum Credits: 3 Sinusoidal steady-state analysis, network functions, real and reactive power, three-phase circuits, laplace transform method, two-port networks, and fourier series. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: ECE 0031 OR COE 0031

## **COE 0132 - DIGITAL LOGIC**

Minimum Credits: 3 Maximum Credits: 3 Introduction to digital systems, boolean algebra, minimization of logic functions, combinational and sequential circuit design. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: (MATH 00150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PROG: Swanson School of Engineering

#### **COE 0142 - COMPUTER ORGANIZATION**

Minimum Credits: 3 Maximum Credits: 3 Digital computer data representation, instruction formats, control, memory and input-output units, microprocessors, minicomputers. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: ECE 0132 or COE 0132; PROG: Swanson School of Engineering

## **COE 0401 - INTRMEDT PROGRMMING USING JAVA**

Minimum Credits: 4 Maximum Credits: 4 This course is a rigorous introduction to the fundamental concepts and techniques of computer programming using the java programming language. This is a first course for students who intend to major in computer science or computer engineering. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

# **COE 0441 - DISCRETE STRUCTURES FOR CS**

Minimum Credits: 3 Maximum Credits: 3 The purpose of this course is to understand and use abstract discrete structures that are the backbones of computer science. In particular, this class is meant to introduce logic, proofs, sets, relations, functions, counting, and probability, with an emphasis on applications in computer science. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: MATH 0031

#### **COE 0445 - DATA STRUCTURES**

# Minimum Credits: 3

## Maximum Credits: 3

This course emphasizes the study of the basic data structures of computer science (stacks, queues, trees, lists) and their implementations using the java language. Included in this study are programming techniques which use recursion, reference variables, and dynamic memory allocation. Students in this course are also introduced to various searching and sorting methods and are expected to develop an intuitive understanding of the complexity of these algorithms. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: COE 0401 or CS 0401

#### COE 0447 - COMPUTR ORGZTN & ASSMBLY LANG

# Minimum Credits: 3

Maximum Credits: 3 The purpose of this course is to study the components of computing systems common to most computer architectures. In particular, this class is meant to introduce data representation, types of processors, memory types, and hierarchy, and device drivers. The students will learn mips assembly language, the design of arithmetic and logic units, and basic designs for risc processors. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: COE 0445 or CS 0445; PROG: Swanson School of Engineering

# Communication

#### **COMM 0101 - INTRO TO HUMAN COMMUNICATION**

Minimum Credits: 3 Maximum Credits: 3 An introduction survey course designed to familiarize students with the many contexts of human communication, such as interpersonal, small-group, organizational, public speaking and media communication. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **COMM 0201 - MASS MEDIA AND SOCIETY**

Minimum Credits: 3 Maximum Credits: 3 Survey of the role of the mass media in American society and exploration of the uses of these media in public relations. Special emphasis will be given to methods of examining the control, content, audience, and effects of the press, radio, television, and motion pictures. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **COMM 0205 - SMALL GROUP COMMUNICATION**

Minimum Credits: 3 Maximum Credits: 3 Designed to help students improve leadership and membership skills within the small group environment. A major research project is required. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

# **Communication: Rhetoric and Communication**

#### **COMMRC 0100 - APPLIED COMMUNICATIONS**

Minimum Credits: 3 Maximum Credits: 3 Hands-on experience with all aspects of communications. Topics may include: communication in the workplace, using problem solving techniques, participating in groups, following and giving directions, communicating with supervisors, presenting your point of view, and communicating to solve interpersonal conflict. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **COMMRC 0320 - MASS COMMUNICATION PROCESS**

Minimum Credits: 3 Maximum Credits: 3 This course is designed to introduce students to the basic concepts of mass communication research and to the history and development of various media (TV., Radio, newspapers, magazines, etc.). Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **COMMRC 0500 - ARGUMENT**

Minimum Credits: 3 Maximum Credits: 3 This course is designed to acquaint students with fundamental principles of argumentation through the use of elementary debating techniques and strategies. Students will participate in several in-class debates on a question of policy. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **COMMRC 0520 - PUBLIC SPEAKING**

**Minimum Credits: 3 Maximum Credits: 3** This course is designed to help students develop increased skill in public speaking by means of theory and practice. This course covers research, organization, style, delivery, and criticism of informative, deliberative, and ceremonial speeches. Academic Career: UGRD **Course Component:** Lecture Grade Component: LG/SNC Elective Basis

## **COMMRC 0530 - INTERPERSONAL COMMUNICATION**

**Minimum Credits: 3 Maximum Credits: 3** 

The purpose of this course is to introduce students to theories and models of human communication in the face-to-face communication context. Focus of learning is on skill development; lecture, discussion, and practice of communication skills are used to facilitate student learning. Academic Career: UGRD **Course Component:** Lecture Grade Component: LG/SNC Elective Basis

#### **COMMRC 0540 - DISCUSSION**

**Minimum Credits: 3 Maximum Credits: 3** This course is designed to increase skills in critical thinking, decision making, and small group discussion. Students are introduced to theories of group process and practice step-by-step group problem solving related to contemporary issues. Academic Career: UGRD **Course Component:** Lecture Grade Component: LG/SNC Elective Basis

## **COMMRC 1106 - SMALL GROUP COMMUNICATION**

# **Minimum Credits: 3**

**Maximum Credits: 3** 

Principles of small group communication are examined in this course. In particular, the examination will reveal the principles of group entry, group formation, group cohesiveness, group verbal and nonverbal message exchanges, group leadership, group problem solving and discussion, and group performance and satisfaction. Individual beliefs, attitudes and behaviors will be compared and contrasted with group beliefs, attitudes and behaviors. Academic Career: UGRD

**Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: (COMMRC 0300 or 0030 or 0100 or 7300 or COMM 0101) and [ENGCMP 200 or (ENGCMP 0203 or 0205 or 0207 or 0208 or 0250 or FP 0003 or 0006 or ENGCMP 0004 or 0006 or 0020 or ENG 0102)]

# **Computer Science**

#### CS 0002 - INTRO COMPUTR PROGRMG-FORTRAN

**Minimum Credits: 3 Maximum Credits: 3** 

This introductory course is designed for students intending to major in an area other than computer science. Course objectives: problem analysis and the development of algorithms; designing, coding, and documenting programs using techniques of good programming style; learning the Fortran language; learning basic concepts of structured programming.

Academic Career: UGRD **Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

#### CS 0003 - INTRO COMPUTER PROGRMMNG-COBOL

#### **Minimum Credits: 3**

**Maximum Credits: 3** 

This is first course in computer science. It is designed especially for student majoring in an area of business or who are interested in business applications of computer science. Objectives of this course include problem analysis with special emphasis on data processing problems; learning the cobol language; designing, coding, and documenting programs using techniques of good programming style. Academic Career: UGRD **Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

#### CS 0004 - INTRO COMPUTER PROGRMMNG-BASIC

#### Minimum Credits: 3

#### Maximum Credits: 3

This is a first course in computer science. It is designed to be of special interest to students majoring in one of the social sciences or humanities. Objectives of this course include use of the computer in an interactive environment; problem analysis and the development of algorithms; learning the basic language; designing; coding; and documenting programs using techniques of good programming style. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

# CS 0007 - INTRO TO COMPUTER PROGRAMMING

# Minimum Credits: 3

#### **Maximum Credits: 3**

This is a first course in computer science programming. It is recommended for those students intending to major in computer science who do not have the required background for cs 0401. It may also be of interest to students majoring in one of the social sciences or humanities. The focus of the course is on problem analysis and the development of algorithms and computer programs in a modern high-level language. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

# CS 0080 - COMPUTER LITERACY

# Minimum Credits: 3

Maximum Credits: 3

A survey course designed for students not majoring in computer science. Course objectives include overview of the components of a computer system; the design considerations involved in implementing a solution to data processing problems; an overview of the use of the computer in medicine, business, education, and science; study of key developments in computer science to provide computing historical perspective; lab sessions provide a hands-on introduction to simple programming, word-processing, and data storage.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### CS 0085 - PC SOFTWARE FOR BUSINESS

#### Minimum Credits: 3 Maximum Credits: 3

An introductory level course in pc software commonly used in business environments. Designed for students in the humanities and social sciences with applications of particular interest to management and accounting majors. The principal applications will be word processing, electronic spreadsheets and database management.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### CS 0121 - ADV COBOL WITH FILE PROCESSING

# Minimum Credits: 3

**Maximum Credits: 3** 

This is an intermediate-level course in computer science for students wishing to satisfy a related area in computer science with emphasis on the business environment. Objectives of this course include an overview of cobol; programming using timesharing facilities and cobol DDT; advanced features of cobol including hashing, cobol library, sub programs, report writer, sorting (including binary), merging, and searching; file maintenance for sequential, random access, ISAM files, and magnetic tapes; project specification and analysis.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### CS 0131 - SOFTWARE FOR PERSONAL COMPUTNG

#### Minimum Credits: 3 Maximum Credits: 3

An intermediate-level course in computer science for students majoring in areas other than computer science. Objectives include a non-technical study of the windows NT operating system; development of applications using software selected from the principal areas of applications for personal computing. These include word-processing (MS Word), spreadsheets (MS Excel), and relational databases (MS Access). **Academic Career:** UGRD

# Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## CS 0132 - PRG IN C & GUIDE TO UNIX SYSTM

#### Minimum Credits: 3

#### Maximum Credits: 3

This intermediate level course is intended for students who wish to learn the c language and also to learn the use of the Unix operating system. Course objectives include: a) the study of the c language using IMB compatible pcs and/or Unix b) an introduction to data structures using c structures and pointers c) the use of library routines and file operations using the c language d) a user-oriented study of the Unix operating system, its file structure, and editors e) an introduction to shell programming and to the use of Unix utilities. Academic Career: UGRD

## Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: CS 0002 or 0004 or 0007 or 0401 or 0015 or 0101 or 0402 or 0411

#### CS 0134 - WEB SITE DESIGN & DEVELOPMENT

#### **Minimum Credits: 3**

Maximum Credits: 3

This course will provide a basic understanding of the methods and techniques of developing a simple to moderately complex web site. Using the current standard web page language, students will be instructed on creating and maintaining a simple web site. After the foundation language has been established, the aid of an internet editor will be introduced. A second web-based language will be included to further enhance the web sites. **Academic Career:** UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CS 0134 requires PREQ CS 0131

#### CS 0135 - ADV SOFTWARE-PERSNL COMPUTING

#### Minimum Credits: 3 Maximum Credits: 3 Advanced study of the

Advanced study of the application and efficient use of software tools. Advanced word, advanced excel, access, PowerPoint, basic publisher, and basic FrontPage will be reviewed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CS 0131

#### **CS 0180 - DATABASE DESIGN**

Minimum Credits: 3 Maximum Credits: 3 Programming in a high-level language (such as visual basic). Integration of data collected into a database (such as access). Designed for business students. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: CS 0131

#### CS 0182 - PROGRAMMING WITH VISUAL BASIC

Minimum Credits: 3 Maximum Credits: 3 Programming concepts will be introduced and reinforced with program development, testing and piloting of programs. Emphasis will be on designing programs to provide solutions to business needs. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ:CS 0131

#### CS 0185 - INTRO TO JAVA PROGRAMMING

#### Minimum Credits: 3 Maximum Credits: 3

Java is an object-oriented programming language that is widely used on the internet/world wide web. The student learns to use java to create and manipulate graphical user interfaces (guis), including the use of animation and graphics. Java applets are created and embedded into web (html) pages. This is an introductory course that requires no prior knowledge of programming.

Academic Career: UGRD Course Component: Lecture

### CS 0334 - INTM WEB DESIGN & DEVELOPMENT

# Minimum Credits: 3

Maximum Credits: 3

The course will consist of advanced implementations of both markup as well as scripting languages. In addition, students will be introduced to a graphical interface application that will allow them to explore concepts of server side web development. A reflective programming language and database application will be used to introduce the server side web development concepts.

Academic Career: UGRD

Course Component: Lecture Grade Component: Letter Grade

**Course Requirements:** PREQ: CS 0007 or CS 0134

# CS 0401 - INTRMEDT PROGRMMING USING JAVA

#### Minimum Credits: 4

Maximum Credits: 4

This course is a rigorous introduction to the fundamental concepts and techniques of computer programming using the java programming language. This is a first course for students who intend to major in computer science.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### CS 0407 - INTRO TO COMPUTR SCI-PASCAL

#### Minimum Credits: 3

#### Maximum Credits: 3

This course is an introduction to the concepts, techniques and tools of computer science. It is designed for those students who are intending to major in that discipline. The course is to emphasize fundamental approaches to problem analysis, algorithm development and top-down program design. In so doing, the student is to gain a thorough working knowledge of an exemplary programming language, namely pascal, and to become thoroughly familiar with the Pitt computing environment.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **CS 0441 - DISCRETE STRUCTURES FOR CS**

#### Minimum Credits: 3

Maximum Credits: 3

The purpose of this course is to understand and use (abstract) discrete structures that are backbones of computer science. In particular, this class is meant to introduce logic, proofs, sets, relations, functions, counting, and probability, with an emphasis on applications in computer science. **Academic Career:** UGRD

**Course Component:** Lecture **Grade Component:** LG/SNC Elective Basis **Course Requirements:** PREQ: MATH 0031

#### **CS 0445 - DATA STRUCTURES**

#### Minimum Credits: 3

Maximum Credits: 3

This course emphasizes the study of the basic data structures of computer science (stacks, queues, trees, lists) and their implementations using the java language included in this study are programming techniques which use recursion, reference variables, and dynamic memory allocation. Students in this course are also introduced to various searching and sorting methods and also expected to develop an intuitive understanding of the complexity of these algorithms.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: CS 0401 (MIN GRADE 'C')

#### CS 0446 - INTRO COMPUTR SCIENCE CONCEPTS

#### Minimum Credits: 3

Maximum Credits: 3

This course provides the student with a basic exposure to all major computer science concepts and specialties. It is not programming intensive,

although the use of Fortran" is a component of the course. Students are to gain an early perspective of computer science and to achieve a common level of knowledge of its major concepts, regardless of which upper-level courses they should later select." Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### CS 0447 - COMPUTR ORGZTN & ASSMBLY LANG

Minimum Credits: 3 Maximum Credits: 3 The purpose of this course is to study the components of computing systems common to most computer architectures. In particular, this class is meant to introduce data representation, types of processors, memory types and hierarchy, and device drivers. The students will learn MIPS assembly language, the design of arithmetic and logic units, and basic designs for RISC processors. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: CS 0445

#### **CS 1399 - COMPUTER SCIENCE INTERNSHIP**

Minimum Credits: 1 Maximum Credits: 3 Academic Career: UGRD Course Component: Internship Grade Component: Letter Grade Course Requirements: GPA greater or equal to 2.5; LVL: Sophomore

# **Electrical Engineering**

#### ECE 0031 - LINEAR CIRCUITS AND SYSTEMS 1

# Minimum Credits: 4

Maximum Credits: 4 The analysis of linear circuits. Electric variables and circuit elements; Kirchhoff's and Ohm's Law; Mesh and Node Equations; Thevenin and Norton equivalent circuits; first and second-order circuits; time domain analysis. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: (MATH 0150 or 0230 or 00231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PLAN: Electrical Engineering or Computer Engineering

#### ECE 0041 - LINEAR CIRCUITS AND SYSTEMS 2

Minimum Credits: 3 Maximum Credits: 3 Sinusoidal steady-state analysis, network functions, real and reactive power, three-phase circuits, laplace transform method, two-port networks, and Fourier series. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: ECE 0031 or COE 0031; PLAN: Electrical Engineering or Computer Engineering

#### ECE 0132 - DIGITAL LOGIC

Minimum Credits: 3 Maximum Credits: 3 Introduction to digital systems, Boolean algebra, minimization of logic functions, combinational and sequential circuit design. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: (MATH 0150 or 0230 or 0231 or 0235) and (PHYS 0152 or 0175 or 0202 or 0476); PROG: Undergraduate Swanson School of Engineering

# **ECE 0142 - COMPUTER ORGANIZATION**

Minimum Credits: 3 Maximum Credits: 3 Digital computer data representation, instruction formats, control, memory and input-output units, microprocessors, minicomputers. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: ECE 0132 or COE 0132; PROG: Swanson School of Engineering

# **ECE 0145 - COMPUTER APPLICATIONS 1**

Minimum Credits: 4 Maximum Credits: 4 Time sharing, mathematical modeling, computer simulation, CSMP, linear simultaneous equations. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

## EE 0132 - DIGITAL LOGIC

Minimum Credits: 3 Maximum Credits: 3 Introduction to digital systems, Boolean algebra, minimization of logic functions, combinational and sequential circuit design. Academic Career: UGRD Course Component: Lecture Grade Component: LG

# **Economics**

## ECON 0100 - INTRO MICROECONOMIC THEORY

Minimum Credits: 3 Maximum Credits: 3 Introduction to principles of economic analysis as applied to the study of prices and markets. The course builds a theoretical basis for understanding producer and consumer behavior, and prepares students to appreciate the importance of markets in our economic system. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## ECON 0110 - INTRO MACROECONOMIC THEORY

#### Minimum Credits: 3 Maximum Credits: 3

An introductory course which develops the basic tools needed to analyze the behavior of various macroeconomic phenomena including inflation, gross domestic product, and unemployment. In addition, these tools are used to study how and whether the government can impact the behavior of the overall economy. Finally, the course looks at the role various institutions such as banks and the stock and bond markets play in affecting the economic environment.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

# ECON 0140 - INTRO TO POLITICAL ECONOMY

#### Minimum Credits: 3

Maximum Credits: 3 Interdisciplinary introduction to economics intended mainly for non-majors, especially political science. The syllabus includes market and macroeconomic theories and relationships between political and economic processes. Though less tool oriented than other introductory treatments, the topical developments are not superficial.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## **ECON 0150 - INTRODUCTION TO STATISTICS**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

An introduction to economic data and statistical concepts. Topics covered include: measures of location and dispersion and introduction to probability theory; characteristics of probability distributions; sampling theory, point estimation and hypothesis testing. Correlation analysis and the linear regression model are treated with special emphasis placed on the construction, estimation, and interpretation of economic models. Emphasis is placed on understanding and using statistical concepts rather than on proving theorems.

# Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ECON 0200 - GAME THEORY PRINCIPLES**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

This course introduces the basic concepts of game theory. The emphasis is on the unifying perspective that game theory offers to questions in economics, other disciplines, and everyday life. The course draws on a wide range of substantive and intellectually stimulating applications of game theory across areas in economics, other disciplines, and beyond. It will enable students to view social interactions as strategic games, to use game theoretic concepts to predict behavior in these interactions and to conceive of ways in which altering the game affects social outcomes. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## **ECON 0206 - INTERMEDIATE MICROECONOMICS**

#### Minimum Credits: 3

Maximum Credits: 3

The theories and techniques of price and output are studied. Topics include the theory and measurement of demand, production functions, cost output relationships, pricing practices in competitive and oligopolistic markets, the roles of prices and profit in resource allocation and the functioning of a decentralized economic system. Academic Career: UGRD

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ECON 0100, CS 0135, STAT, algebra proficiency, or permission of instructor

# **ECON 0230 - INTRODUCTION TO PUBLIC ECONMCS**

#### Minimum Credits: 3 Maximum Credits: 3

The objectives of this course are - to illustrate how basic economic principles can be used to determine the economic effects of government expenditure and tax policies; to develop the students' ability to analyze issues and to recognize the value judgments which lie behind various positions taken in current policy debates.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ECON 0100 or ECON 0800

## ECON 0280 - INTRODUCTION TO MONEY & BANKNG

# Minimum Credits: 3

Maximum Credits: 3

The course is directed toward giving the student an insight into the role that monetary policy and financial markets play in the economy. It will cover both the theoretical and institutional aspects of banking necessary to function successfully in the business world. One object of the course is to give the student the ability to analyze and appraise critically the monetary policy of federal reserve system.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### ECON 0400 - LABOR AND THE ECONOMY

#### Minimum Credits: 3 Maximum Credits: 3

An introductory survey of contemporary labor developments and issues. Readings and lectures have a more historical and institutional perspective and less emphasis on analytical techniques than other labor offerings.

Academic Career: UGRD

### ECON 0450 - ECON OF TECHNOLOGICAL CHANGE

Minimum Credits: 3 Maximum Credits: 3

This course focuses on the process of technological change. Topics include the historical development of technology, the economic analysis of technological change, case studies of specific nations and products, and public policy issues linked to technological change. **Academic Career:** UGRD

Course Component: Lecture Grade Component: Letter Grade

**Course Requirements:** PREQ: ECON 0100 or ECON 0110

## ECON 0451 - ECON OF TCHNLGCL CHANGE -IFTA

## Minimum Credits: 1

Maximum Credits: 1 This course focuses on the process of technological change via a case study of a particular country. Topics include the historical development of technology, the economic analysis of technological change, a case study of a specific nation and products, and public policy issues linked to technological change.

Academic Career: UGRD

**Course Component:** Lecture

Grade Component: Letter Grade

Course Requirements: CREQ: ECON 0800 and ECON 0100 and (ECON 0110 or ECON 0450)

#### **ECON 0500 - INTRO INTERNATIONAL ECONOMICS**

# Minimum Credits: 3

Maximum Credits: 3

Provides an introduction to international economics. Half the topics are pure theory, half international monetary economics. Topics from the real world are analyzed. Topics include alternative pure trade theories; effects of trade barriers; U.S. commercial policy; forms of regional integration; balance of payments; elimination of balance of payments disequilibrium; international monetary system.

Academic Career: UGRD

**Course Component:** Lecture **Grade Component:** LG/SNC Elective Basis

#### **ECON 0800 - INTRODUCTION TO ECONOMICS**

#### Minimum Credits: 3

Maximum Credits: 3

A one-term course designed primarily for the non-major. The main goals are to create interest in the study of economics and introduce some basic tools economists use to analyze social issues. Issues range from farm subsidies to changes in income tax rates to changes in spending on crime reduction.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### ECON 1307 - ECONMCS OF ENERGY & ENVIRONMNT

Minimum Credits: 3 Maximum Credits: 3 The course will examine the role of energy in economic development, models of efficient energy management, OPEC behavior and world oil crisis. Coverage extends into environmental issues (air pollution, solid waste, acid rain) and government policies. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ or COREQ: MATH 0031

# **Educational Psychology**

EDPSY 0004 - EMOTIONAL PROBLEMS OF CHLDHOOD Minimum Credits: 3 Maximum Credits: 3 A case study approach to the assessment and treatment of childhood behavior problems is utilized. Special emphasis is on personality development in childhood, common developmental problems, positive and negative parental influences on child behavior, and treatment techniques. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **EDPSY 0006 - INTRO TO EDUCATNAL PSYCHOLOGY**

Minimum Credits: 3 Maximum Credits: 3 Deals with the psychological aspects of the educational process. Theories and research from both psychology and educational psychology are examined in the areas of cognitive and social development, individual differences, culture, cognitive processes, learning, motivation, classroom

management, and measurement. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

## **EDPSY 0020 - PLAY THERAPY**

Minimum Credits: 3 Maximum Credits: 3 Introduction to digital systems, Boolean algebra, minimization of logic functions, combinational and sequential circuit design. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

# English

## **ENG 0100 - INTRO TO COLLEGE COMPOSITION**

Minimum Credits: 3 Maximum Credits: 3 Designed to build self-confidence in the use of standard written English, including the ability to compose clear and correct standard English prose in sentences, paragraphs, and short essays. Academic Career: UGRD Course Component: Lecture Grade Component: Lecture Grade

#### **ENG 0101 - ENGLISH COMPOSITION 1**

Minimum Credits: 3 Maximum Credits: 3 The first of two required competency courses in English composition, this course focuses on the writing process and on the kinds of writing common in the academic disciplines. Academic Career: UGRD Course Component: Lecture Grade Component: Lecture Grade Component: Letter Grade Course Requirements: PREREQ: C- or better in ENG 0100 or by placement exam or SAT

#### **ENG 0102 - ENGLISH COMPOSITION 2**

Minimum Credits: 3 Maximum Credits: 3 This is an extension of the skills mastered in ENG 0101, this course focuses on the processes of researching, writing, and presenting a term paper. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: ENG 0102 Requires PREQ of C- or better in ENG 0101

# **English Composition**

ENGCMP 0100 - INTENSIVE WORKSHP IN COMPOSITN Minimum Credits: 3 Maximum Credits: 3 This course creates an intensive workshop in composition for students who have limited experience as readers and writers. Students engage in a rigorous program of college level reading and writing that introduces them to academic inquiry, analysis, and argument. Discussion of student writing is central to the course, and discussion of the readings will often focus on how students have written in response to them. Academic Career: UGRD Course Component: Seminar

Grade Component: LG/SNC Elective Basis

#### **ENGCMP 0101 - INTENSIVE COMPOSITION WORKSHOP**

Minimum Credits: 3 Maximum Credits: 3

This course creates an intensive workshop in composition for students who have limited experience as readers and writers. Students engage in a rigorous program of college level reading and writing that introduces them to academic inquiry, analysis, and argument. Discussion of student writing is central to the course, and discussion of the readings will often focus on how students have written in response to them. Academic Career: UGRD Course Component: Seminar

Grade Component: LG/SNC Elective Basis

#### **ENGCMP 0150 - WORKSHOP IN COMPOSITION**

Minimum Credits: 3 Maximum Credits: 3

This course is designed to give students who have had limited experience with writing an opportunity to increase their control of written language and their confidence in performing academic inquiry, analysis and argument. Students write in response to weekly assignments, and instruction focuses on helping students to extend, revise, and edit their work.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGCMP 0200 - SEMINAR IN COMPOSITION**

# Minimum Credits: 3

Maximum Credits: 3

This introductory course offers students opportunities to improve as writers by developing their understanding of how they and others use writing to interpret and share experience, affect behavior, and position themselves in the world. Specific reading and writing assignments may vary from section to section, but student writing will be the primary focus in all sections. The course is designed to help students become more engaged, imaginative, and disciplined composers.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: ENGCMP 0150 or ENGCMP 0152

#### **ENGCMP 0211 - LIBRARY RESEARCH METHODS**

#### Minimum Credits: 1 Maximum Credits: 1

Provides the opportunity for students to acquire skills in library research techniques. Professional librarians instruct students in developing search strategies for gathering information using such resources as the online catalog, periodical indexes, electronic resources, and others. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: ENGCMP 0211 requires PREQ or COREQ ENG 0101

#### **ENGCMP 0250 - CRITICAL WRITING**

## Minimum Credits: 3

**Maximum Credits: 3** 

Students in this course will be trained in the responsible development and articulation of written opinions. Material drawn from various media will be used to help students increase their powers of observation and analysis that they may learn the art of making discriminating evaluations of situations, events, issues, controversies, artifacts and objects.

Academic Career: UGRD

Course Component: Seminar

Grade Component: LG/SNC Elective Basis

## **ENGCMP 0400 - WRITTEN PROFESSNL COMMUNICTN**

## Minimum Credits: 3

#### Maximum Credits: 3

This course explores the methods of inquiry, analysis and composition characteristic of written communication in professional settings. The course will examine such writing's specialized use of language, conventions and formats, premises, motives, and purposes. By preparing letters, resumes, proposals, reports, etc. Students will get a feel not only for what professional" communication is, but also for how and why it does, or can, or should function."

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ENGCMP 0200

#### **ENGCMP 0440 - CRITICAL WRITING**

#### Minimum Credits: 3

Maximum Credits: 3

Students in this course will be trained in the responsible development and articulation of written opinions. Material drawn from various media will be used to help students increase their powers of observation and analysis that they may learn the art of making discriminating evaluations of situations, events, issues, controversies, artifacts and objects.

Academic Career: UGRD

Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ENGCMP 0200 or equivalent

## **ENGCMP 0600 - INTRO TO TECHNICAL WRITING**

# Minimum Credits: 3

Maximum Credits: 3 This introductory course is for students in various technical fields. Representative technical reports will be studied, as well as abstracts, the presentation of visuals and oral communication. Writing assignments will emerge from case studies reflecting on-the-job challenges. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

# **English Film**

#### **ENGFLM 0400 - INTRODUCTION TO FILM**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

This is a basic course on the visual arts that offers the student abroad introduction to the medium of film. As part of this overview, the class will consider such issues as: the process of contemporary film production and distribution; the nature of basic film forms; selected approaches to film criticism; comparisons between film and the other media.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

# **English Literature**

#### **ENGLIT 0315 - READING POETRY**

#### Minimum Credits: 3

#### Maximum Credits: 3

Poetry is usually the first literary form to evolve in a culture. Yet many today reject it as artificial, overly refined and removed from ordinary human experience. By studying various kinds of poetry, this course aims to help students break down the barriers between classic poems, contemporary poetry, and a more general lyric impulse. As the most highly condensed literary experience, poetry invites very close reading, so we will explore various techniques for making sense of poems.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0320 - THE COMIC IDEA**

Minimum Credits: 3 Maximum Credits: 3 The primary aim of this course is to increase students' understanding of the structure of the comic experience and of comedy's place in culture. We will use models of literary comedy in reading modern and contemporary works, older materials in English or translated from other Western cultures, and works translated from non-European cultures. Academic Career: UGRD

Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0325 - THE SHORT STORY**

Minimum Credits: 3 Maximum Credits: 3

This course studies short stories that explore a variety of themes. It seeks to define the short story as a specific literary genre and to distinguish it from earlier forms of short narrative literature. It then goes on to examine the effects of literary, cultural and historical traditions on these stories and their reception.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0354 - WORDS AND IMAGES**

Minimum Credits: 3 Maximum Credits: 3

This course explores the relationships between lanaguage and images. It studies how we describe and understand visual images and how they help us understand qualities that could not easily be defined otherwise. It considers how images function in literary texts and other writers as well as the unconventional images found in dreams, ads, and popular prints, etc.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: C- or better in ENGCMP 0150

## **ENGLIT 0370 - LITERATURE AND IDEAS**

## Minimum Credits: 3

#### **Maximum Credits: 3**

This course studies invention and interpretation, and explores the various ways writers produce texts and readers make them make sense. Though texts may change from section to section and instructor to instructor, they always stimulate investigation into reading and writing as ways of knowing.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0500 - INTRO TO CRITICAL READING**

# Minimum Credits: 3

Maximum Credits: 3 This course studies three to five significant literary works in conjunction with influential criticism on each text. Students explore the uses and limits of different critical methods. The course seeks to develop a critical understanding of both classic literary texts and dominant modes of reading as changing cultural practices.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0570 - AMERICAN LITERATURE**

Minimum Credits: 3 Maximum Credits: 3 This first course in American literature explores the characteristic features of writings from the colonial period to the present. It emphasizes the interaction between literary texts and their social contexts, and examines the emergence of a national literature. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

ENGLIT 0580 - INTRODUCTION TO SHAKESPEARE Minimum Credits: 3 Maximum Credits: 3 This course will focus on a number of Shakespeare's major plays from all phases of his career. Class discussion will consider the historical context of the plays, their characterization, theatrical technique, imagery, language and themes. Every attempt will be made to see the plays both as poems and as dramatic events.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0590 - FORMATIVE MASTERPIECES**

Minimum Credits: 3 Maximum Credits: 3

This course will study in some detail eight or nine of those masterpieces which form the largest part of what we now regard as the Western tradition of literature. The works chosen will come from various genres--epic poetry, drama, the novel, and satire. They will span the centuries from the classical periods of ancient Greece and Rome through the Renaissance and into the nineteenth century. **Academic Career:** UGRD

**Course Component:** Seminar

Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0597 - BIBLE AS LITERATURE**

Minimum Credits: 3 Maximum Credits: 3 This introductory course

This introductory course acquaints students with what is in the bible and provides background information drawn from various disciplines about the elements and issues that give it its distinctive character. Attention is necessarily given to its religious perspectives, since they govern the nature and point of view of the biblical narratives, but no specific religious view is urged.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0610 - WOMEN AND LITERATURE**

Minimum Credits: 3 Maximum Credits: 3 An exploration of writings by and about women. Through our reading of various literary forms -- poetry fiction, autobiography -- we will explore the aspirations and realities of women's lives. We will consider how social issues -- class, race, etc. -- Affect women writers. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: C- or better in ENGCMP 0150

## **ENGLIT 0625 - DETECTIVE FICTION**

Minimum Credits: 3 Maximum Credits: 3 This course examines detective fiction in terms of its history, its social meaning and as a form of philosophizing. It also seeks to reveal the place and

values of popular fiction in our lives. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### **ENGLIT 0641 - TRAGEDY**

Minimum Credits: 3 Maximum Credits: 3

This course will explore the properties of tragic literature from ancient Greece and Rome, through the Renaissance and into the twentieth century. In the process we will address issues often raised about tragic heroes and their flaws, about fate and justice, about the cathartic and the pathtic. Through our reading of the literature and the criticism we will seek understanding of tragedy as a literary form and of its changes through time and from culture to culture.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: ENGCMP 0200 or CREQ: ENGCMP 0200

# ENGLIT 1250 - 20TH CENTURY AMERICAN LIT

Minimum Credits: 3 Maximum Credits: 3 This course focuses on literature produced in this century in relation to changing social and cultural contexts. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

## **ENGLIT 1325 - MODERNISM**

Minimum Credits: 3 Maximum Credits: 3 This course examines major works in the modernist tradition poetry, fiction, drama--to determine the role these texts have played in creating the world that seems so familiar to us now. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in ENGCMP 0150

## **ENGLIT 1380 - WORLD LITERATURE IN ENGLISH**

Minimum Credits: 3 Maximum Credits: 3 This course examines contemporary literature, primarily in English, written in eastern Europe, Africa, Latin America, etc. It pays particular attention to its depiction of social, political and moral concerns. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

## **ENGLIT 1647 - LITERATURE FOR ADOLESCENTS**

Minimum Credits: 3 Maximum Credits: 3 This course will read classics as well as modern works written specifically for an adolescent audience. We will also read and discuss sociological and psychological constructions of adolescents and books on pedagogy. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

# Engineering

# **ENGR 0009 - INTRO TO ENGINEERING COMPUTING**

# Minimum Credits: 3

Maximum Credits: 3

The course is designed to teach students the fundamentals of computing and the concept of engineering design as applied to the design of software. Fundamentals include basic computer organization, formulation of algorithms, basic data structures, pseudo code and top down iterative refinement. In the concurrent laboratory, proficiency is developed in a high level language and a text editor/word processor.

Academic Career: UGRD Course Component: Lecture

Grade Component: Letter Grade

#### **ENGR 0010 - ENGINEERING ANALYSIS**

#### Minimum Credits: 3 Maximum Credits: 3

This course is closely linked to engineering 0009 through use of the computer to solve engineering problems. Numerical methods are presented and these methods are then used in solution of problems in mechanics, heat transfer, electrical systems, and chemical processes. Economic and human factors are also included in the problem solutions. The fundamentals of computer graphics are also covered. The overall emphasis of the course is on computer-aided engineering (CAE).

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

## **ENGR 0011 - INTRO TO ENGINEERING ANALYSIS**

Minimum Credits: 3

#### Maximum Credits: 3

Introduces students to basic topics in engineering, the role of the computer in engineering, ill structured problem-solving and report writing. The course includes material on the use of Unix, HTML, spread sheets, and MATLAB. Data analysis and curve fitting is done in both MATLAB and Excel. The writing component includes four detailed reports and includes an oral presentation. The course goals are: to introduce the fundamentals of what engineering is, what engineers do, why a diverse work force is needed and what values come with working in a group environment; to introduce the required library research skills and communication skills used by all engineers; to introduce the role of the computer in engineering problem solving, including the basic analytical, programming design, graphical, and problem solving skills used by most engineers in their profession; and to provide an overview of how material in the basic sciences and mathematics is applied by engineers to solve practical problems of interest to society. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: Letter Grade

Course Requirements: PREQ or COREQ: MATH 0220 and ENGR 0081

#### **ENGR 0012 - INTRO TO ENGINEERING COMPUTING**

#### Minimum Credits: 3

#### Maximum Credits: 3

Introduces students to social topics in engineering, the role of the computer in engineering, ill-structured problem-solving and report writing. The course includes material on the use of MATLAB and C++. Students learn the fundamentals of computing in engineering, including program design, program development, and debugging. Applications to problems in engineering analysis with topics selected from ENGR 0011. The writing component includes four detailed reports and includes an oral presentation.

Academic Career: UGRD

Course Component: Lecture

Grade Component: Letter Grade

Course Requirements: PREQ: ENGR 0011 and CREQ: MATH 0230 and ENGR 0082

## **ENGR 0013 - STATICS AND PARTICLE DYNAMICS**

# Minimum Credits: 4

**Maximum Credits: 4** 

A basic course in statics and particle dynamics. Topics covered include the effect of external forces acting on particles and rigid bodies. Use is made of computers for self-learning through tutorial software and for problem solving.

Academic Career: UGRD Course Component: Lecture

Grade Component: Letter Grade

#### **ENGR 0014 - MECHANICS OF MATERIALS**

Minimum Credits: 4

Maximum Credits: 4 An introductory course in the mechanics of deformable solids. Material covers the internal stresses, strains, and displacements which occur when a structure is subjected to applied loads. Open ended design problems are also discussed. Academic Career: UGRD Course Component: Lecture Grade Component: Lecture

#### **ENGR 0020 - PROBLTY & STAT FOR ENGINEERS 1**

#### Minimum Credits: 4

Maximum Credits: 4 An introductory course in statistics. Topics covered include: data analysis, probability, randon variables, selsected discrete and continuous probability distributions, one sample and two sample estimation, hypothesis testing, experiments with two factors and introduction to regression analysis. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: MATH 0150 or 0230 or 0231 or 0235; PROG: Swanson School of Engineering

#### **ENGR 0022 - MATERLS STRUCTURE & PROPERTIES**

# Minimum Credits: 3

Maximum Credits: 3

An introduction to the basic concepts of materials science and engineering. The concepts of atomic, crystal, micro- and macro-structure, their control and effects on chemical, electrical, magnetic, optical, and mechanical properties. Modification of properties by heat treatment and control of processing. Fundamental considerations in materials selection.

#### **ENGR 0081 - FRESHMAN ENGINEERING SEMINAR 1**

Minimum Credits: 0 Maximum Credits: 0 An in-depth orientation in the various areas of engineering and the related fields of employment. Includes small group meetings with departmental representatives and special freshman academic advisors. A formal departmental choice is made at the conclusion of these courses. Academic Career: UGRD Course Component: Seminar Grade Component: H/S/U Basis Course Requirements: CREQ: ENGR 0011 or 0711

#### **ENGR 0082 - FRESHMAN ENGINEERING SEMINAR 2**

Minimum Credits: 0 Maximum Credits: 0

An in-depth orientation in the various areas of engineering and the related fields of employment. Includes small group meetings with departmental representatives and special freshman academic advisors. A formal departmental choice is made at the conclusion of these courses. Academic Career: UGRD Course Component: Seminar Grade Component: H/S/U Basis Course Requirements: PREQ: ENGR 0081; CREQ: ENGR12

#### **ENGR 0083 - ENGINEERING SEMINAR 83**

Minimum Credits: 0 Maximum Credits: 0

Required for all engineering students. Orientation in various engineering disciplines with relative fields of employment. Includes meeting with academic advisor as well as presentations by engineers from industry. Seminars are modeled after professional societies in order to acquaint students with the engineering profession. Academic Career: UGRD

Course Component: Seminar

Grade Component: LG/SNC Elective Basis

#### **ENGR 0084 - ENGINEERING SEMINAR 84**

Minimum Credits: 0 Maximum Credits: 0

Required for all engineering students. Orientation in various engineering disciplines with relative fields of employment. Includes meeting with academic advisor as well as presentations by engineers from industry. Seminars are modeled after professional societies in order to acquaint students with the engineering profession. Academic Career: UGRD

**Course Component:** Seminar **Grade Component:** LG/SNC Elective Basis

# **English Writing**

## **ENGWRT 0400 - INTRO TO CREATIVE WRITING**

Minimum Credits: 3 Maximum Credits: 3 This course offers the opportunity to experiment with forms of poetry and fiction and to read and discuss from a writer's point of view contemporary writing in these genres. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in ENGCMP 0200

## **ENGWRT 0530 - INTRODUCTION TO POETRY WRITING**

Minimum Credits: 3 Maximum Credits: 3 Through writing exercises, analysis of modern and contemporary poetry and frequent revision of their own poetry, students learn the basic elements of poetry writing. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in ENGCMP 0200

#### **ENGWRT 1910 - INTERNSHIP: PUBLIC RELATIONS**

Minimum Credits: 3 Maximum Credits: 3

This course offers students an opportunity to work as interns for local public relations firms or corporate public relations departments. The internships are complemented by close supervision and seminars dealing with some of the ethical, legal and practical issues facing the working professional.

Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis

# French

## FR 0001 - ELEMENTARY FRENCH 1

Minimum Credits: 5 Maximum Credits: 5 This course will introduce the student to the oral-aural and reading-writing skills in the language. From the outset, students learn to use the spoken language and begin to work on good pronunciation, while at the same time developing the listening comprehension, reading, and writing skills. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### FR 0002 - ELEMENTARY FRENCH 2

Minimum Credits: 5 Maximum Credits: 5

This course introduces the students to the oral-aural and reading-writing skills in the language. From the outset, students learn to use the spoken language and begin to work on good pronunciation, while at the same time developing the listening comprehension, reading, and writing skills. This course is a logical continuation of elementary French 0001. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: FR 0001

#### FR 0101 - ELEMENTARY FRENCH 1

Minimum Credits: 3 Maximum Credits: 3 A study of the grammar and vocabulary of elementary spoken and written French. Stresses grammatical structure and its correct application. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### FR 0102 - ELEMENTARY FRENCH 2

Minimum Credits: 3 Maximum Credits: 3 A continuation of elementary French 1. A study of the grammar and vocabulary of elementary spoken and written French. Stresses grammatical structure and its correct application. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: FR 0102 requires pre-requisite of FR 0101

# **Freshman Studies**

#### FS 0002 - FRESHMAN SEMINAR

Minimum Credits: 1 Maximum Credits: 1 This course will acquaint freshmen with the many policies and procedures of college life. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### FS 0004 - COLLEGE SUCCESS SKILLS

Minimum Credits: 1 Maximum Credits: 1 For first-term freshmen, course designed to orient students to campus resources and college success techniques. A variety of teaching methods introduces information on the library, computer center, notetaking skills, study and test taking strategies, time management, and others. Academic Career: UGRD Course Component: Lecture Grade Component: Satisfactory/No Credit

# Geology

#### **GEOL 0024 - METEOROLOGY**

#### Minimum Credits: 4

#### **Maximum Credits: 4**

This course will provide students with an overview of the earth's weather systems. Emphasis will be on lab-centered, hands-on activities designed to demonstrate weather phenome non through a holistic approach. Topics will include, but are not limited to, structure and composition of the atmosphere, global patterns of circulation, pressure systems, fronts, air masses, weather maps and weather prediction, and climate systems. Students will be required to complete weekly assignments; there will be a semester project; at least one class session will be a field trip. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: LG/SU3 Elective Basis

#### **GEOL 0025 - INTRO TO METEOROLOGY**

#### Minimum Credits: 3

#### Maximum Credits: 3

An online weather studies course covering the composition and structure of the atmosphere, the flows of energy to, from, and through the atmosphere, and the resulting motions produced from small to planetary scales. The physical principles of atmospheric phenomena are stressed in the understanding of weather's impact on humans. Methods of analysis are developed through the study of current weather as meteorological data are delivered via the internet.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **GEOL 0050 - PHYSICAL GEOLOGY**

## Minimum Credits: 4

Maximum Credits: 4 This lab class provides hands-on exercises related to rock and mineral identication, geologic time, geologic structures, geologic maps, and the analysis of landforms as revealed by topographic maps, satellite images, and air photos. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **GEOL 0101 - PHYSICAL GEOLOGY**

# Minimum Credits: 4

Maximum Credits: 4

This course serves as an introduction to the earth sciences. The lectures and laboratory exercises will cover a broad range of topics related to the physical geology, but also minor aspects of the historical geology. The topics covered include, but not limited to, Maps, Minerals, Rocks, Tectonic activity, Volcanoes, Sediments, Geologic time, Natural resources, Landscapes, Hazards, Life through time, and Evolution, etc. The course has a three (3) hour lab component during which you will be conducting a variety of laboratory exercises which will allow you to review and understand

important geologic concepts and processes. Physical Geology is a laboratory science course and satisfies the Physical Science (PH) and science lab requirement for the General Education (GE). The lecture and the laboratory elements are integrated. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **GEOL 0800 - GEOLOGY**

#### Minimum Credits: 3 Maximum Credits: 3

Geology is the study of how the earth works. This class covers the classification and origin of basic rocks and minerals; examines the role of plate tectonics in shaping the earth and producing such hazards as earthquakes and volcanoes; and examines the forces that shape beaches and rivers and sometimes threaten our lives and property. We also survey the evidence for changing climate and the future of such resources as groundwater, fossil fuels, and ores.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **GEOL 0802 - GEOLOGY OF THE NATIONAL PARKS**

#### Minimum Credits: 3 Maximum Credits: 3

The magnificent scenery of the national parks provides a backdrop to an exploration of the basic geological principles that govern the creation and development of landscapes. The geological history of the North American continent will be explored in order to provide a framework in which to understand the development of the landscapes of our country.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **GEOL 0842 - PLANET EARTH**

# Minimum Credits: 3

#### Maximum Credits: 3

Our home planet is a vast, interconnected machine whose study requires an interdisciplinary approach. This is a comprehensive overview of the workings of planet earth in the light of recent scientific discoveries. Topics will include geology from a plate tectonic perspective (the solid earth), interactions between continents and oceans and atmosphere, including aspects of oceanography and climatology (the fluid earth), what we have learned from space probes and how we can apply that knowledge to our own planet and the limits of our planet as a sustainer of life. **Academic Career:** UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **GEOL 0860 - ENVIRONMENTAL GEOLOGY**

# Minimum Credits: 3

#### Maximum Credits: 3

This course takes an integrated earth systems approach to understanding our planet and its resources. We will investigate geologic processes and hazards (e.g., earthquakes, volcanoes, landslides, and weather hazards), geologic resources (water, soil, minerals, energy) and the local and global ramifications of human interaction with the earth (e.g., air, soil and water pollution, ozone depletion, and climate change). This course also serves as an introductory course for three majors in the department of geology and planetary science.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

# History of Art and Architecture

## HAA 0010 - INTRODUCTION TO WORLD ART

#### Minimum Credits: 3

Maximum Credits: 3 This course is intended to introduce the student to major monuments of Western art from Egypt to the 20th century, and to demonstrate the tools of analysis with which one may approach a work of art as an aesthetic object and as a historic document. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HAA 0020 - INTRODUCTION TO ASIAN ART

#### Minimum Credits: 3

#### Maximum Credits: 3

This base level survey is meant, on the one hand, to introduce the student to the arts of Japan, China, and India and on the other, to teach some fundamental techniques of visual analysis. The course considers the development of Chinese bronzes, Chinese Buddhist sculpture, Indian Hindu and Buddhist sculptures, and Japanese temples, sculptures, and paintings.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### HAA 0040 - INTRO TO WESTERN ARCHITECTURE

## Minimum Credits: 3

#### Maximum Credits: 3

Introduces students to the conscious observation and analysis of architecture and to a broad survey of the major masterpieces of architecture in Western civilization. Formative concepts behind the designs, structural principles involved in the construction, and societal values promoted and reinforced by the formal character of buildings will be considered along with the analysis of style. Required for the architectural studies major and recommended as a beginning course for others interested in architecture.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HAA 0050 - INTRODUCTION TO MEDIEVAL ART

Minimum Credits: 3 Maximum Credits: 3 A survey of the architecture, painting, sculpture and minor arts of the medieval world from ca. 300 To ca. 1450 With the emphasis on visual analysis of period styles. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HAA 0070 - EURPN VISL TRADTN RENASNC-PRES

#### Minimum Credits: 3 Maximum Credits: 3 An introduction to European art and architecture from the early Renaissance to the present. The course will also include American works from the 18th century onwards. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HAA 0150 - ANCIENT ART

# Minimum Credits: 3

# Maximum Credits: 3

The Mediterranean Sea is a lake and its shores have produced many important cultures and artistic traditions. The course will survey the artistic and cultural traditions of Mesopotamia, Egypt, and the Aegean, from the Neolithic to the end of the Bronze Age (ca. 6000-1200 BCE), a formative period for the cultures that developed in these regions. Special attention will be paid to: 1) the relationship between the artistic traditions of these areas and the societies which produced them, and 2) the way in which influences from one culture were transformed by another. **Academic Career:** UGRD

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HAA 0302 - RENAISSANCE ART

# Minimum Credits: 3

# Maximum Credits: 3

We will explore the arts - painting, sculpture, architecture, and the decorative arts - that flourished in Italy between 1250 and 1590. The renaissance is one of the great epochs of western culture; this course offers an introduction to the visual evidence that reveals the development of new attitudes about human life and its meaning. Emphasis will be on works of those revolutionary individuals who transformed the arts - Giotto, Donatello, Brunelleschi, Michelangelo, Leonardo, Raphael, Bellini, titian, and Palladio, to name only the most important.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HAA 0440 - FRANK LLOYD WRIGHT

#### Minimum Credits: 3 Maximum Credits: 3

This course will deal with the life of the man who was America's greatest architect and one of the principal world figures in the art of building in the Twentieth Century. The lectures will treat his formation as an architect as well as the development of his career and will focus upon a theoretical analysis of wright's work in comparison with that of his great contemporaries.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HAA 1901 - INDEPENDENT STUDY

Minimum Credits: 1 Maximum Credits: 3 Independent reading and research with one faculty member. Academic Career: UGRD Course Component: Independent Study Grade Component: Satisfactory/No Credit

### HAA 1902 - INDEPENDENT STUDY

Minimum Credits: 1 Maximum Credits: 3 Academic Career: UGRD Course Component: Independent Study Grade Component: Letter Grade

# History

#### HIST 0100 - WESTERN CIVILIZATION 1

Minimum Credits: 3 Maximum Credits: 3 The study of others leads back to ourselves. We learn about men and women from the past in order to compare their experience to our own, hoping that the comparison will make us more aware of the opportunities and limitations of present-day life. As an introduction to history, this course tries to suggest the excitement and uncertainties of studying the past. We begin at the time of the crusades, and continue through Renaissance and Reformation to the eve of Industrial Revolution. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0101 - WESTERN CIVILIZATION 2

Minimum Credits: 3 Maximum Credits: 3 A history of the West from the Industrial Revolution to the late Twentieth Century, the period when Europe and its overseas extensions dominated world history. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0300 - RUSSIA TO 1860

Minimum Credits: 3 Maximum Credits: 3 This course examines the social, political, economic and intellectual developments of Russia from the Great Reforms of Peter to the Emancipation of the Serfs in 1861. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0301 - RUSSIA TO 1917

Minimum Credits: 3 Maximum Credits: 3 This course analyzes the major social and economic problems of the Russian Empire from the emancipation of 1861 through the Revolution of 1917. The emphasis is on understanding the major issues that precipitate the first socialist" Revolution in European history." Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0302 - SOVIET RUSSIA

Minimum Credits: 3 Maximum Credits: 3 This course examines the history of the USSR from 1917 to the present. Particular attention is paid to the revolutionary transformation of society, the construction of the Soviet state and Soviet society, and to the ways in which state and society relate. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0401 - MODERN EAST ASIAN CIVILIZATION

Minimum Credits: 3 Maximum Credits: 3 This survey of Chinese and Japanese history in the nineteenth and twentieth centuries compares and contrasts the development of these two East Asian nations through a format that includes lectures, discussions, films, and readings. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0600 - UNITED STATES TO 1877

Minimum Credits: 3 Maximum Credits: 3 This is an introductory, lower division, course that develops the history of United States from the 1400s through the 1880s. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0601 - UNITED STATES 1865-PRESENT

Minimum Credits: 3 Maximum Credits: 3 An introduction to American history from the Civil War to the present which emphasizes selected topics on changes in American society and politics as an earlier agrarian society became an industrial-urban one and as the nation took up an ever larger role in world affairs. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0670 - AFRO-AMERICAN HISTORY 1

Minimum Credits: 3 Maximum Credits: 3 This course surveys the history of Afro-Americans from their African origins to their emancipation during the Civil War. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0671 - AFRO-AMERICAN HISTORY 2

Minimum Credits: 3 Maximum Credits: 3 This course surveys the development of black Americans from the time of the Civil War to the present. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0675 - WITCHES TO WALDEN POND

Minimum Credits: 3 Maximum Credits: 3 A survey of American religious history from the colonial period through the civil war. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0676 - RELIGION IN MODERN AMERICA

Minimum Credits: 3 Maximum Credits: 3 An examination of the major developments in American religion from the Civil War to the present. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HIST 0678 - US AND THE HOLOCAUST

Minimum Credits: 3 Maximum Credits: 3 With increasing interest in the Holocaust in Europe, this course focuses on the American side of the Atlantic - on issues of anti-Semitism and antiimmigrant sentiment in this country and on America's response to the Holocaust. We will also look at some post-Holocaust issues as well. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0685 - UNITED STATES FORGN RELATIONS

# Minimum Credits: 3

**Maximum Credits: 3** 

The course emphasizes three significant periods of development: (a) the period of origins, 1775-1825, (b) the period of hesitant entry onto the international scene, 1890-1941, and (c) the period of full participation in international affairs, 1941-present. In the process the course endeavors to demonstrate the changing role of such concepts as security, neutrality, isolationism, expansionism, and intervention in the evolution of the nation's conduct of foreign affairs. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0686 - HISTORY OF IDEAS IN AMERICA

Minimum Credits: 3 Maximum Credits: 3 A survey of major ideas that helped shape America's religious, cultural, social, economic, and political character beginning with puritanism and inclusive of Jacksonianism. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0751 - ANCIENT WORLDS

Minimum Credits: 3 Maximum Credits: 3 This is a lecture course on the earliest cultures of Egypt, Mesopotamia and China. The approach is comparative. The course will focus on the similarities and the differences in the cultural development of these ancient civilizations, and will stress their contributions and legacies to the civilizations of today. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0756 - INTRO TO ISLAMIC CIVILIZATION

#### Minimum Credits: 3 Maximum Credits: 3

This course aims to introduce students to Islamic and Middle Eastern History from the time of the Prophet (ca. 600 C.E.) to the Iranian Revolution in

1979. We will proceed chronologically, focusing mainly on political events. However, a special emphasis will be given to the formation of the Islamic tradition, its evolution across different regions and cultures in time, and its interaction with other traditions. In the modern era, we will particularly explore the Islamic societies' political, cultural, and military encounter with the rising power of the West in the Middle East. In addition to the several historical processes and developments such as modernization, nation-building, Islamic fundamentalism and globalization, which have shaped the history of the Middle East in the last two centuries, our class discussions will also touch on the main theoretical perspectives that have stamped the studies of Islam and the Middle East. Here, concepts such as orientalism, defensive development, and modernity will constitute our main focus.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 0795 - HISTORY OF AFRICA BEFORE 1800

#### Minimum Credits: 3

#### Maximum Credits: 3

Surveys history of Africa from earliest times to eve of European civilization. Looks at Africa from the inside out and aims at promoting an appreciation of Africa's contribution to world civilization and an understanding of the historical processes that have shaped modern Africa. Major themes and topics include ancient kingdoms, Islam the slave trade and the European contact. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### HIST 1005 - SPECIAL TOPICS

Minimum Credits: 3 Maximum Credits: 3 This course entails the exploration of a special topic chosen by the instructor. Academic Career: UGRD Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

#### HIST 1045 - SOCIALISM VERSUS CAPITALISM

#### Minimum Credits: 3 Maximum Credits: 3

The course covers the economic changes that produced capitalism; the attempts to understand capitalism which culminated in the theories of Adam Smith; the problems of communist societies and their attempts to return to some form of capitalism. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### **HIST 1083 - HISTORY OF SPORTS**

## Minimum Credits: 3

Maximum Credits: 3 The course will survey the history of sports, focusing primarily on the 20th century. We will balance consideration of professional sports with that of the games the people play. We will look both at the impact of television as well as the new fitness (revolution). Topics considered will include women in sports, the commercialization of culture and collegiate sports. A major focus will be the role in sports in Pittsburgh in the past 50 years. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### HIST 1123 - MODERN BRITAIN

#### Minimum Credits: 3

#### **Maximum Credits: 3**

Political, economic and social change in Britain from the early 18th century to the present are examined in depth. Topics include the pre-industrial social structure, the origins of political stability, the making of the Industrial Revolution, popular protest and political reform, Britain's supremacy during the Victorian era, imperialism and the rise of labor, the impact of total war, and the emergence of the welfare state. A discussion of Britain's future prospects concludes the course.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## HIST 1610 - UNITED STATES COLONIAL

Minimum Credits: 3 Maximum Credits: 3 This is an upper division course that develops the history of the North American English colonies from around 1400 through the early 1760s. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 1612 - UNITED STATES 1789-1840

Minimum Credits: 3 Maximum Credits: 3 A history of ideas -- social, literary, scientific, political -- that expressed and shaped the culture. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 1646 - ECONMC & BUSINSS HISTORY U.S.

Minimum Credits: 3 Maximum Credits: 3 The historical background of current major economic issues. Covers boom and bust; industrialization; productivity trends; changes in business organization; relations between business and society; ideological battles over the free market system. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HIST 1655 - AMERICAN WORKERS 19TH CENTURY

# Minimum Credits: 3

Maximum Credits: 3 This course examines American working class formation, development, and recomposition during the nineteenth century, and workers' impact on American economic, political, and cultural development. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 1656 - AMERICAN WORKERS 20TH CENTURY

#### Minimum Credits: 3

Maximum Credits: 3

This course examines the experiences of American workers during the second Industrial Revolution of the early Twentieth Century, the emergence of a government-sponsored national system of labor relations in the 1930s and 1940s, the structural changes in the economy and labor force since 1950, and the subsequent breakdown of the new deal formula for class relations.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 1660 - GENDER & SEXTY IN US TO 1865

Minimum Credits: 3 Maximum Credits: 3 This upper-level course is part of a two-course sequence which surveys the history of women in the United States. Part 1 focuses on women's experiences from the 1600s to the 1880s with special attention to class, ethnic, and geographic differences among women. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HIST 1661 - US GENDER/SEXUALITY SINCE 1865

#### Minimum Credits: 3 Maximum Credits: 3

This upper-level course is part of a two-course sequence which surveys the history of women in the United States. Part 2 focuses on women's

experiences from 1865 to the present with special attention to class, ethnic, and geographic differences among women. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### HIST 1685 - U.S. POPULAR CULTURE

Minimum Credits: 3 Maximum Credits: 3 This course examines the development and social impact of mass-produced and mass-consumed forms of culture in Twentieth Century America. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HIST 1775 - ORIGINS OF CHRISTIANITY

Minimum Credits: 3 Maximum Credits: 3

This course presents a historical-critical investigation of Christian origins. Special attention is paid to varieties of 1st century Hellenistic and Palestinian Judaism within the Greco-Roman world. Primary readings include selected Biblical passages and apocrypha, 1st century historians and philosophers (Josephus, Tacitus, Suetonius, and Philo), the New Testament corpus (including Paul and the Pastorals), and selected readings from the Dead Sea Scrolls. In addition there will be assignments from various modern New Testament critics, historians, and theologians. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

# Education, Health, Physical and Recreation

#### **HPRED 0106 - NUTRITION**

### Minimum Credits: 2

Maximum Credits: 2

An introduction to the processes involved in nourishing the body. Emphasis will include a study of nutrients and their physiological impact and interrelationships within the body, and the quality of diet. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### **HPRED 0107 - NUTRITION LABORATORY**

Minimum Credits: 1 Maximum Credits: 1 Laboratory exercises designed to illustrate the principles of nutrition and the relationship between nutrition and health. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: HPRED 0106

#### HPRED 1021 - HEALTH THEORIES & PROGRAMMING

Minimum Credits: 3 Maximum Credits: 3 The course introduces students to the major health theories that are used to plan, implement, and evaluate health promotion and disease prevention interventions for schools, workplaces, healthcare organizations and communities. Using the theories students design a health intervention. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

# History and Philosophy of Science

## HPS 0437 - DARWINISM AND ITS CRITICS

Minimum Credits: 3 Maximum Credits: 3 Charles Darwin's ideas have had an enormous impact on biology and on culture generally. These ideas have been criticized within biology, by philosophers, social theorists and religious fundamentalists. This course studies the historical growth of Darwinism and the criticisms mentioned, and evaluates those criticisms and their impact on the theory. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HPS 0610 - CAUSAL REASONING

#### Minimum Credits: 3 Maximum Credits: 3

Do school vouchers really help inner city students become better educated? Do gun control laws really make society safer? This course examines how scientists reason about causal claims like these. It considers use of scientific statistical data that informs our public policy debates. The course uses an interactive, web-based text and exams. In addition, there is an on-line virtual causality lab" in which students will set up, run, and then analyze simulated experiments. They will construct causal theories, use the lab to derive predictions from these theories, and then test the predictions against the simulated data. While course materials are delivered on-line."

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

#### HPS 0613 - MORALITY AND MEDICINE

# Minimum Credits: 3

#### Maximum Credits: 3

Ethical dilemmas in the practice of health care continue to proliferate and receive increasing attention from members of the health care profession, ethicists, policy makers, and the general public as health care consumers. In this course we will examine a number of ethical issues that arise in the context of contemporary medical practice and research by analyzing articles and decision scenarios. Topics to be covered typically include the physician-patient relationship; informed consent; medical experimentation; termination of treatment; genetics; reproductive technologies; euthanasia; resource allocation; and health care reform. Students who successfully complete this course will be able to identify and analyze different philosophical approaches to selected issues in medical ethics; have gained insight into how to read and critically interpret philosophical arguments; and have developed skills that will enable them to think clearly about ethical questions as future or current health care providers, policy makers, and consumers. This course is part of a core sequence leading to Certification in the Conceptual Foundations of Medicine Certificate Program, and is a companion course to HPS 0612 (Mind and Medicine) but may be taken independently. The course is of particular interest to pre-medical and prehealth care students.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HPS 0620 - SCIENCE AND RELIGION

## Minimum Credits: 3

Maximum Credits: 3 This advanced undergraduate course addresses two questions: does the scientific understanding of the world suffer from a kind of incompleteness that can be remedied by the supernaturalist religions? Or is there even a clash between contemporary science and such religion? Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HPS 0630 - SCIENCE AND PSEUDOSCIENCE

#### Minimum Credits: 3 Maximum Credits: 3

This course probes the distinction between genuine and pseudo-science using a number of case studies, including ESP and other paranormal phenomena, scientific creationism, UFO's and extraterrestrial life, etc. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

# HPS 1612 - PHIL OF 20TH CENTURY PHYSICS

#### Minimum Credits: 3

#### Maximum Credits: 3

An examination of the fascinating philosophical problems to which modern physical theories have given rise. No previous formal training in physics or mathematics will be presupposed, since the basic physical ideas needed will be introduced largely qualitatively with an emphasis on concepts rather than equations. Topics will vary from year to year with instructor, but center around classical mechanics, quantum mechanics, and relativity theory.

Academic Career: UGRD

# **Health Related Professions**

#### HRP 0020 - PROFESSIONALISM SEMINAR

Minimum Credits: 1 Maximum Credits: 1 Students with an interest in the health care professions explore topics such as professional ethics, confidentiality, behavior, appearance, the patientprofessional relationship, etc. Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

#### HRP 0080 - HEALTH SCIENCES INTERNSHIP

Minimum Credits: 1 Maximum Credits: 3 Provides an opportunity for students to observe health professionals in their work environment. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis Course Requirements: Sophomore or higher; 2.5 GPA; Division Consent

# HRP 0090 - INTRO TO MEDICAL TERMINOLOGY

Minimum Credits: 3 Maximum Credits: 3 Basic study of the professional language of medicine, including word construction, pronunciation, spelling, definition, and the use of terms from all areas of medical science and hospital service. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HRP 0102 - INTRODCTN TO MASSAGE THERAPY

Minimum Credits: 4 Maximum Credits: 4 Course covers beginning principles and techniques, including surface anatomy, exercise physiology, basic kinesiology, clinical pathology, medical terminology, assessments, and safety and professional abilities. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ OR CREQ: C- or better in BIOSC 0096 and BIOSC 0097 or BIOSC 0212 and BIOSC 0214

#### HRP 0104 - INTERMEDIATE MASSAGE THERAPY

Minimum Credits: 5 Maximum Credits: 5 A continuation of topics in hrp 0102 plus application of modalities; and intermediate principles and techniques of massage therapy and professional abilities. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### HRP 0105 - INTERNSHIP IN MASSAGE THERAPY

Minimum Credits: 2 Maximum Credits: 2 Provides practical experience working in an appropriate environment doing supervised massage therapy. Academic Career: UGRD

### HRP 0106 - ADVANCED MASSAGE THERAPY

#### Minimum Credits: 4 Maximum Credits: 4

A continuation of topics in HRP 0104 plus Asian anatomy and physiology; Asian philosophy and cosmology; concepts of yin/yang; advanced principles and techniques of massage therapy and body work and professional abilities; and strategies for successful practice. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: C- or better in HRP 0104 and [(BIOSC 0096 and BIOSC 0097) or (BIOSC 0212 and BIOSC 0214)]

## HRP 0180 - THE HEALING ARTS

Minimum Credits: 4 Maximum Credits: 4 An investigation into the health professions. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

#### HRP 0184 - INTRO TO SCIENCE FOR HLTH PROF

Minimum Credits: 3 Maximum Credits: 3 Provides an overview of the topics important to the student preparing for a career in health care. Physics, chemistry, and biology are interrelated to provide insight into the mechanisms and physical forces controlling and circumscribing life processes on our planet. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## HRP 0290 - APPLIED NEUROANATMY/PHYSIOLOGY

Minimum Credits: 3 Maximum Credits: 3 This course provides a review of neuroanatomy and neurophysiology with emphasis on application to clinical problems. Students learn to recognize neurological problems and to be able to discuss the neuroanatomical and/or neurophysiological abnormalities contributing to the problem. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

#### HRP 0399 - SPECIAL TOPICS - MASSAGE THRPY

Minimum Credits: 1 Maximum Credits: 3 This course is designed to allow students further study in massage therapy and is designed to meet the specific educational needs of the massage therapy student. Academic Career: UGRD Course Component: Independent Study Grade Component: Letter Grade

#### HRP 0410 - APPLIED KINESIOLOGY

Minimum Credits: 3 Maximum Credits: 3 Analysis of movement based on a knowledge of anatomy and physiology as applied to the function of body mechanics. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: BIOSC 0212 and BIOSC 0214 and HRP 0184 and (MATH 0031 or MATH 0110); Min grade 'C- for all courses listed"

# HRP 0411 - APPLIED KINESIOLOGY LAB

#### Minimum Credits: 1

Maximum Credits: 1 Lab covers neuromuscular skeletal anatomy, physiology, biomechanics and kinesiology in depth. Successful completion of the competency exams is required to pass this course. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

# HRP 0420 - CLINICAL PATHOLOGY

## Minimum Credits: 3

Maximum Credits: 3 A survey of the major aspects of the disease process, covering such topics as inherited disease, infections, neoplasia, nutritional and metabolic deficits, and disorders due to physical agents. Also incorporates the disease process as it affects individual organ systems and a discussion of laboratory diagnostic procedures. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: BIOSC 0213 and BIOSC 0215

# HRP 0421 - CLINICAL PATH/PATHPHYLGY LAB

Minimum Credits: 1 Maximum Credits: 1 Students are expected to demonstrate an understanding of pathophysiological principles by completing clinical case studies that highlight the particular pathophysiological processes related to their clients. Two written case studies are required. One of those case studies will serve as a class presentation and discussion. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

# HRP 0435 - INTRO TO CPT PROCEDURE CODING

Minimum Credits: 3 Maximum Credits: 3 Provides an understanding of coding systems and the role of coded information in medical reimbursement and health information management systems. Included is a beginning to intermediate view of the CPT and HCPCS coding nomenclature. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in HRP 0090

## HRP 0535 - DIAGNOSIS & PROCEDURE CODING 2

Minimum Credits: 3 Maximum Credits: 3 A continuation of HRP 0435: introduction to CPT procedure coding Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: HRP 0435

## HRP 0635 - ADV DIAGNS & PROCEDURE CODNG

#### Minimum Credits: 3 Maximum Credits: 3

Provides advanced preparation in icd-9-cm, CPT, and HCPCS coding classification systems in preparation for the coding certification examination. Included are other related topics, as the opportunity arises. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### HRP 0700 - MEDICAL INTERNSHIP

Minimum Credits: 3 Maximum Credits: 3 Provides practical experience working in a medical environment. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis Course Requirements: Sophomore or higher; 2.5 GPA; Division Consent

### HRP 0820 - INTRODUCTION TO PHARMACY

Minimum Credits: 3 Maximum Credits: 3 Discussion of the role and duties of the pharmacy technician in a variety of settings (retail, clinic, hospital, etc.). Knowledge and compliance with federal, state, and local laws and regulations pertaining to the profession are included. In addition, emphasis is on ethics and standards as they impact on the practice of pharmacy. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### HRP 0830 - DRUG CLASSIFICATION AND USES

Minimum Credits: 3 Maximum Credits: 3 Knowledge and uses of the main therapeutic categories of prescription drugs, pharmacology, drug interactions and adverse effects, generic and brand name pharmaceuticals as well as common dosage forms and strengths. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### HRP 0899 - PHARMACY EXTERNSHIP

#### Minimum Credits: 6 Maximum Credits: 6

Acquire competence by working in a variety of settings under the direct supervision of a licensed pharmacist. Students would be required to sign-up for four different field experiences (community, chain, hospital, clinic, etc.). This should be the final course in the pharmacy technician certificate program.

Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis

### HRP 1399 - INTERNATNL HEALTH INTERNSHIP

## Minimum Credits: 3

### Maximum Credits: 3

This course offers students exposure to international health issues within community health agencies in an international setting. Students shadow community health workers in addition to conducting both library and field research (interviews, working with agency records, etc.) And writing papers.

Academic Career: UGRD Course Component: Independent Study Grade Component: LG/SNC Elective Basis

## **Human Services**

### **HUSERV 0331 - INTRODUCTION TO HUMAN SERVICES**

### Minimum Credits: 3

#### Maximum Credits: 3

Provides a comprehensive introduction to the knowledge and skills required for successful human services work. Topics include history and issues in human services work, philosophical models, methods of services delivery, and professional roles. In addition, an overview of different populations frequently served by the human services delivery system will be presented. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### HUSERV 0399 - HUMAN SERVICES INTERNSHIP

### Minimum Credits: 3

Maximum Credits: 3

Intended to be completed in the final term of program. Students spend 100 hours in a supervised internship in an approved human services location. Students are expected to produce a research report from their internship that includes application of skills learned in didactic course work, such as statistical methods, computer applications, and human services philosophies. Students are required to deliver two presentations based on this report, one at the internship site and one on campus. **Academic Career:** UGRD

Course Component: Internship Grade Component: LG/SNC Elective Basis Course Requirements: Sophomore or higher; 2.5 GPA; Division Consent

## **Instruction Learning**

### **IL 0080 - EDUCATION INTERNSHIP**

Minimum Credits: 0 Maximum Credits: 0 Provides an opportunity for students to observe education professionals in their work environment. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis

### IL 0210 - COLLEGE READING & STUDY SKILLS

Minimum Credits: 3 Maximum Credits: 3

This is a computer based course designed to provide assistance for students in achieving academic success. Course content includes selfmanagement, vocabulary development, reading comprehension, study strategies, and preparation for examinations. Additionally, students study and practice using online databases and other resources.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SU3 Elective Basis

## Journalism

### JOURNL 0642 - JOURNALISM PRACTICUM

Minimum Credits: 1 Maximum Credits: 1 Based on the academic credit-for-experience concept, this course is available to members of the staff of the yearbook, the littlest panther. May be taken for credit three times only. Academic Career: UGRD Course Component: Practicum Grade Component: LG/SNC Elective Basis

### JOURNL 1172 - INTERNSHIP

Minimum Credits: 2 Maximum Credits: 12 A journalism internship can be established with media, businesses, or organizations to provide a practical experience supplement to the academic program. The credit value of each internship program is determined by the number of clock hours worked. Academic Career: UGRD Course Component: Internship Grade Component: LG/SNC Elective Basis

### JOURNL 1173 - INTERNSHIP

Minimum Credits: 3 Maximum Credits: 12

3-, 6-, 9-, and 12-credit journalism internships have been established with area media, businesses, and organizations in order to provide a practical experience supplement to the academic program. Six internship credits may be applied to the journalism major. The credit value of each internship program is determined by the number of working hours involved. Academic Career: UGRD

## **Mathematics**

### MATH 0027 - FUNDAMENTALS OF MATH

Minimum Credits: 4 Maximum Credits: 4 Topics include solving and graphing linear equations and linear inequalities in one and two variables, arithmetic with polynomials, factoring polynomials, quadratic equations, and arithmetic with rational expressions, complex fractions, and equations with rational expressions, rational exponents, arithmetic with radical expressions, and equations with radical expressions. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

## MATH 0029 - FUNDAMENTALS OF MATH 1

Minimum Credits: 3 Maximum Credits: 3 Designed for students with little background in algebra. Topics covered are arithmetic with fractions, properties of real numbers, arithmetic with signed numbers, solving and graphing linear equations, and solving and graphing linear inequalities. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### MATH 0030 - FUNDAMENTALS OF MATH 2

### Minimum Credits: 3

Maximum Credits: 3 Designed for students with some background in algebra. Topics covered are properties of exponents, factoring, polynomial arithmetic, rational expressions, radicals, and rational exponents. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in Math 0029 or by placement exam

### MATH 0031 - ALGEBRA

Minimum Credits: 3 Maximum Credits: 3 The course covers basic algebra skills. Linear, polynomial, rational, exponential, and logarithmic functions are included. Systems of linear equations are also covered. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in MATH 0030 or by placement exam

### **MATH 0032 - TRIGONOMETRY AND FUNCTIONS**

Minimum Credits: 2 Maximum Credits: 2 This course is designed to enable students, who have mastered algebra, to learn trigonometry. Besides trigonometry, material of graphing and polynomials is included. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in MATH 0031

### MATH 0033 - TOPICS IN APPLIED TRIGONOMETRY

#### Minimum Credits: 1 Maximum Credits: 1

This course covers angles, angular measures, and the circular trigonometric functions of angles as applied to the solutions of triangles and to

elementary vector analysis. Designed as mathematical preparation for the topics in physical science and kinesiology needed by those in health sciences curricula. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **MATH 0035 - PHARMACEUTICAL MATHEMATICS**

Minimum Credits: 2 Maximum Credits: 2 Includes ratio and proportions regarding dosages and dilutions, metric conversions, iv drip rates and admixture calculations, percent solutions (both by mass and volume), molarity, reconstitution of injectable, and familiarity with measurement systems. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **MATH 0110 - FUNDAMENTALS OF MATHEMATICS**

Minimum Credits: 3 Maximum Credits: 3 Introduction to calculators, statistics, probability, matrices, consumer mathematics, and elementary difference equations exhibiting chaos, and decision making are among the topics covered. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: C- or better in MATH 0030 or by placement exam

### MATH 0120 - BUSINESS CALCULUS

Minimum Credits: 4 Maximum Credits: 4 This course introduces the basic concepts of limits, continuity, differentiation, integration, maximization and minimization. Applications to the social sciences, especially business and economics, are stressed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C- or better in MATH 0031 or by placement exam

### MATH 0200 - PREP FOR SCIENTIFIC CALCULUS

Minimum Credits: 3 Maximum Credits: 3 A variety of topics are studied: functions, rational functions, logarithmic and exponential functions, graphs, asymptotes, inverse, conic sections, translation and rotation of axes, trigonometric identities and equations, and possibly vectors. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PRE-REQ OF C- OR BETTER IN MATH 0031 OR BY PLACEMENT EXAM

### MATH 0220 - ANALYTC GEOMETRY & CALCULUS 1

Minimum Credits: 4 Maximum Credits: 4 This is the first of a sequence of three basic calculus courses. It covers the derivative and integral of functions of one variable and their applications. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREREQ: C- or better in Math 0200 or Math 0032 or by placement exam

### MATH 0230 - ANALYTC GEOMETRY & CALCULUS 2

Minimum Credits: 4 Maximum Credits: 4 This is the second of a sequence of three basic calculus courses. It covers the calculus of transcendental functions, techniques of integration, series of numbers and functions, polar coordinates, and conic sections. Academic Career: UGRD Course Component: Lecture

### MATH 0240 - ANALYTC GEOMETRY & CALCULUS 3

#### Minimum Credits: 4 Maximum Credits: 4

This is the third of a sequence of three basic calculus courses. It covers vectors and surfaces in space and the calculus of functions of several variables including partial derivatives and multiple integrals, stokes theorem, and first order differential equations. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: C or better in MATH 0230

### MATH 0250 - MATRIX THEORY & DIFFT EQUATNS

Minimum Credits: 4 Maximum Credits: 4 The topics include matrix algebra, vector spaces, linear transformations, linear differential equations with constant coefficients, and systems of first order linear differential equations. Matrix techniques are used extensively in the differential equations part of the course. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: MATH 0240 (C or better)

### MATH 0280 - INTRO TO MATRICES & LINEAR ALG

Minimum Credits: 3 Maximum Credits: 3 The principal topics which this course will cover include vectors, matrices, determinants, linear transformations, eigenvalues and eigenvectors, and selected applications. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: MATH 0280

### MATH 0400 - FINITE MATHEMATICS

Minimum Credits: 3 Maximum Credits: 3 The course covers the basic concepts of set theory, logic, combinatorics, Boolean algebra, and graph theory with an orientation towards applications. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### MATH 0410 - INTRO THEORETICAL MATHEMATICS

Minimum Credits: 3 Maximum Credits: 3 This course is an introduction to the theoretical treatment of sets, functions, relations, sequences, and limits. Classwork and homework will concentrate on the writing and understanding of proofs of theorems. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **MATH 0413 - INTRO THEORETICAL MATHEMATICS**

#### Minimum Credits: 4 Maximum Credits: 4 This course is an introduction to the theoretical treatment of sets, functions, relations, numbers, sequences, and limits. Classwork and homework concentrate reading and writing of proofs of theorems centered on these topics. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### MATH 0420 - INTRO THEORY 1-VARIABLE CALCUL

Minimum Credits: 3

Maximum Credits: 3 The course provides a careful treatment of the theoretical concepts of limit, continuity, derivative and integral, including the fundamental theorem of calculus. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### MATH 0430 - INTRO ABSTRCT ALGBRAIC SYSTEMS

### Minimum Credits: 3

Maximum Credits: 3 This course introduces the student to abstract algebraic concepts, rings, integral domains, fields, integers, rational, real and complex numbers, and polynomials. Many examples will be presented during class and in the homework. The students are expected to enhance their proof writing

techniques. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **Mechanical Engineering**

### **ME 0022 - KINEMATICS OF MACHINERY**

Minimum Credits: 3 Maximum Credits: 3 Fundamental theory of motion as applied to basic mechanisms. Analytical, computer, and graphical methods for determining displacements, velocities, and accelerations. Gears and gear trains are studied, and cams and linkages are synthesized. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: (MATH 0240 or 0201 or 0241) and (ENGR 0131 or 0135 or ET 0051) and (ME 0024 or MEMS 0024 or ET 0035); PROG: School of Engineering

### ME 0024 - INTRO TO MECHANCL ENGRG DESGN

Minimum Credits: 3 Maximum Credits: 3 Provides knowledge of design graphics and manufacturing processes by conventional and computer-aided methods. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

### **ME 0050 - THERMODYNAMICS**

Minimum Credits: 3 Maximum Credits: 3 Basic concepts and definitions; system and control volume; properties of pure substances; work and heat; first law and energy equations for control mass and control volume; second law and entropy. Academic Career: UGRD Course Component: Lecture Grade Component: Lecture

### **ME 1017 - THEORETICAL DYNAMICS**

Minimum Credits: 3 Maximum Credits: 3 Dynamics of rigid bodies including energy methods, conservation of momentum, problems of varying forces and constraints, relationship of motions to different reference frames, and Euler's equations. Academic Career: UGRD Course Component: Lecture Grade Component: Lecture

### **ME 1051 - APPLIED THERMODYNAMICS**

Minimum Credits: 3

Maximum Credits: 3

Thermodynamic processes, energy and entropy changes in real and ideal gases, vapors, and liquids, and mixtures of those fluids. Basic thermodynamic cycles (vapor and gas power, refrigeration, and compressors). Introduction to chemical thermodynamics. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade Course Requirements: PREQ: ME 0051 or MEMS 0051 or (MET 1154 and MET 1110); PROG: School of Engineering

## Management

### MGMT 1401 - BUSINESS SOCIETY & INT'L ENVRN

Minimum Credits: 3

Maximum Credits: 3

Business is no longer defined simply as an economic entity, and successful managers must concern themselves with more than economic issues. Using a wide variety of cases, this course examines the political, social, environmental, ethical, and international dimensions of the business environment.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: MGMT 1401 requires pre-requisites of MATH 0031 and ENGCMP 0200 or ENG 0101

## **Management Information Systems**

### **MIS 1311 - ELECTRONIC COMMERCE**

Minimum Credits: 3 Maximum Credits: 3

Electronic commerce will be studied using cases, lectures, readings and world wide web site evaluations. Student teams will give presentations analyzing individual companies or organizations, including a detailed analysis and evaluation of the business model being used. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## Music

## **MUSIC 0211 - INTRO TO WESTERN ART MUSIC**

Minimum Credits: 3 Maximum Credits: 3

This class will examine the history, culture, and practice of "classical" music. We will explore the technical workings of music and learn what to listen for in a wide variety of musical styles. We will also discuss the values and meanings of music in different social and political contexts. No prior knowledge of music is necessary and there is no requirement to read music to succeed in the course. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **MUSIC 0611 - COLLEGIATE CHORALE**

Minimum Credits: 1 Maximum Credits: 1 Open to students, faculty, staff, and community. The study and performance of traditional and contemporary choral works. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

## **MUSIC 0711 - HISTORY OF JAZZ**

#### Minimum Credits: 3 Maximum Credits: 3

The course focuses on the chronological development of jazz from its beginnings on the plantation to its present state as a world concert music.

Various styles such as ragtime, blues, gospel, spirituals, rhythm and blues, rock, soul, etc., Are examined. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## Nursing

### NUR 0065 - NUTRITION FOR CLINICAL PRACT

Minimum Credits: 2 Maximum Credits: 2 Brief introduction to the chemistry and metabolism of nutrients. Course primarily considers nutritional requirements throughout the life cycle and medical nutrition therapy for selected disruptions of health. Academic Career: UGRD Course Component: Lecture Grade Component: Lecture Grade

### NUR 0066 - NUTRITION FOR CLINCAL PRACTICE

### Minimum Credits: 3

### Maximum Credits: 3

This course focuses on nutrition for clinical practice for nurses. Food for energy and the major nutrients are considered for the promotion of health and for medical nutrition therapy for selected disruptions of health. Emphasis is placed on nutrition assessment and interventions in relation to the goals of the current healthy people document and dietary guidelines for Americans.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

### NUR 0068 - NUTRITION CLIN PRACTICE LAB

## Minimum Credits: 1

#### Maximum Credits: 1

Review of food for energy and the six categories of nutrients. Most of the material pertains to nutrition assessment and care of hospitalized patients including medical nutrition therapy for cardiovascular disease, diabetes mellitus and overweight/obesity issues in the United States. Academic Career: UGRD

Course Component: Credit Laboratory Grade Component: Letter Grade Course Requirements: PREQ: NUR 0066

### **NUR 0300 - NURSING FOUNDATIONS**

### Minimum Credits: 3

### **Maximum Credits: 3**

Students are introduced to various theories and concepts that are fundamental to nursing practice. They include: Orem's theory, Roy's adaptation model, Erikson's developmental theory, Maslow's basic human needs; concepts of stress and adaptation, health-illness continuum, health care delivery systems, the scope of nursing practice, legal and ethical principles including the nurse practice act and HIPPA regulations, professional standards and organizations, communication strategies, teaching and learning theories and critical thinking concepts and strategies emphasizing the nursing process.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

### NUR 0350 - NURSING FUNDAMENTALS

### Minimum Credits: 6

#### Maximum Credits: 6

Students are introduced to elements of nursing practice that are common to most clients and areas of practice. This course builds on the skills, knowledge, theories and concepts gained from the nursing foundations course and the natural and social sciences. This course focuses on pursuing critical thinking as the foundation for the nursing process. Through establishment of a therapeutic nurse-client relationship, the student becomes proficient in nursing assessment and physical examination of the individual. Based on individual patient needs and priorities, the student implements therapeutic nursing interventions to provide safety, hygiene and comfort. The concepts that are emphasized in this course include: health assessment, patient safety in the health care environment, fluid and electrolytes, principles of applied pathophysiology, principles of asepsis and hygiene, comfort and psychosocial support strategies, and pain recognition and management. This course includes a focused component on the care of the older adult emphasizing a holistic approach to promoting wellness. Utilization of the nursing process is directed toward maximizing the quality of life of the older adult. Students are guided to greater levels of understanding of their attitudes and perceptions of the dimensions of aging. **Academic Career:** UGRD

### NUR 0400 - ADULT MEDICAL SURGICAL NURSING

### Minimum Credits: 8

Maximum Credits: 8

This course builds on the knowledge and skills from the fundamentals of nursing practice course. This course provides students with opportunities to integrate theories, concepts and skills in delivering care to hospitalized adult clients in a variety of acute care facilities. Students gain knowledge of complex physiological and psychosocial stressors and adaptations related to health alterations of a medical-surgical nature. Alterations in cardiovascular, respiratory, reticuloendothelial, hepatic, immune system, nervous/sensory, musculo-skeletal, reproductive and gastrointestinal systems will be discussed. Care of the client during the perioperative period is included.

Academic Career: UGRD

Course Component: Practicum

Grade Component: Letter Grade

### NUR 0450 - FAMILY AND MENTAL HEALTH

### **Minimum Credits:** 9

#### **Maximum Credits: 9**

This course builds on the knowledge and skills from the NUR 0400 course. This course provides students with opportunities to integrate theories, concepts and skills in delivering care to clients in recognized phases of change or development - the perinatal period, children and families from infancy through adolescence, and clients experiencing mental health alterations. Utilizing the nursing process as a framework, students develop culturally appropriate nursing strategies to influence health. Concepts that are emphasized in this course include: collaborative practice among the health care team; a focus on the family as a resource in the treatment of illness and the promotion of wellness; and therapeutic nurse-client interactions. Students will rotate through obstetrics, pediatric and mental health care facilities during this course.

Academic Career: UGRD

**Course Component:** Practicum

Grade Component: Letter Grade

### NUR 0500 - COMPLEX AND COMMUNITY HEALTH

#### **Minimum Credits: 9**

#### Maximum Credits: 9

This course builds on the knowledge and skills from the NUR 0450 course. This course requires that the students apply knowledge of the nursing process to the care of multiple clients with more complex physiological and psychosocial problems in various settings. Concepts emphasized include: complex medical-surgical alterations in health; principles of trauma and emergency nursing; care of clients and communities during bio terroristic/emergency threats; health care teaching to clients and families; use of home and community resources to influence health; current legal, ethical, and professional issues; and future directions for health care.

Academic Career: UGRD Course Component: Practicum Grade Component: Letter Grade Course Requirements: PREQ: C or better in NUR 0450

### NUR 0525 - ROLE DEVELOPMENT

#### Minimum Credits: 1 Maximum Credits: 1

This course leads the student to prepare for licensure and employment as a graduate nurse. Discussions include NCLEX preparation strategies, contemporary jobs in nursing, an overview of professional organizations, an overview of advanced nursing education programs and employment opportunities, and support for impaired professionals.

Academic Career: UGRD Course Component: Lecture

Grade Component: Satisfactory/No Credit

Course Requirements: PREQ or COREQ: C or better in NUR 0450

### NUR 1110 - PHARMACOLOGY AND THERAPEUTICS

Minimum Credits: 3 Maximum Credits: 3 Examination of the major categories of pharmacologic agents and application of pharmacologic concepts to clinical nursing practice. Emphasis is placed on understanding the physiologic actions of the drugs, expected patient responses, major side effects, and implications for nursing. Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

## Microbiology

### **ORBIOL 0031 - MICROBIOLOGY 1**

### Minimum Credits: 4

**Maximum Credits: 4** 

This is an introductory course in microbiology designed for nursing students with no previous microbiology background. Three major areas included are the microorganisms, the immune mechanisms of the host, and the interaction of the host and the microorganisms in the disease process and in homeostasis. This course includes a laboratory series which is coordinated with the lecture content. Major emphasis is placed on infectious diseases and infection control at the nursing level.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

### **ORBIOL 0032 - MICROBIOLOGY 1 LABORATORY**

Minimum Credits: 0 Maximum Credits: 0 Content is devoted to the development of student's basic laboratory skills, application of microbiological methods and will emphasize performance, scientific investigation, and safety. Academic Career: UGRD Course Component: Practicum Grade Component: No Grade Required

## **Physical Education**

### PEDC 0017 - WIFFLEBALL

Minimum Credits: 1 Maximum Credits: 1

This course is designed to help students advance their skills in wiffleball. Skills include: throwing, catching, fielding, pitching, hitting. Game strategy, rules, regulations and umpiring are also covered. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0021 - PERSONAL FITNESS 1

Minimum Credits: 1 Maximum Credits: 1

An organized approach to health related fitness with diagnostic and prescriptive assessment, and cognitive input to include the variables modifiable by activity, techniques of training, and relaxation. The emphasis is on an individual self-designed program based on scientific principles with the goal of personal improvement and fitness knowledge of primary importance. **Academic Career:** UGRD

Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0023 - WEIGHT TRAINING

### Minimum Credits: 1

Maximum Credits: 1

A coeducational class designed to provide the student with the opportunity to develop and practice basic weight training techniques. With the guidance of the instructor, the student will be encouraged to develop an individualized self-designed program. The emphasis of this course will be placed on progressive-resistive exercises. Academic Career: UGRD

Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis

### PEDC 0035 - SOCIAL DANCE

Minimum Credits: 1

Maximum Credits: 1

Beginners course, the college substitute for Arthur Murray, emphasis on couple dances, such as: tango, waltz, rhumba, meringue, and fad dances--old and new.

Academic Career: UGRD

### **PEDC 0045 - TENNIS 1**

### Minimum Credits: 1

#### Maximum Credits: 1

This course is primarily designed for beginning tennis players. The course will emphasize an introduction to all of the basic tennis shots. Students will be taught how and when to use each shot and playing and scorekeeping will be explained. A small amount of strategy will be stressed for playing singles and doubles. The overall goal is to facilitate enjoyment of the game of tennis as a lifetime sport.

#### Academic Career: UGRD

**Course Component:** Credit Laboratory **Grade Component:** LG/SNC Elective Basis

### PEDC 0048 - RACQUETBALL 1

#### Minimum Credits: 1 Maximum Credits: 1

This course is designed to introduce the beginner to the significant components of racquetball. Three types of racquetball games, singles, doubles, and cut throat, will be introduced in conjunction with individual skill development. The grip, ready position, racquet swing, service, return of service, and shot making will be covered. Game strategies and rules and regulations will be reviewed.

Academic Career: UGRD

Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis

### PEDC 0049 - BADMINTON

### Minimum Credits: 1

#### Maximum Credits: 1

This course is designed to introduce the beginner to the significant components of badminton. The following basic strokes will be presented in class; forehand and backhand, overhead clear, high singles service, low doubles service, smash and drop. Rules and regulations and strategies for doubles and singles games will be presented.

Academic Career: UGRD

Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0050 - RACQUETBALL 2

## Minimum Credits: 1

Maximum Credits: 1

This course provides basic stroke mechanics, practice drills, and winning strategies for advanced players with a knowledge of the game of racquetball. Class time will deal in depth with the drive, lob, overhead z-serves, serve returns, back wall play, and training aids. Developing strategies for winning in singles and doubles will be dealt with extensively in class.

Academic Career: UGRD

Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0051 - DIRECTED STUDY

Minimum Credits: 1 Maximum Credits: 6

If a student is interested in developing a program independently, or if a student is interested in a program not offered formally by this department, he or she may develop a contract with an instructor in a specific area and present this contract for approval to the program coordinator. Academic Career: UGRD Course Component: Independent Study

Grade Component: LG/SNC Elective Basis

### PEDC 0056 - SOCCER

#### Minimum Credits: 1

#### Maximum Credits: 1

For the beginners who wish to develop competence in the skills, rules, and strategies required for participation in soccer. The course also covers the history and development of soccer as an international sport.

Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0057 - BASKETBALL 1-MEN

### Minimum Credits: 1

#### Maximum Credits: 1

Supervised competition follows a conditioning period in which individual skills and team strategy are stressed. Opportunity to improve on previously acquired skills and become a team member is provided. Players measured by individual improvement and contribution to the team. Academic Career: UGRD

**Course Component:** Credit Laboratory **Grade Component:** LG/SNC Elective Basis

### PEDC 0060 - BASKETBALL 1 - CO-EDUCATIONAL

### Minimum Credits: 1

Maximum Credits: 1 Supervised competition follows a four-week conditioning period in which individual skills and team strategy are stressed. Opportunity to improve on

previously acquired skills and become a team member is provided. Academic Career: UGRD Course Component: Credit Laboratory

Grade Component: LG/SU3 Elective Basis

### **PEDC 0062 - TOUCH FOOTBALL**

#### Minimum Credits: 1

#### Maximum Credits: 1

A co-educational course designed to provide the student with the opportunity to develop the fundamental skills of football, along with experiencing organized competition in touch football games. Students are encouraged to develop offensive plays and defensive strategies and are given opportunities to evaluate their ideas under practice and competitive conditions.

Academic Career: UGRD

**Course Component:** Credit Laboratory **Grade Component:** LG/SNC Elective Basis

### PEDC 0065 - VOLLEYBALL

### Minimum Credits: 1

#### Maximum Credits: 1

This course is designed to introduce the beginner to the significant components of volleyball. Basic skills to be taught will include the overhead volley, forearm pass, service, spike, individual block and defensive recovery skills. A 4-2 right-side-setter offensive system will be introduced with a 6-back and a 6-up defensive system. All rules and regulations will be reviewed during the course.

Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0067 - KARATE

Minimum Credits: 1

#### Maximum Credits: 1

Introduction to the principles and techniques of traditional shotokan karate. Commencing with physical conditioning and basic blocking, stroking, punching, and kicking techniques-- training progresses through traditional formal exercise (kata), sparring, and self-defense methods. A karate club is available for those who wish to continue their study of karate beyond the scope of this course.

Academic Career: UGRD Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis

### PEDC 0085 - BADMINTON/PADDLE TENNIS

### Minimum Credits: 1

Maximum Credits: 1 Initial class time will concentrate on the basic skills and strategies of the game. The rules and regulations will be in effect as the class progresses from recreational play to an aggressive power sport. Academic Career: UGRD Course Component: Credit Laboratory

Grade Component: LG/SNC Elective Basis

### PEDC 0095 - LEADERSHP IN INTRAMURAL SPORTS

### Minimum Credits: 3

### Maximum Credits: 3

Designed for college students to assist the intramural program in the capacity of sports officiating and supervision, community recreation programs, and individuals preparing to enter the sports officiating field. In addition, the course is intended to provide special direction for physical education and recreation major students and prospective coaches. Students enrolling will be expected to serve a minimum of thirty (30) hours in several of these programs.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PEDC 0099 - BASIC ROCK CLIMBING

#### Minimum Credits: 1 Maximum Credits: 1

Beginning with bouldering, the course will deal primarily with rope handling and moving on vertical rock planes in a safe manner. Covered in this course are bouldering, friction and balance climbing, 3-point suspension, use of ropes, knot craft, body rappelling, free rigging climbs, mountain safety, basic belaying, use of webbing (slings and harnesses), chinmey techniques and natural protection. Academic Career: UGRD

**Course Component:** Credit Laboratory **Grade Component:** LG/SNC Elective Basis

### PEDC 0105 - CROSS-COUNTRY SKIING

Minimum Credits: 1 Maximum Credits: 1 Cross-country skiing techniques for beginning and intermediate skiers. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0108 - PHYSCL CONDG/WEIGHT TRAINING 1

Minimum Credits: 1 Maximum Credits: 1 Weight training, aerobic, and flexibility techniques. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### **PEDC 0111 - HORSEMANSHIP**

Minimum Credits: 1 Maximum Credits: 1 Care of horses, riding instruction, and stable management. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0118 - DOWNHILL SKIING 1

Minimum Credits: 1 Maximum Credits: 1 The fundamental techniques of downhill skiing. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0121 - OUTDOOR RECREATION

Minimum Credits: 1 Maximum Credits: 1 Canoeing, backpacking, horseback riding, and camping. Academic Career: UGRD

### PEDC 0146 - FIRST AID AND CPR

#### Minimum Credits: 1 Maximum Credits: 1

A laboratory-lecture course in which American red cross techniques of cardiopulmonary resuscitation (CPR) and standard first aid are presented. All students who meet the American red cross standards will receive American red cross certification. Academic Career: UGRD

Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0155 - INDIVIDUAL & TEAM ACTIVITIES 1

Minimum Credits: 1 Maximum Credits: 1 An opportunity to sample leisure-time sports activities, such as archery, badminton, basketball, paddle tennis, racquetball, ragball, tennis, or volleyball. Choice of activity will depend upon number of students enrolled and group preferences. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0156 - INDIVIDUAL & TEAM ACTIVITIES 2

Minimum Credits: 1 Maximum Credits: 1 An opportunity to sample leisure-time sports activities, such as archery, badminton, basketball, paddle tennis, racquetball, ragball, tennis, or volleyball. Choice of activities will depend upon number of students enrolled and group preference. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0157 - INDIVIDUAL & TEAM ACTIVITIES 3

Minimum Credits: 1 Maximum Credits: 1 An opportunity to sample leisure-time sports activities, such as archery, badminton, basketball, paddle tennis, racquetball, ragball, tennis, or volleyball. Choice of activities will depend upon number of students enrolled and group preferences. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### **PEDC 0161 - INDIVIDUAL FITNESS**

Minimum Credits: 1 Maximum Credits: 1 Fundamental fitness concepts and appropriate physical activities will be introduced to students. Students will be required to implement and complete a 10-week fitness program. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

### PEDC 0171 - FITNESS KICK BOXING

## Minimum Credits: 1

Maximum Credits: 1

Our exercise program is based on the concepts of boxing, karate, muay thai kick boxing, and total fitness accompanied by rhythmatic music. Conditioning is focused on the areas of endurance, strength, and flexibility; all of which can bring about positive physical changes in participating students. Aerobic and anaerobic power training with speed bay and heavy bag is part of the training module.

Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

### PEDC 0172 - OUTDOOR ARCHERY

Minimum Credits: 1

Maximum Credits: 1 From the evolution of the bow and arrow to today's complex equipment, this hands-on course details all aspects of target shooting leading up to big game decoys. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0228 - PERSONAL FITNESS 2

Minimum Credits: 1 Maximum Credits: 1 Designed to provide the student with an advanced understanding of the scientific basis of physical fitness. The course is intended to help each student develop an in-depth personal fitness profile and subsequent advanced program of physical activity. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: LG/SNC Elective Basis

### PEDC 0262 - YOGA 1

Minimum Credits: 1 Maximum Credits: 1 An elementary course on the practice and theory of the basic principles of yoga. This class will provide students with a plan to focus on their particular bodies' strengths and weaknesses plus increase flexibility. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

### PEDC 0263 - YOGA 2

Minimum Credits: 1 Maximum Credits: 1 An intermediate level course on the theory of basic principles of yoga. Academic Career: UGRD Course Component: Credit Laboratory Grade Component: Letter Grade

### PEDC 0363 - ZUMBA

Minimum Credits: 1

### Maximum Credits: 1

Zumba is a one of kind combination of dance and exercise, designed to put "Fun" back into fitness. The zumba workout maximizes caloric output, fat burning, and total body toning. The routines feature aerobic interval training with a combination of fast and slow rhythms that tone and sculpt the body. Exotic and explosive Latin rhythms create a party like atmosphere that delivers results, as well as a "Feel happy" workout. No previous experience in dance is needed to have fun with zumba. Academic Career: UGRD

**Course Component:** Practicum **Grade Component:** Letter Grade

### **PEDC 1001 - HORSEMANSHIP**

### Minimum Credits: 2

**Maximum Credits: 2** 

This course gives the student basic exposure to the horse from the ground as well as from the horse's back. Students learn the basics of caring for a horse and elementary principles of horse training and management. Students will be given the opportunity to practice the principles of hunt-seat equitation through actual riding experience provided by a local riding academy. Initial riding experience will occur on a lounge line with the opportunity for individualized progression to jumping, etc.

#### Academic Career: UGRD

**Course Component:** Credit Laboratory **Grade Component:** LG/SNC Elective Basis

# Philosophy

### PHIL 0010 - CONCEPTS OF HUMAN NATURE

Minimum Credits: 3 Maximum Credits: 3 An introduction to some ways in which ethical and social thought has been influenced by different views of human nature. Readings are from such authors as Plato, Hobbes, Rousseau, Marx, and Freud. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0080 - INTRO TO PHILOSOPHCAL PROBLEMS

Minimum Credits: 3 Maximum Credits: 3 An introduction to some classical problems of philosophy. Topics vary, but might include skepticism, free will, the existence of god, and the justification of ethical beliefs. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0200 - HISTORY OF ANCIENT PHILOSOPHY

Minimum Credits: 3 Maximum Credits: 3 The aim of this course is to introduce students to some of the main achievements and leading ideas of ancient Greek philosophy up to classical times. Emphasis will be on understanding and evaluating the arguments and ideas of the Greek philosophical tradition. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0300 - INTRODUCTION TO ETHICS

Minimum Credits: 3 Maximum Credits: 3 This is an introductory course considering the question of one fundamental moral principle - right and wrong. The results are applied to moral problems of serious interest today. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0360 - MORALITY AND MEDICINE

Minimum Credits: 3 Maximum Credits: 3 This introductory level undergraduate course examines various ethical problems arising in medicine, such as euthanasia, abortion, and the allocation of resources. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0470 - PHILOSOPHY OF RELIGION

Minimum Credits: 3 Maximum Credits: 3 A critical examination of the rationality of faith in the existence of god. Traditional arguments both for and against the existence of god are considered, along with pragmatic justifications of faith based upon its beneficial consequences. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0473 - PHILOSOPHY OF RELIGION

Minimum Credits: 3 Maximum Credits: 3 An examination of the arguments for and against the existence of god. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0500 - INTRODUCTION TO LOGIC

Minimum Credits: 3 Maximum Credits: 3 An introduction to the concepts and methods of modern deductive logic. Propositional logic is emphasized, but quantificational logic is touched upon. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0610 - PHILOSOPHY AND SCIENCE

Minimum Credits: 3 Maximum Credits: 3 An introductory course in philosophy of science. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 0840 - SCIENCE AND RELIGION

Minimum Credits: 3 Maximum Credits: 3 This introductory undergraduate course addresses two questions; does the scientific understanding of the world suffer from a kind of incompleteness that can be remedied by the supernaturalist religions? Or is there even a clash between contemporary science and such religion? Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 1303 - EASTERN PHILOSOPHY

Minimum Credits: 3 Maximum Credits: 3 The theory and practice of Hinduism, Buddhism, Taoism, Zen Buddhism, and Sufism, and comparisons with Western philosophies and religions. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 1500 - SYMBOLIC LOGIC

Minimum Credits: 3 Maximum Credits: 3 This advanced undergraduate course develops skills in formal and informal reasoning in predicate-quantifier logic, and covers formal semantics for sentential logic, informal semantics for predicate-quantifier logic, and elementary syntactic metatheory. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHIL 1612 - PHIL OF 20TH CENTURY PHYSICS

### Minimum Credits: 3

#### **Maximum Credits: 3**

An examination of the fascinating philosophical problems to which modern physical theories have given rise. No previous formal training in physics or mathematics will be presupposed, since the basic physical ideas needed will be introduced largely qualitatively with an emphasis on concepts rather than equations. Topics will vary from year to year with instructor, but center around classical mechanics, quantum mechanics, and relativity theory.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## Physics

### PHYS 0084 - INTRO TO PHYSICAL SCIENCE

Minimum Credits: 3 Maximum Credits: 3 A course for non-science students which introduces topics in physics, including heat, electricity, electromagnetism, vector quantities, energy and work, waves, and others. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHYS 0106 - BASIC PHYS SCIENCE & ENGRG 3

Minimum Credits: 3 Maximum Credits: 3 This is the third term of a three-term, calculus-based sequence in introductory physics. This term deals with electromagnetism, waves and optics, and modern physics. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHYS 0110 - INTRODUCTION TO PHYSICS 1

Minimum Credits: 3 Maximum Credits: 3 This is the first term of a two-term, algebra-based sequence in introductory physics. This term deals with mechanics, heat and thermodynamics, and waves. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREREQ: C- or better in MATH 0031

### PHYS 0111 - INTRODUCTION TO PHYSICS 2

Minimum Credits: 3 Maximum Credits: 3 This is the second term of a two-term, algebra-based sequence in introductory physics. This term deals with electricity and magnetism, optics, and modern physics. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: PHYS 0110

### PHYS 0174 - BASC PHYS SCI & ENGR 1 (INTGD)

Minimum Credits: 4 Maximum Credits: 4 The integrated curriculum version of PHYS 0104, the first part of a two-term sequence (PHYS 0174 - PHYS 0175) introduces students to the basic principles of mechanics. An effort has been made to achieve a better integration of physics with the first term of calculus, engineering, and chemistry. The theory of waves and the kinetic theory of gases will be discussed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ or CREQ: MATH 0220

### PHYS 0175 - BASC PHYS SCI & ENGR 2 (INTGD)

Minimum Credits: 4

Maximum Credits: 4 The integrated curriculum version of PHYS 0105, the second part of a two-term sequence (PHYS 0174 - PHYS 0175), introduces students to the basic principles of physics. An effort has been made to achieve a better integration of physics with the first term of calculus, engineering, and chemistry. Modern physics (special relativity, elementary quantum mechanics, and atomic structure) will be discussed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: REQ: PHYS 0174 and COREQ or PREQ: MATH 0230

### PHYS 0212 - INTRO TO LABORATORY PHYSICS

Minimum Credits: 2 Maximum Credits: 2 This is an introductory physics laboratory associated with the physics PHYS 0110 - PHYS 0111 sequence. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: PHYS 0111

### PHYS 0219 - BASIC LAB PHYS SCIENCE & ENGRG

Minimum Credits: 2 Maximum Credits: 2 This is an introductory physics laboratory associated with the physics 0104 - 0105 - PHYS 0106 sequence. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: CREQ: PHYS 0175

### PHYS 1917 - MODERN PHYSICS ATOMS & NUCLEI

Minimum Credits: 3 Maximum Credits: 3 This course is an intermediate-level introduction to modern physics with a greater emphasis on applications of atomic and nuclear physics than in physics 1119. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **Physical Therapist Assistant**

### PHYSTA 0050 - FRESHMAN SEMINAR

Minimum Credits: 1 Maximum Credits: 1 An introduction to the physical therapist assistant program. Academic Career: UGRD Course Component: Seminar Grade Component: H/S/U Basis

### PHYSTA 0110 - INTRO TO PHYSICAL THERAPY

#### Minimum Credits: 3 Maximum Credits: 3

Introduces the PTA student to many aspects of physical therapy including the PT/PTA relationship, communication, the history of physical therapy, the APTA, scope of practice, ethical principles, laws and standards which affect the student, health care team roles, professional development, documentation, liability and confidentiality. Students are exposed to basic administration principles and continuous quality improvement. Students learn about universal precautions, taking vital signs, and application of therapeutic heat and cold.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

### PHYSTA 0221 - PTA PRINCIPLES & PROCEDURES 1

### Minimum Credits: 3

Maximum Credits: 3

Instructs the student in the application of therapeutic modalities, gait training, wheelchair training, and identification of architectural barriers/environmental modifications. Students also learn how to document services rendered, how to participate in discharge planning, how to provide psychosocial support, and how to educate patients and families. Emphasis is placed on communication skills and ethical practice. Successful completion of the competency checklist is required to pass this course. Academic Career: UGRD

### PHYSTA 0222 - PTA PRINCIPLES & PROCEDURES 2

## Minimum Credits: 4

Maximum Credits: 4

Instructs the student in basic assessment skills, therapeutic exercise, and activities of daily living. Students learn procedures for pulmonary hygiene and wound care. Students receive further instruction on psychosocial support, patient/family education, ethics, communication, and documentation. Successful completion of the competency checklist is required to pass this course.

Academic Career: UGRD

Course Component: Lecture

Grade Component: Letter Grade

### PHYSTA 0223 - PTA PRINCIPLES & PROCEDURES 3

### Minimum Credits: 4

Maximum Credits: 4

Provides instruction in electrical stimulation and biofeedback. Students learn to treat patients who present with orthopedic, neurologic, and pediatric problems. Students receive further instruction in psychosocial support, documentation, ethical behavior, patient/family education, and communication.

Academic Career: UGRD Course Component: Lecture Grade Component: Letter Grade

### PHYSTA 0224 - PTA PRINCIPLES & PROCEDURES 4

#### Minimum Credits: 4

#### Maximum Credits: 4

Provides laboratory instruction for the treatment of patients with orthopedic, neurologic, and pediatric problems. Students learn the developmental sequence and how it applies to treatment. Students learn advanced therapeutic exercise techniques. Students receive further instruction in psychosocial support, documentation, ethical behavior, patient/ family education and communication. Successful completion of the competency checklist is required to pass this course.

Academic Career: UGRD

Course Component: Lecture

Grade Component: Letter Grade

### PHYSTA 0225 - PTA PRINCIPLES & PROCEDURES 5

#### Minimum Credits: 3

#### **Maximum Credits: 3**

Students learn and practice appropriate physical therapy data collection and intervention techniques related to orthopedic problems. Students continue instruction and practice in physical therapy documentation and ethical practice. This course runs concurrently with PHYSTA 0223 and PHYSTA 0224.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PHYSTA 0228 - INDEP STUDY IN PHYSCL THERAPY

Minimum Credits: 0 Maximum Credits: 7 This course is designed to allow students further study in physical therapy. The material covered may be either remedial or advanced study. The course is individually designed by the PTA faculty to meet the specific educational needs of the PTA student. Academic Career: UGRD Course Component: Independent Study Grade Component: Letter Grade

### PHYSTA 0331 - CLINICAL EDUCATION 1

Minimum Credits: 4 Maximum Credits: 4 A full-time field assignment. Academic Career: UGRD Course Component: Clinical Grade Component: Satisfactory/No Credit

### PHYSTA 0332 - CLINICAL EDUCATION 2

Minimum Credits: 6 Maximum Credits: 6 A full-time field assignment. Academic Career: UGRD Course Component: Clinical Grade Component: Satisfactory/No Credit

### PHYSTA 0333 - CLINICAL EDUCATION 3

Minimum Credits: 6 Maximum Credits: 6 A full-time field assignment. Academic Career: UGRD Course Component: Clinical Grade Component: Satisfactory/No Credit

### PHYSTA 0440 - PROFESSIONAL ISSUES SEMINAR

Minimum Credits: 1 Maximum Credits: 1 Designed to provide the student with additional information in conjunction with their full-time affiliations. Topics may vary depending on issues raised from students while in the clinic. Topics may include: licensure, teaching methods, research, documentation, advances in the field, changes in legislation, insurance issues, etc. Academic Career: UGRD Course Component: Seminar Grade Component: H/S/U Basis

## **Political Science**

### **PS 0197 - DIRECTED STUDY**

Minimum Credits: 1 Maximum Credits: 6 Directed study is designed to give students the opportunity to design and carry out a research project to be agreed upon by the student and a supervising faculty member. Academic Career: UGRD Course Component: Directed Studies Grade Component: LG/SNC Elective Basis

### **PS 0200 - AMERICAN POLITICS**

#### Minimum Credits: 3 Maximum Credits: 3

This course is, quite generally, designed to provide students with a basic working knowledge of the basic goals of the constitutional framers, giving students an understanding of the purposes of the American political system; the essential structures (or institutions) within the American political system, the behavior (broadly defined) of the actors within the American political system, the purpose and performance of the linkage institutions in the United States (possibly including political parties, elections, and interest groups); and the types of policies that are often produced by a system with the characteristics of those found in the United States. Depending on the interests, area of expertise, and inclinations of the particular instructor, some of these may be emphasized more heavily than others.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 0205 - LAW AND THE COURTS**

Minimum Credits: 3 Maximum Credits: 3

This course examines the major components of the American legal system, including the police, the law profession, prosecutors and public defenders, state and federal courts, plus the impact of the Supreme Court on the American political system. Emphasis is on the realities of the legal process in operation - how it affects the "who gets what" question. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 0262 - UNITED STATES HEALTH POLICY**

### Minimum Credits: 2

Maximum Credits: 2 A survey of health care and health policy in the United States. Description and analysis of the proposals, current practices, and the reactions of interest groups will be the central theme of the course. Both national and state policies will be addressed. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 0300 - COMPARATIVE POLITICS**

### Minimum Credits: 3

#### Maximum Credits: 3

This course provides students with basic information about a range of political systems outside the United States and teaches them to use that information to examine major theories about politics. The course is also designed to help students understand the government and the politics of the United States in comparative perspective and to develop some understanding of comparative methodology and the logic of comparison as a social science method. Depending on the interests, area of expertise, and inclinations of the particular instructor, some regions and topics might be emphasized more heavily than others.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 0500 - WORLD POLITICS**

#### **Minimum Credits: 3**

#### Maximum Credits: 3

This course aims to increase students' knowledge of the history of the modern state system and, in particular, political developments during the past few decades. It introduces students to basic concepts and analytic frameworks that political scientists employ to understand world politics, enhancing students' knowledge of international institutions that play important roles in world politics and exploring current issues in world affairs relating to human welfare and security. Depending on the interests, area of expertise, and inclinations of the particular instructor, some of these may be emphasized more heavily than others.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 0600 - POLITICAL THEORY**

### Minimum Credits: 3

### Maximum Credits: 3

This course is designed to introduce students to the idea of normative political theory and to important authors and concepts in the western political theory tradition. Students will learn to understand both historical and contemporary debates surrounding important political concepts such as authority, justice, liberty, and democracy, and to appreciate the differences among normative, empirical, logical, and faith-based political claims. Students will learn to read critically and analytically, to make simple normative arguments, and to explain the specific role of normative arguments in political science and political life. Depending on the interests, area of expertise, and inclinations of the particular instructor, some of these may be emphasized more heavily than others.

#### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 1201 - CONSTITUTION & CIVIL LIBERTIES**

#### Minimum Credits: 3

#### Maximum Credits: 3

The course will explore major topics in the area of civil liberties and civil rights which have concerned the Supreme Court in recent years and which have provoked extensive political and social controversy. Examples include decisions about discrimination, privacy, freedom of speech and assembly, and conflicts between freedom of the press and a fair trial.

### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 1202 - AMERICAN CONSTITUTIONAL LAW**

#### Minimum Credits: 3

#### **Maximum Credits: 3**

The United States constitution plays an extraordinarily powerful role in American political life. The primary focus of this course is examination of

the role of constitutional law in the American political process. We do this by analyzing constitutional interpretation by the United States Supreme Court and other federal courts in its major decisions. Students will learn how the court reached its decisions, who some significant justices have been, how the court considered contending arguments, and what the consequences of these decisions for our political system have been. Topics include the development of judicial review and close analysis of the way in which the court has addressed the two major structural features of the U.S. Constitution ' separation of powers and federalism in an historic and contemporary setting. Specific issues in these areas are struggles over presidential and congressional power and national versus state power. We also address issues regarding civil liberties and civil rights. Students should find this course helpful in reaching a more sophisticated understanding of the major issues of constitutional law in American life, as well as providing a useful background to the cases and kinds of legal analysis they may pursue in further study in law school or other graduate study. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### **PS 1211 - LEGISLATIVE PROCESS**

## Minimum Credits: 3

Maximum Credits: 3

This course provides an analysis of the legislative process in modern democracies with primary attention devoted to the legislative process in the United States. The history and meaning of representation is analyzed as is the behavior of participants in the legislative process. The impact of social-economic forces on decision-making in the United States is studied as are the roles of interest groups, political parties, the executive branch, and the judiciary.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 1262 - HEALTH POLICY IN UNITED STATES**

### Minimum Credits: 3

Maximum Credits: 3

This course is an introduction to current problems of health care and health policy in the United States. Description and analysis of the proposals, current practices, and the reactions of interest groups will be the central theme of the course. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### **PS 1267 - ENVIRONMNTAL POLITICS & POLICY**

### Minimum Credits: 3

**Maximum Credits: 3** 

This course will be an introduction to environmental policies and policies in the United States. The course will examine both the historical development of environmental policies in the U.S., As well as address the contemporary context in which current environmental policies are formulated, legitimated, and implemented. In doing so, the course will look at some of the key issues, actors, and policies in environmental politics. **Academic Career:** UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### PS 1341 - GVRNT & POLIT USSR/RUSS FEDRTN

#### Minimum Credits: 3 Maximum Credits: 3

A survey of the political systems in the USSR (1917-1991) and its major successor, the Russian Federation (1991-present). The first section deals with the period from the Bolshevik Revolution in 1917 until the mid-1980s. The second section examines the efforts to reform the political system under general Secretary Gorbachev. The final section deals with the collapse of the USSR in 1991 and the subsequent development of the Russian Federation as an independent state.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PS 1810 - SPECIAL TOPICS**

Minimum Credits: 3 Maximum Credits: 3 Detailed analysis of a particular topic not covered by regularly scheduled courses. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SU3 Elective Basis

# Psychology

### **PSY 0010 - INTRODUCTION TO PSYCHOLOGY**

### Minimum Credits: 3

**Maximum Credits: 3** 

Summary of our present knowledge in fundamental areas of learning, sensation and perception, biological basis of behavior, developmental patterns, motivation, emotion, personality and adjustment, and measurement of behavior. Information and concepts are applied to problems in understanding human behavior. Additional out-of-class experiments or an equivalent research paper are a part of the course.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PSY 0020 - PSYCHOLOGICAL STATISTICS**

### Minimum Credits: 4

Maximum Credits: 4

The aim of the course is to provide the student with a basic understanding of statistical techniques of primary interest in psychology, education and behavioral sciences. Topics include frequency distributions, graphing techniques, percentile ranks, measures of central tendency and variability, standard scores, normal curve, probability, combinations and permutations, correlations and regression, sampling distributions, tests of hypotheses, confidence intervals, one and two-way analysis of variance and non-parametric analyses.

### Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### **PSY 0105 - INTRODUCTION TO SOCIAL PSYCH**

### Minimum Credits: 3

**Maximum Credits: 3** 

An overview of social psychology. The scientific study of how one person's behavior and/or characteristics can influence the thoughts, feelings and behaviors of others. Topics covered include social perception, attitude formation and change; prejudice and discrimination; altruism and aggression; cooperation, competition, and bargaining; group decision making, leadership; and environmental effects on behavior.

### Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200

### **PSY 0160 - PSYCHOLOGY OF PERSONALITY**

#### Minimum Credits: 3

**Maximum Credits: 3** 

Survey of major approaches to the study of personality, focusing on their relative abilities to provide coherent explanations for individual behavior. Issues involved in the assessment of personality will also be discussed and several assessment procedures evaluated. Recent research in personality psychology is reviewed and analyzed.

### Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200

### **PSY 0184 - PSYCHOLOGY OF GENDER**

#### Minimum Credits: 3

Maximum Credits: 3

This course is intended to be an introduction to the theories and current research on the psychological nature of women and the psychology of gender roles. The male perspective on gender roles will also be included. The effects of cultural factors that determine both female and male roles in our society will be examined as well as how these roles affect different interpersonal relationships between women and men. The potential for change at both the societal and individual level will be discussed.

### Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: PSY 0010 or 0012 or 0105 or 0101 or 0200 or PSY 0203 or 0210

### **PSY 0203 - SOCIAL PSYCHOLOGY**

Minimum Credits: 3 Maximum Credits: 3 An examination of the effects of people on other people, social factors in attitude formation and change, person perception, social influence, and interpersonal relations (e.g. affiliation, aggression, and altruism). Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: PSY 0010 or PSY 0101

### PSY 0265 - DATA ANALYSIS & RESEARCH WRIT

Minimum Credits: 3 Maximum Credits: 3 This course covers SPSS data analyses and the introduction to the writing style required by the American psychological association. (APA style) Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREREQ: STAT 1000

### **PSY 0310 - DEVELOPMENTAL PSYCHOLOGY**

Minimum Credits: 3 Maximum Credits: 3 The course focuses on development of the child from birth to adolescence, the current theory and research concerning social, emotional, intellectual, perceptual and language development. The organization of the course is topical. Coverage is confined to normal development; what develops, how and why in the average child. Little attention to abnormal development. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200

## PSY 0405 - LEARNING AND MOTIVATION

Minimum Credits: 4 Maximum Credits: 4 This course elucidates fundamental principles of learning and motivation as derived predominantly from animal research. Focus is given to the empirical and conceptual processes underlying the facilitation and suppression of behavior, e.g. primary and conditioned reinforcement, nonreinforcement, punishment and avoidance as well as the generalization and discrimination of these processes. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: PSY 0010 or 0012 or 0015 or 0101 or 0200

### **PSY 1050 - TOPICS IN PSYCHOLOGY**

Minimum Credits: 3 Maximum Credits: 3 A topics course. Content will vary from term to term depending on instructor. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **PSY 1205 - ABNORMAL PSYCHOLOGY**

#### Minimum Credits: 3 Maximum Credits: 3

This course provides an overview of the major issues in the area of mental illness. This course emphasizes the scientific approach to understanding the major psychological and behavioral disorders. The research and clinical literatures regarding the etiology, course and treatment of these disorders will be presented.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: PSY 0010

### **PSY 1270 - CHILD PSYCHOPATHOLOGY**

### Minimum Credits: 3

#### Maximum Credits: 3

This course considers research and theory which bear on the development of psychological disorders in children. Biological and environmental factors which contribute to childhood disorders are considered with special emphasis on the role of the family. Childhood psychosis, hyperactivity, and depression are studied to illustrate theoretical models and empirical findings.

Academic Career: UGRD

**Course Component:** Lecture **Grade Component:** LG/SNC Elective Basis **Course Requirements:** PSY 0010

### **PSY 1355 - ADOLESCENCE**

### Minimum Credits: 3

Maximum Credits: 3 The period of adolescence will first be studied from both a psychological and sociological perspective. Focus is on the individual as he/she experiences physical, cognitive, and social changes. Contributions of such theorists as Freud, Erikson, and Piaget are highlighted. A number of critical issues and conflicts of adolescence are discussed i.e. the generation gap, sex roles and behaviors, juvenile delinquency. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: (PSY 0010 or 0012 or 0015 or 0101 or 0200) and (PSY 0310 or 0202 or 0230)

## **Education, Psychology in Education**

### **PSYED 0005 - LIFE SPAN DEVELOPMENT**

Minimum Credits: 3 Maximum Credits: 3

This course follows the developing person from conception until the end of life. The course combines theory, research and practical applications from developmental psychology. Lecture topics include genetic influences on development; prenatal and birth factors; physical, cognitive, social, personality, and cultural variables which influence development in infancy, childhood, adolescence, early-, middle-, and late adulthood. **Academic Career:** UGRD

Course Component: Lecture

Grade Component: Letter Grade

## **Religious Studies**

### **RELGST 0115 - BIBLE AS LITERATURE**

#### Minimum Credits: 3 Maximum Credits: 3

This introductory course acquaints students with what is in the bible and provides background information drawn from various disciplines about the elements and issues that give it its distinctive character. Attention is necessarily given to its religious perspectives, since they govern the nature and point of view of the biblical narratives, but no specific religious view is urged.

Academic Career: UGRD Course Component: Seminar Grade Component: LG/SNC Elective Basis

### **RELGST 0135 - CHRISTIAN BIBLE**

Minimum Credits: 3 Maximum Credits: 3 An introduction to the text of the Christian bible. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 0283 - US AND THE HOLOCAUST**

#### Minimum Credits: 3 Maximum Credits: 3

With increasing interest in the Holocaust in Europe, this course focuses on the American side of the Atlantic - on issues of anti-Semitism and antiimmigrant sentiment in this country and on America's response to the holocaust. We will also look at some post-Holocaust issues as well. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 0405 - RELIGION IN EARLY AMERICA**

Minimum Credits: 3 Maximum Credits: 3 A survey of American religious history from the colonial period through the Civil War. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 0415 - RELIGION IN MODERN AMERICA**

Minimum Credits: 3 Maximum Credits: 3 An examination of the major developments in American religion from the Civil War to the present. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 0715 - PHILOSOPHY OF RELIGION**

Minimum Credits: 3 Maximum Credits: 3 An examination of the arguments for and against the existence of God. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 1120 - ORIGINS OF CHRISTIANITY**

Minimum Credits: 3 Maximum Credits: 3 An historical investigation of Christian origins against the backdrop of both the Greco-Roman and Jewish worlds. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 1130 - VARIETIES OF EARLY CHRISTNITY**

#### Minimum Credits: 3 Maximum Credits: 3

This course will examine the many different and often competing forms of Christianity that existed during the first five centuries of our common era. We will include an historical survey of Mediterranean culture and society in the historical Roman Empire to help us understand the ways in which Christianity developed in relation to the philosophical, sociological, theological, and political environment of this period. We will also focus on the contribution of the early varieties of Christianity to modern Western views of the relationship between the individual body and society. The literature of this period represents a broad variety of beliefs and practices ranging from philosophical views of god and matter (and the nature of each), to notions of life-long celibacy.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **RELGST 1144 - CLASSICAL MYTHOLOGY & LIT**

### Minimum Credits: 3

Maximum Credits: 3 This course examines how authors of classical antiquity used the traditional figures and stories of their culture's mythology as material for works of literature. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

## Russian

### **RUSS 0800 - MASTERPIECES 19THC RUSSIAN LIT**

Minimum Credits: 3 Maximum Credits: 3

This course will focus on selected masterpieces of Russian literature of the nineteenth century. The chosen works will be studied and discussed for their intrinsic literary value and as examples of main literary trends. Readings will include short stories by Pushkin, Gogol, Leskov, and Chekov, as well as Gogol's novel "dead souls", Dostoevsky's "crime and punishment", and Tolstoy's "war and peace".

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### **RUSS 0870 - HISTORY OF RUSSIAN FILM 1**

Minimum Credits: 3 Maximum Credits: 3 The course presents the history of Russian and Soviet films, filmmaking, and the film industry from the coronation of Tsar Nicholas II to the death of Stalin. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **Studio Arts**

### SA 0120 - PAINTING STUDIO 1

Minimum Credits: 3 Maximum Credits: 3

Foundation painting is an introductory course in the principle practices of painting. The course develops compositional and color awareness and basic painting techniques. This course will explore the formal and expressive aspects of painting. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### SA 0130 - DRAWING STUDIO 1

Minimum Credits: 3 Maximum Credits: 3 Foundation drawing is an introductory course that instructs students in traditional drawing approaches and visual analysis through the act of drawing. Principles of perspective, composition, and methods of modeling form are explored for the development of individual skills and perception. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## Sociology

### SOC 0003 - TECHNOLOGY AND SOCIAL CHANGE

### Minimum Credits: 3

Maximum Credits: 3

To acquain the student with major sociological concepts, approaches and theories that are applicable to the analysis of the interaction between technology and society. The discussions are organized around three issues; 1. The effects of technology upon various aspects of the social structure and functioning, 2. The social conditions which lead to innovations and the diffusion of innovations throughout society, and 3. Technology assessment and environmental impact statement processes as they bear on current national decisions bearing on technology/society interfaces. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **SOC 0007 - SOCIAL PROBLEMS**

#### Minimum Credits: 3 Maximum Credits: 3

The major aims of this course are to understand the nature of important social problems in American society and analyze their causes and

consequences. The two competing perspectives, one, that social problems are created when individuals fail to conform to societal norms, and two, that social problems are caused when institutions fail to meet changing needs and aspirations of individuals will be used in our analysis. Future trends and policy alternatives toward amelioration will be examined. Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### SOC 0010 - INTRODUCTION TO SOCIOLOGY

Minimum Credits: 3 Maximum Credits: 3

This course introduces the student to the discipline of sociology, its development, theories, major findings, and to the sociological interpretation of modern society. Emphasis will be given to the importance of careful empirical investigation for the understanding of recent social and cultural changes. Students should be prepared to encounter basic issues in sociological method and in theory; an inclination toward systematic and abstract reasoning will help. Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **SOC 0150 - SOCIAL THEORY**

Minimum Credits: 3 Maximum Credits: 3

The aim of this course is to provide a survey of major developments in sociological theory in recent times. The classic background for these developments is included as part of the course. Lectures, readings and discussions help the student to acquire a grasp of the significance of theoretical analysis in sociology and of basic sociological problems addressed by a variety of theorists.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **SOC 0199 - INTERNSHIP**

Minimum Credits: 1 Maximum Credits: 6

This is an internship for human relations majors to allow them to apply the knowledge and skills learned in the classroom to practical situations in a professional setting. Internships are assigned on a basis of student's interest and the availability of positions. Academic Career: UGRD Course Component: Internship

Grade Component: Letter Grade

### SOC 0438 - SOCIOLOGY OF THE FAMILY

#### Minimum Credits: 3 Maximum Credits: 3

This course introduces students to the sociological perspective on the family and analyzes how the structure and nature of family life are shaped by larger historical and social forces. We will look at how changes in the economy and technology affect the family; how ideas concerning gender roles

affect male/female relationships and the socialization of children; how race, ethnicity, and class shape family life; and the wide variety of family forms, historical and contemporary.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### SOC 0446 - SOCIOLOGY OF GENDER

### Minimum Credits: 3

### **Maximum Credits: 3**

This course will analyze the various processes and institutions through which gender roles are defined and shaped in our society. It will analyze the interaction between individual conceptions of gender and larger social institutions such as the family, the workforce, the media, religion, etc. The current changes in these roles will be related to changes in other social institutions. We will also examine the multiple forms of inequality in our society--based on sex, race, class, and sexual preference--and see how they interact.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### SOC 0471 - DEVIANCE AND SOCIAL CONTROL

#### Minimum Credits: 3

#### Maximum Credits: 3

This course raises questions about what is "deviant" and how certain actions and beliefs come to be considered deviant. It also raises questions concerning the social, structural and cultural determinants of the decision to view something as "deviant" and in need of "control". The course explores changes in the definition of behavior which lead the same behaviors to be considered 'sins', 'crimes', 'illnesses', and 'alternative life-styles'. Academic Career: UGRD

**Course Component:** Lecture

Grade Component: LG/SNC Elective Basis

### **SOC 0472 - INTRODUCTION TO CRIMINOLOGY**

### Minimum Credits: 3

#### Maximum Credits: 3

Criminology refers to the scientific study of crime, its causes, and social responses to it. This course provides a broad overview of the study of crime. It examines the legal definitions and elements of crime; surveys the major categories of crime, i.e. predatory and non-predatory acts; reviews the major measures of crime; identifies the major correlates of crime, reviews and assesses the major theories of crime; differentiates types of offenders and explores various dimensions of their offending; and examines and evaluates the workings of the criminal justice system.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### SOC 0474 - SOCIETY AND THE LAW

### Minimum Credits: 3

**Maximum Credits: 3** 

Every society regulates behavior and the means, i.e. Either informal or formal, with which this is done varies according to level of social development. This course examines the regulation of behavior in primitive, transitional, and modern societies and traces the development of law and legal systems and their relationship to different characteristics of social development. We will examine legal jurisprudence and the application of the principles of these philosophies and explore how they have shaped legal action.

Academic Career: UGRD

**Course Component:** Lecture **Grade Component:** LG/SNC Elective Basis

#### SOC 0475 - SOCIOLOGY OF AGING Minimum Credits: 3

### Maximum Credits: 3

This course studies the fate of being old in American society in terms of income-adequacy, participation in political life, family relations, the status of retirement as an institution, health, the loss of independence and life in nursing homes. These and related issues are examined in cross-national perspective to assess the level and some nationally distinctive ways in which modern society cares for its elderly.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

### SOC 0477 - MEDICAL SOCIOLOGY

### Minimum Credits: 3

### Maximum Credits: 3

This is a course on socio-cultural aspects of health, illness, disease and (medical) treatment in American society. The historical transformation of American medicine into a powerful sovereign profession with unparalleled authority, autonomy and control over all aspects of health and illness will be examined. On the basis of this historical survey, recent empirical studies of distribution of health, disease and medical care will be examined as well as specific substantive issues and contemporary debates.

Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### SOC 1117 - LAW AND POLITICS

#### Minimum Credits: 3 Maximum Credits: 3

Examines law as an integral part of the political process. Topics include American legal culture; legal socialization; legal decision makers; the politics of formulating legal policy; the politics of implementing legal policy; and the effect of legal decisions on the operation of the political process.

Academic Career: UGRD

### SOC 1316 - SOCIAL AND CULTURAL CHANGE

## Minimum Credits: 3

Maximum Credits: 3

This course presents sociology from a global perspective in three ways: it focuses on social change as a critical factor in understanding society today, it uses a cross international approach to compare nations and regions of the world, it examines the ties between societies and the manner in which these relationships create a global society.

Academic Career: UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

## Spanish

### **SPAN 0001 - ELEMENTARY SPANISH 1**

Minimum Credits: 5 Maximum Credits: 5

This course is designed to develop the student's communicative proficiency through an integrated approach to the teaching of all four language skills: listening, speaking, reading and writing. Grammatical structures; vocabulary and readings are presented as tools for developing good communication skills. The course also aims to foster cultural awareness of the Spanish-speaking world. Academic Career: UGRD Course Component: Lecture

Grade Component: LG/SNC Elective Basis

### **SPAN 0002 - ELEMENTARY SPANISH 2**

Minimum Credits: 5

Maximum Credits: 5 A continuation of SPAN 0001, the course builds on the skills acquired in the first term as students continue to develop their communicative language skills in Spanish. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis Course Requirements: PREQ: SPAN 0001

### **SPAN 0101 - ELEMENTARY SPANISH 1**

Minimum Credits: 3 Maximum Credits: 3 A study of elementary spoken and written Spanish. Emphasis on communicative proficiency. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### SPAN 0102 - ELEMENTARY SPANISH 2

Minimum Credits: 3 Maximum Credits: 3 A continuation of SPAN 0101, training in spoken and written Spanish. Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **Statistics**

### STAT 0200 - BASIC APPLIED STATISTICS

Minimum Credits: 4 Maximum Credits: 4 This course teaches methods

This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression the analysis of variance, and contingency tables. Students will learn how to use a statistical computer package. Academic Career: UGRD

### STAT 1000 - APPLIED STATISTICAL METHODS

#### Minimum Credits: 4 Maximum Credits: 4

This course is an intensive introduction to statistical methods. It is designed for students who want to do data analysis and to study further ideas in applied statistics beyond this course. The topics covered include descriptive statistics, elementary probability, random sampling, controlled experiments, hypothesis testing, regression and the analysis of variance. Emphasis will be placed on the statistical reasoning underlying the methods. Students will also become proficient at the use of a statistical software package.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: C- or better in MATH 0031 or MATH 0110

### STAT 1100 - STAT & PROBLTY FOR BUS MGT

#### Minimum Credits: 4 Maximum Credits: 4

This is a one-term introduction to statistics and probability. Both modeling and data analysis will be emphasized. Various probability models for discrete and continuous variables will be analyzed. Inferential, descriptive and data analysis techniques will be covered with examples from management. A statistical package will be introduced and used to conduct data analyses.

Academic Career: UGRD

Course Component: Lecture

Grade Component: LG/SNC Elective Basis

Course Requirements: PREQ: MATH 0120 or MATH 0220

## **Supervision Technology**

### **ADS 0026 - EFFECTIVE SUPERVISION**

### Minimum Credits: 3

### Maximum Credits: 3

The student is provided with a completely organized, staffed and operating company. Through the operation of the company, the student applies the theories and techniques of supervision. Included are: management of resources (equipment, materials, energy, capital, human time), product and services (productivity, cost, quality), improving and unifying performance (work simplification, performance planning). Management games are utilized to achieve realism.

Academic Career: UGRD Course Component: Lecture Grade Component: LG/SNC Elective Basis

### **Theatre Arts** THEA 0830 - INTRODUCTION TO PERFORMANCE

## Minimum Credits: 3

### Maximum Credits: 3

This course is designed to develop the students' awareness of the actor's process and to foster a general sense of theatre as an area of human endeavor. Students will be introduced to basic communication skills, including physical and vocal presence in front of an audience. The course will also develop an introductory level of acting skill through the use of regular warm-ups, theater games, improvisation, and simple scene study. The class will culminate in the performance of a final scene. Scenes will be selected from a diverse range of playwrights and students will examine the political, cultural and social context of each play. The course will also provide an introduction to basic theater terminology, and foster the ability to respond to and reflect on theatrical performances. Each student is required to buy a semester pass and attend university theatre productions. **Academic Career:** UGRD

Course Component: Lecture Grade Component: LG/SNC Elective Basis

## **UP** Titusville

### UPT 1307 - STUDY ABROAD- CZECH PRGM FEE

Minimum Credits: 0 Maximum Credits: 0 Program fee for Pitt Titusville study abroad program to Czech republic. May be used alone or in combination with one or more of these courses: BIOSC 1104, BUS 1104, and HAA 1901. Academic Career: UGRD Course Component: Directed Studies Grade Component: No Grade Required